

Research Article

# Patient-centered care measures through the eyes of South African Radiographers and patients: A survey approach

Kathleen Naidoo<sup>a,\*</sup>, Heidi Thomas<sup>a</sup>, Emma Hyde<sup>b</sup>, Maryann Hardy<sup>c</sup>, Andrea Doubleday<sup>d</sup>, Tracey Pieterse<sup>d</sup>, Tom Steffens<sup>e</sup> and Therese Gunn<sup>e</sup>

<sup>a</sup> Cape Peninsula University of Technology, South Africa

<sup>b</sup> University of Derby, United Kingdom

<sup>c</sup> University of Bradford, United Kingdom

<sup>d</sup> University of Auckland, New Zealand

<sup>e</sup> Queensland University of Technology, Australia

## ABSTRACT

**Background:** Worldwide there has been a shift in the ideology within healthcare systems that focuses on 'people' rather than the 'patients'. A patient should not only be perceived by their condition but rather viewed holistically as a person. Within a South African (SA) context, the constitution has been amended to state that all South African citizens have the right to healthcare that is caring, free from harm, and effective. Hence, it can be rationalized that patient-centered care (PCC) is a necessary and vital approach in South African healthcare as well. A study conducted by Hyde and Hardy in the United Kingdom (UK) explored measures of PCC from radiography patients, radiographers, radiography managers, radiography educators, and radiography students' perspectives. This study was duplicated to define informed measures of PCC from a South African perspective. Therefore, this study aimed to gain perspectives on PCC measures in diagnostic radiography within a sample of the South African community. This paper focuses on the perspectives of the clinical radiographer and patient respondents.

**Method:** This study was conducted using a quantitative approach with the use of an online survey. The Qualtrics software was utilized to design the survey. The survey consisted of three PCC themes; use of technology, comfort and emotional support, and control over the environment. Recruitment of the subgroups was via advertisement in social media, email networks, and word of mouth.

**Results:** There were 28 radiographer responses and 14 patient responses. The data were analyzed using SPSS software version 28. Patient care while explaining the use of technology in radiography, received positive responses from both respondent groups. Patient care measures that explored comfort and emotional support received varied responses from patients and radiographers. Important PCC concepts, such as asking the patient about their care needs and health problems, were lacking. Patients indicated that radiographers do not include their family members in the discussion of the care needs even though family involvement is a PCC element.

**Conclusion:** The perceptions of PCC measures differed between the two groups which indicated that there are still some gaps in clinical practice. Patient involvement in their care and individualized care should be prioritized. There is a need for family involvement during radiography procedures to be better highlighted within clinical practice. It is also recommended that more importance be placed on PCC during undergraduate training. While service delivery is important, radiographers must not disregard their PCC responsibilities towards the patient.

## RÉSUMÉ

**Contexte:** Dans le monde entier, l'idéologie des systèmes de soins de santé a évolué pour se concentrer sur les « personnes » plutôt que

**Contributors:** KN & HT contributed to acquisition, analysis and interpretation of data. EH & MH contributed to the conception or design of the work. All authors were involved in drafting and commenting on the paper and have approved the final version.

**Funding:** The researchers obtained funding for the purchasing of the Qualtrics software from the Department of Higher Education and Training Standard Operating Policy governing the University Capacity Development Grant.

**Competing interests:** All authors declare no conflict of interest.

**Ethical approval:** Ethics clearance for this study was obtained (CPUT/HWS-REC 2022/H12).

\* Corresponding author.

E-mail address: [naidooka@cput.ac.za](mailto:naidooka@cput.ac.za) (K. Naidoo).

sur les « patients ». Un patient ne doit pas être perçu uniquement en fonction de son état de santé, mais plutôt comme une personne à part entière. Dans le contexte sud-africain, la constitution a été amendée pour stipuler que tous les citoyens sud-africains ont droit à des soins de santé bienveillants, exempts de préjugés et efficaces. On peut donc considérer que les soins centrés sur le patient (SCP) sont une approche nécessaire et vitale pour les soins de santé en Afrique du Sud également. Une étude menée par Hyde et Hardy au Royaume-Uni a exploré les mesures des soins centrés sur le patient du point de vue des patients, des radiographes, des responsables de la radiographie, des éducateurs en radiographie et des étudiants en radiographie. Cette étude a été reproduite pour définir des mesures éclairées des SCP du point de vue de l'Afrique du Sud. Par conséquent, cette étude visait à obtenir des perspectives sur les mesures de SCP en radiographie diagnostique au sein d'un échantillon de la communauté sud-africaine. Cet article se concentre sur les points de vue des radiographes cliniciens et des patients interrogés.

**Méthodologie:** Cette étude a été menée selon une approche quantitative à l'aide d'une enquête en ligne. Le logiciel Qualtrics a été utilisé pour concevoir l'enquête. L'enquête portait sur trois thèmes des SCP : l'utilisation de la technologie, le confort et le soutien émotionnel, et le contrôle de l'environnement. Le recrutement des sous-groupes s'est fait par le biais d'annonces dans les médias sociaux, les réseaux de messagerie et le bouche-à-oreille.

*Keywords:* Patient centred-care; Radiography; Ubuntu

## Introduction

Patient interactions in diagnostic radiography are transient and often once-off [1]. Radiography is often perceived as a target-driven environment with a focus on service delivery rather than the patient. However, the cornerstone of all healthcare professions is caring for the patient [2]. The concept of patient care is not new, and it is well embedded within radiography curricula. However, over the years, research has shown that while radiographers can meet their professional obligation of patient care, their ability to care is often diminished [2].

Caring can be described as an act or display of kindness, compassion, and sincere understanding towards the patient [3]. So, while radiographers might greet the patient and apply radiation protection measures, all of which are considered professional responsibility, the manner in which these aspects are delivered is the key difference. For example, greeting your patient with a smile and asking them how they are while listening attentively to their responses.

Globally, healthcare systems are focusing on improved PCC with an increase in the introduction and implementation of PCC models [4,5]. Santana et al. [5], explain PCC models as frameworks where healthcare providers partner with patients to co-design and deliver personalized care, providing high-quality care and improving healthcare system efficiency and effectiveness. Recognizing that healthcare is complex, the World Health Organization (WHO) [6] refrains from advocating single models of PCC but rather recommends a set of common

**Résultats:** Des réponses ont été reçues de 28 radiographes et 14 patients. Les données ont été analysées à l'aide du logiciel SPSS version 28. Soigner les patients en expliquant l'utilisation de la technologie en radiographie a reçu des réponses positives de la part des deux groupes de répondants. Les mesures de soins aux patients qui explorent le confort et le soutien émotionnel ont reçu des réponses variées de la part des patients et des radiographes. Des concepts importants des SCP, tels que l'interrogation du patient sur ses besoins en matière de soins et ses problèmes de santé, faisaient défaut. Les patients ont indiqué que les radiographes n'incluaient pas les membres de leur famille dans la discussion sur les besoins en matière de soins, bien que l'implication de la famille soit un élément des SCP.

**Conclusion:** Les perceptions des mesures de SCP diffèrent entre les deux groupes, ce qui indique qu'il y a encore des lacunes dans la pratique clinique. L'implication du patient dans ses soins et l'individualisation des soins devraient être prioritaires. Il est nécessaire que l'implication de la famille pendant les procédures de radiographie soit mieux mise en évidence dans la pratique clinique. Il est également recommandé d'accorder plus d'importance à l'implication du patient dans ses soins au cours de la formation de premier cycle. Bien que la prestation de services soit importante, les radiographes ne doivent pas négliger leurs responsabilités en matière de SCP à l'égard du patient.

principles and strategic directives to coordinate care around challenges and people's needs. In alignment with this perspective, the Picker Institute [7] framework identifies and delineates eight dimensions that characterize various facets of PCC (Table 1). Similarly, the Institute of Medicine (IOM) [8] has identified six components that are critical for providing quality care (Table 1). Both frameworks place a significant emphasis on upholding the patient's right to quality healthcare, with clinical decisions involving and guided by the patient's perspectives and experiences.

In the UK the focus on patient experience and PCC has gained increasing emphasis over the last 10 years. In accordance with the Picker Institute, organizations in the UK such as Health Foundation [9] and Health Education England [10] have all published documents stressing the importance of patient-centered approaches to care, which meet individuals' needs. In keeping with this national approach, Hyde and Hardy [11–13] conducted a study that sought to gather several stakeholder perspectives on patient-centered care in radiography.

In the South African context, constitutional amendments have stipulated that all citizens have the right to receive healthcare services that are caring, free from harm, and effective [14]. The South African Patient Rights Charter serves as an informative document delineating the rights and responsibilities of patients with respect to their health, particularly underscoring their active participation in healthcare decision-making [15]. This charter denotes a significant milestone in the history

Table 1  
PCC Frameworks.

PCC – Picker Institute	PCC – Institute of Medicine
1. Fast access to reliable healthcare advice	1. Improves quality of life
2. Effective treatment by trusted professionals	2. Supports independence
3. Continuity of care and smooth transitions	3. Promotes positive well-being
4. Involvement and support for family and carers	4. Honors choice
5. Clear information, communication and support for selfcare	5. Promotes respect
6. Involvement in decisions and respect for preferences	6. Empowers recipients of care
7. Emotional support empathy and respect	
8. Attention to physical and environmental needs	

of South Africa (SA), as prior to 1994, not all patients were granted equal access to high-quality healthcare services. Subsequently, substantial efforts have been made to improve the quality and accessibility of government healthcare services for all citizens. This is further underscored by the Batho Pele principle, which stresses the necessity of healthcare professionals treating citizens with empathy and respect [16]. Moreover, the Health Professions Council of South Africa (HPCSA) emphasizes the concept of patient-centered care, as an effort towards understanding the experience of illness from the patient's perspective and truly understanding what matters most to them [17].

In a similar spirit, nurses in SA have formulated best practice guidelines for PCC. These guidelines involve the following key elements: (1) embracing values and beliefs foundational to patient-centered care; (2) optimal communication in all facets of care; (3) rendering of basic nursing care practices; (4) family involvement; (5) awareness of the importance of culture in patient-centered care; (6) organizational and managerial support; (7) organizational champions; (8) positive work environment; and (9) organizational structure that promotes inter-professional collaborative practice [18]. These recommendations were made with specific reference to the nursing context in SA, reflecting their unique professional circumstances. To date, no best practice guidelines on PCC exist for radiographers in SA. However, it could be argued that some of the elements prescribed for nursing could be relevant to the radiography context in SA.

In their research, Hyde and Hardy [11-13] found substantial differences in the defining measures of PCC between patients, clinical radiographers, radiography managers, student radiographers, and radiography educators in the UK. Consequently, the need to identify PCC measures within the same participant groups within South Africa, New Zealand, and Australia was identified. This study was conducted in collaboration with Hyde and Hardy, and researchers from Australia and New Zealand.

Given the substantial socio-economic disparities between the UK (a first-world nation) and SA, it is imperative not to presume uniformity of PCC measures between these two countries, hence a replication of this study was deemed necessary to provide insights into PCC as it pertains to radiography in the South African context. According to the researchers' knowledge, this is the first study of its kind to evaluate informed measures of PCC practices involving radiography patients and clin-

ical radiographers in SA. This paper only reports on data collected from SA with a focus on the patient and radiographer subgroups. The radiographer and patient subgroups are presented as the radiographer is the primary caregiver while the patient is the recipient. Comparison of these subgroups will allow insight into the care provided in the radiography environment as well as the similarities and differences in perceptions between these two groups. Data collection and analysis were performed by the South African researchers, while the collaborators contributed solely to the writing of this paper.

## Method

### *Research design*

This study employed a quantitative research approach. Data collection was facilitated via an online survey. This study replicates the research conducted by Hyde and Hardy [11] and employs identical data collection (Qualtrics survey) and data analysis (IBM SPSS statistics) methodologies.

### *Ethics*

Ethics clearance for this study was obtained (CPUT/HWS-REC 2022/H12). Participants were recruited in their personal capacity via social media; therefore, no site permission was required.

### *Population and recruitment*

South African diagnostic radiographers, patients, radiography students, educators, and radiography managers were invited to participate in this study. Convenience sampling was utilized, which involved the enrolment of participants who met the criteria of the subgroups [19]. Recruitment of all the subgroups was via Facebook and WhatsApp, email networks, and word of mouth. By accessing the online study link, participants gained access to the study information and were required to click the "I consent to partake in the study" before being directed to the survey for completion. English-speaking clinical radiography managers, student radiographers, radiography patients, and radiography educators located in SA were included, eliminating the need for translation of languages other than English. This is in keeping with the original research done by Hyde and Hardy [11]. Based on Hyde and Hardy's [11] study in the

UK, 30 respondents were required per sub-group. Two weekly reminders were posted via social media and email networks.

#### *Consent and voluntary participation*

Consent to participate was obtained via an online form. A comprehensive explanation of the study's nature and significance was provided prior to participants accessing and completing the survey form. Participants were informed that participation was completely voluntary and that declining participation in any of the study stages (survey and focus group) would not result in any negative consequences to them.

#### *Anonymity and confidentiality*

Confidentiality was addressed in the informed consent. To safeguard participants' confidentiality, no personal identifiers (names, surnames, and cellphone numbers) were required, and surveys were completed anonymously. All data collected and analyzed were stored via a password-protected link and password-protected computers which only the researchers could access.

#### *Data collection tool*

Quantitative data was collected utilizing the online Qualtrics survey with paired attitudinal statements about PCC [20]. This was the same survey tool used to collect data from UK participants thereby ensuring that the perspectives of the South African population are gathered similarly. Hyde and Hardy tailored the attitudinal statements for each subgroup, resulting in the same approach being adopted for the South African study. Respondents were asked to identify with one of the subgroups to access the correct version of the survey.

The survey focused on three themes namely: use of technology, comfort and emotional support, and control over the environment. Additionally, patient demographics were collected. A 5-point Likert scale (strongly agree; agree; no strong feeling either way; disagree; and strongly disagree) was used to indicate participants' level of agreement with PCC statements. The paired statements (negative and positive) were posed in random order to increase response validity. Demographic information regarding years qualified (where appropriate), practice setting (where appropriate), geographical location, and gender were also sought. Study participants were given the option to voluntarily leave an email address should they wish to participate in phase two of the study. No other personal information that could potentially disclose the identity of participants was requested. The survey required approximately 10 min of participants' time to complete. Data collection was conducted between January 2023 and May 2023.

#### *Data analysis*

The survey data were entered into the SPSS statistics (IBM SPSS Statistic for Windows, Version 28.0; 2021), facilitating summary and descriptive analyses. Subsequently, the Kruskal-

Wallis test was utilized to perform a comparative evaluation among the independent subgroups. This was followed by the Wilcoxon test for pairwise observations and comparisons of the PCC statements.

## **Results**

Responses were received from clinical radiographers (28) and patients (14). Radiographer responses yielded a 93 % response rate and patient responses generated a 47 % response rate per subgroup. There were adequate responses for summaries and descriptive analysis however generalizations are not possible. Tables are provided to depict the agreed, neutral, and disagreed responses. The neutral responses were also included as some statements received a considerable number of respondents remaining neutral. Respondents were also asked for basic demographic data to ensure that responses were received from a range of ages, gender, and geographical locations.

#### *Section A – use of technology*

In this section, there were eight statements on how care is provided to the patient within the radiology environment which uses technology (Table 2). These questions explored whether radiographers explain the imaging equipment movement, noises, and difficulties with patients. Positioning challenges, language preference, and breathing techniques were also surveyed. Most of the radiographers agreed with all statements in this section. However, most patient respondents only agreed to the first seven statements. There was a mixed response from patients to the last statement where 50 % of patients disagreed that radiographers always ensure that they understand who is present in the imaging room and their role before starting the imaging examination. This is important to note as radiographers (92.9 %) indicated meeting this obligation, however, 50 % of the patient respondents did not view this in the same manner.

#### *Section B: comfort and emotional support*

This section considered statements related to comfort and emotional support for patients. Six statements were explored (Table 3) with an emphasis on whether radiographers introduce themselves to patients, provide their patients with the opportunity to ask questions, and discuss the patient's care needs. The responses in this section had the greatest number of discrepancies between the radiographer and patient perceptions. Radiographers agreed with most statements; however, statement 5 had varied responses, with the majority of radiographers agreeing, 16 % disagreeing, and 28 % remaining neutral. The majority of the patients (57.71 %) disagreed with statement two indicating that radiographers do not invite patients to share their health problems. Additionally, half of the patient respondents (50 %) felt that radiographers do not discuss their care needs with them. Another patient-centered care measure that many patients (64.3 %) thought radiographers neglected, was the op-

Table 2  
Perspectives on the use of technology.

Statements	Agree		Neutral		Disagree	
	Radiographer	Patient	Radiographer	Patient	Radiographer	Patient
Radiographer (n = 28) Patient (n = 14)						
1. I always explain the equipment, its movement, and likely noises prior to starting the imaging examination	82.2 % (n = 23)	71.4 % (n = 10)	7.1 % (n = 2)	0 % (n = 0)	10.7 % (n = 3)	28 % (n = 4)
2. I always explore with my patients any difficulties they may have maintaining an image acquisition position prior to starting the imaging examination	96.4 % (n = 27)	85.7 % (n = 12)	3.6 % (n = 1)	7.1 % (n = 1)	0 % (n = 0)	7.1 % (n = 1)
3. I always ensure my patients understand and can comply with any breath hold requirements prior to starting the imaging examination	92.6 % (n = 26)	85.7 % (n = 12)	3.6 % (n = 1)	0 % (n = 0)	3.6 % (n = 1)	14.3 % (n = 2)
4. I always ensure any equipment difficulties or failures that will impact on my patient's examination are communicated clearly and promptly.	100 % (n = 28)	76.9 % (n = 10)	0.0 % (n = 0)	7.7 % (n = 1)	0 % (n = 0)	15.4 % (n = 2)
5. If my patient appears distressed or anxious before, during or after the examination, I always take time to explore the reasons for this with the patient	100 % (n = 28)	71.4 % (n = 10)	0.0 % (n = 0)	7.1 % (n = 1)	0 % (n = 0)	21.4 % (n = 3)
6. When talking to my patients, I always use language appropriate to their level of understanding	100 % (n = 28)	100 % (n = 14)	0.0 % (n = 0)	0 % (n = 0)	0 % (n = 0)	0 % (n = 0)
7. Patients are confident in the care they receive when the imaging examination is efficiently undertaken	96.4 % (n = 27)	100 % (n = 14)	0.0 % (n = 0)	0 % (n = 0)	3.6 % (n = 1)	0 % (n = 0)
8. I always ensure my patient understands who is present in the imaging room and their role prior to starting the imaging examination.	92.9 % (n = 26)	50 % (n = 7)	3.6 % (n = 1)	0 % (n = 0)	3.6 % (n = 1)	50 % (n = 7)

Table 3  
Perspectives on comfort and emotional support.

Statements	Agree		Neutral		Disagree	
	Radiographer	Patient	Radiographer	Patient	Radiographer	Patient
Radiographer (n = 25) Item non-response (3 radiographers) Patient (n = 14)						
1. I always introduce myself with 'Hello my name is...'	68 % (n = 17)	64.3 % (n = 9)	12 % (n = 3)	7.1 % (n = 1)	20 % (n = 5)	28.6 % (n = 4)
2. I always invite patients to tell me about their health problem	68 % (n = 17)	21.4 % (n = 3)	16 % (n = 4)	21.4 % (n = 3)	16 % (n = 4)	57.1 % (n = 8)
3. I always give my patients the opportunity to ask questions about their examination	92 % (n = 23)	85.7 % (n = 12)	0 % (n = 0)	7.1 % (n = 1)	8 % (n = 2)	7.1 % (n = 1)
4. I always give my patients the opportunity to discuss their care needs	80 % (n = 20)	28.6 % (n = 4)	16 % (n = 4)	21.4 % (n = 3)	4 % (n = 1)	50 % (n = 7)
5. I always ask my patients whether they wish to include a family member/carer in any conversation about their examination and care	52 % (n = 13)	7.1 % (n = 1)	28 % (n = 7)	28.6 % (n = 4)	16 % (n = 5)	64.3 % (n = 9)
6. I always take account of my patients' abilities (strength and resilience), when assessing the need for examination modifications	96 % (n = 24)	64.3 % (n = 9)	4 % (n = 1)	14.3 % (n = 2)	0 % (n = 0)	21.4 % (n = 3)
7. I always provide my patients with positioning preferences where alternative image acquisition approaches are possible	76 % (n = 19)	64.2 % (n = 9)	16 % (n = 4)	14.3 % (n = 2)	8 % (n = 2)	21.4 % (n = 3)
8. I always ensure my patients are able to maintain personal hygiene and provide support and assistance during the examination	92 % (n = 23)	71.4 % (n = 10)	8 % (n = 2)	21.4 % (n = 3)	0 % (n = 0)	7.1 % (n = 1)

portunity to allow their family members to be included in the discussion of their examination and care.

### Section C: control over environment

This section considered factors that ensure the environment is favorable for the patient. The patient and radiogra-

pher groups had varied responses regarding the control over the environment. The coordination of patient hospital appointments received a 46.2 % neutral response from patients and a 66.7 % agree response from radiographers. All radiographer respondents agreed to inform patients of any examination delays however only 53.9 % of patients agreed. Most radiographers (79 %) disagreed that they provide their patients with a

Table 4  
Perspective of control over the environment.

Statements	Agree		Neutral		Disagree	
	Radiographers	Patients	Radiographers	Patients	Radiographers	Patients
Radiographers ( <i>n</i> = 24) Patients ( <i>n</i> = 13) Item nonresponse (4 radiographers, 1 patient)						
1. My department always tries to coordinate attendance for imaging examinations with other hospital appointments the patient may have.	66.7 % ( <i>n</i> = 16)	38.5 % ( <i>n</i> = 5)	20.8% ( <i>n</i> = 5)	46.2 % ( <i>n</i> = 6)	12.5 % ( <i>n</i> = 3)	15.4 % ( <i>n</i> = 2)
2. If there are examination delays, I always inform my patients of these when they arrive in the department	100 % ( <i>n</i> = 24)	53.9 % ( <i>n</i> = 7)	0 % ( <i>n</i> = 0)	7.7 % ( <i>n</i> = 1)	0 % ( <i>n</i> = 0)	38.5 % ( <i>n</i> = 5)
3. When changing my patient into radiolucent clothing, I always give them a choice of style (e.g. shorts, tie-back gown, theatre scrubs style).	12.5 % ( <i>n</i> = 3)	53.9 % ( <i>n</i> = 7)	8.3 % ( <i>n</i> = 2)	15.4 % ( <i>n</i> = 2)	79.1 % ( <i>n</i> = 19)	30.8 % ( <i>n</i> = 4)
4. When changing my patient into radiolucent clothing, I always make sure that the size and length is appropriate for the patient.	66.7 % ( <i>n</i> = 16)	53.9 % ( <i>n</i> = 7)	12.5 % ( <i>n</i> = 3)	7.7 % ( <i>n</i> = 1)	20.8 % ( <i>n</i> = 5)	38.5 % ( <i>n</i> = 5)
5. Before, during and after the imaging examination, I always provide my patients with a dressing gown, blanket or other items to maintain their comfort, privacy and dignity	100 % ( <i>n</i> = 24)	76.9 % ( <i>n</i> = 10)	0 % ( <i>n</i> = 0)	15.4 % ( <i>n</i> = 2)	0 % ( <i>n</i> = 0)	7.7 % ( <i>n</i> = 1)
6. I always give my patient choice over the lighting level and wider environmental settings (e.g. music, sensory displays) if available	29.2 % ( <i>n</i> = 7)	15.4 % ( <i>n</i> = 2)	25 % ( <i>n</i> = 6)	30.8 % ( <i>n</i> = 4)	45.9 % ( <i>n</i> = 11)	53.9 % ( <i>n</i> = 7)

choice of gown style while 53.9 % of patients indicated they were given a choice of gown style and size. Additionally, only a few radiographers (29.2 %) indicated that they offered their patients a choice of lighting level and environment control and only 15.4 % of patients agreed with this statement (Table 4).

## Discussion

The study results depict that the patient's and radiographer's perceptions of PPC are different. These findings are similar to Hyde and Hardy's [11] study in the UK, whereby a disparity in responses by radiographers and patients was also observed. The most significant differences in perceptions were noted in the patient "comfort and support" section of the questionnaire. The other two sections "use of technology" and "control over the environment" received fairly positive responses for most statements amongst both the patient and radiographer groups.

Half the patient respondents indicated that the radiographer did not inform them of who was in the room. According to the South African Patient Rights Charter, patients have the right to "be treated by a named healthcare provider" [21]. Maintaining patient rights during a medical procedure is pivotal to ensuring optimal care is afforded to the patient. Within the South African context, there could be several different individuals in the room with the patient depending on the diagnostic imaging procedure being performed. For example, student radiographers, radiologists, nurses, and even other medical professionals therefore it is critical for South African radiographers to ensure that all persons who will be involved in the procedure have been introduced to the patient and their role highlighted.

Foundational aspects of caring for a patient were lacking as patients indicated that radiographers did not introduce them-

selves. This is in keeping with the notion of awareness of your healthcare professional by name which is a fundamental right of the patient [21]. The patient respondents also felt that radiographers do not ask them how they are feeling. While this was disheartening to record, it can be attributed to a number of reasons with radiographer shortage being at the top of the list. Since the COVID-19 pandemic, many healthcare workers have experienced burnout and fatigue which has impacted staffing [22]. While this phenomenon of shortage is not new to the radiography profession, the number of outpatients needing radiological procedures has significantly increased [22]. This increase in patient numbers compels radiographers to focus on service provision and the professionals are often perceived as task-driven. Therefore, Hancock and Bleiker [2] recommend a need to transform our practice, with a greater emphasis placed on the caring and compassionate component of our role and not only the service delivery facet.

While being cognizant of staff shortages and service delivery challenges, radiographers should be reminded that there are elements of PCC that can easily be incorporated without increasing the radiographer's workload, an illustration of this is the little gestures approach [23]. The little gestures approach while seemingly "small" has been reported to have a meaningful impact on patient experience. Some of these include greeting your patient with a smile, asking your patient how they are, or simply offering the patient a blanket [23,24]. These gestures can be effortlessly embedded into radiography practice.

The patient respondents in this study suggested that radiographers do not provide patients with the opportunity to discuss their healthcare needs or the option to share their health problems. The provision of individualized care for patients is the cornerstone of PCC and this can only be attained by

understanding the patient's health problem and care needs. The key to compassion is developing a human connection with the patient and maintaining this throughout the procedure [2]. In order to achieve this connection, a noteworthy dialogue is required between the radiographer and the patient [2]. Effective communication is fundamental in enhancing PCC measures, and it allows patients to be well-informed to make better decisions about their healthcare [25]. In support, radiographers in Sweden perceive verbal, and nonverbal communication to be vital when engaging with patients [26]. PCC encompasses the mindful nature of the person with their needs and desires in addition to the person requiring an imaging service. So, to promote a truly PCC environment in SA, radiographers are encouraged to enhance their communication skills and engage in meaningful dialogue with their patients.

When radiographers were asked about including the patient's families in the radiology conversation about the examination and care, 28 % remained neutral with no strong feelings. The neutral result could be interpreted as radiographers perceiving family involvement as inconsequential for the effective delivery of PCC. Family members contribute to the care of patients by facilitating decision-making, helping healthcare professionals to provide quality care, and advancing patient safety [27,28]. Literature shows that the patient and their families have valuable experience, expertise, and insights that are beneficial in effecting changes in health care [29]. There is an emergent body of knowledge regarding the importance of family involvement in patient care therefore diagnostic radiographers need to be conscious of this and they should endorse family involvement in caring for patients. Emphasis on the involvement of family members and how this enhances the patient's experience of care should also be integrated into the undergraduate radiography curriculum.

In 2019, 84 % of South Africans depended on the public health sector and this health sector in SA is constantly under enormous restrictions and strain with limited resources and finances [30]. Radiographers in this study indicated that they do not give their patients a choice over the style and length of the gown. It could, therefore, be argued that limited resources are one of the reasons why the majority of radiographers do not offer their patients a preference for gown style. Dignity and privacy are the foundation of PCC in healthcare, yet this can be compromised when asking a patient to change into a hospital gown. At times clothing can be seen as empowerment for the wearer but conversely, it can also affect the self-esteem and well-being of the individual if they are uncomfortable with what they wear [31]. Clothing can have protective elements but is also associated with cultural requirements, social status, religion, and individuality [31]. This then makes us question the nature of hospital gowns seemingly having a one-style or one-size-fits-all arrangement and raises debate about radiographers not having options for their patients. The contextual complexities of PCC in SA should be considered and professional bodies such as the Society of Radiographers of South Africa (SORSA) and the Health Professions Council of South Africa (HPCSA)

should be preemptive in advocating for the radiographer and patient to ensure resources are available to adequately care for patients.

In SA, there is an African philosophy called Ubuntu. The philosophy of Ubuntu was initiated in different societies in Africa. Ubuntu underscores the principles of the community, village, and family [32]. The concept of Ubuntu is a rendition of human kindness and humanity to others ([33]:215). "I am because of who we are", is a meaningful description of Ubuntu and helps us understand that we are who we are because of others. Downing & Hastings-Tolsma [33]: [216] further explain two distinctive qualities of Ubuntu: "relationships between people" and "how those relationships could be conducted". With the aim of developing an authentic PCC diagnostic radiography environment in SA, Ubuntu could be the foundation on which this is built. South African radiographers should embrace their ancestries and use Ubuntu as a compass to navigate the PCC challenges they may encounter.

### *Study limitations*

A limitation of the study was that the survey catered to English-speaking participants only. Due to the rich culture and the various official languages in SA, the English-speaking criteria potentially excluded the perceptions of a large population in SA. Another limitation that arose was the poor response rate received. While a number of respondents started the survey, many did not complete it. Due to the smaller sample size, generalizations cannot be made. The survey was conducted online, which could potentially have limited responses from rural areas in SA that do not have access to good quality internet.

### **Conclusion**

In conclusion, there are still some gaps in clinical practice that must be bridged, especially in the area of comfort and emotional support. In order for us to become truly patient-centered, patient involvement in their care and individualized care should be prioritized. Even though service delivery is imperative we cannot neglect caring for our patients during this process. It is recommended that more importance be placed on PCC during undergraduate training. The promotion of the little gestures approach makes compassionate care doable in a busy and time-constrained department. Simply smile at your patient, ask them how they are feeling, listen to their care needs, and offer them a blanket when needed. Within a South African context, the beauty of Ubuntu lays the perfect foundation for us to cultivate change and build meaningful relationships with our patients. Let us embrace our rich culture and heritage and let us provide the best care for our patients.

### **Acknowledgments**

The researchers would like to thank all participants for their contribution to the research study.

## References

- [1] Makanjee CR, Engel-Hills P. Ethics in diagnostic radiography in South Africa: a complex temporary encounter mediated through text and technology. *African Perspectives on Ethics for Healthcare Professionals*; 2018:201–214.
- [2] Hancock A, Bleiker J. But what does it mean to us? Radiographic patients and carer perceptions of compassion. *Radiography*. 2023;29 Supplement 1, Pages S74-S80, ISSN 1078-8174/10.1016/j.radi.2023.02.005.
- [3] Bolderston A, Lewis D, Chai M. The concept of caring: perceptions of radiation therapists. *Radiography*. 2010;16(3):198–208. Online Available. <http://www.sciencedirect.com/Science/Article/Pii/S107881741000044>.
- [4] Lathoura S, Dimitrakaki C, Notara V, Sakellari E, Lagiou A. Person-Centred approach in radiology primary health care: a cross-sectional study. *Int J Caring Sci*. 2020;13(2):1240–124.
- [5] Santana MJ, Manalili K, Jolley RJ, Zelinsky S, Quan H, Lu M. How to practice person-centred care: a conceptual framework. *Health Expect*. 2018;21(2):429–440.
- [6] World Health Organisation (WHO). *WHO Global Strategy on People-Centred and Integrated Health Services*. WHO; 2015.
- [7] Picker Institute. The Picker Principles of Person Centred Care. <https://picker.org/who-we-are/the-picker-principles-of-person-centred-care/>. (Accessed 18 September 2023).
- [8] Institute of Medicine. *Crossing the Quality chasm: a New Health System For the 21st Century*. Washington, D.C.: The National Academies Press; 2001. <https://ebookcentral.proquest.com/lib/cput/reader.action?docID=3375215>.
- [9] Health Foundation. *Person-Centred Care Made Simple. What Everyone Should Know About Person-Centred Care*; 2016. <https://www.health.org.uk/sites/default/files/PersonCentredCareMadeSimple.pdf> (Accessed 13 September 2023).
- [10] Health Education England. *Person-Centred Approaches: Empowering People in Their Lives and Communities to Enable an Upgrade in Prevention, Wellbeing, Health, Care and Support*; 2017. <https://www.skillsforhealth.org.uk/images/pdf/Person-Centred-Approaches-Framework.pdf> (Accessed 18 September 2023).
- [11] Hyde E, Hardy M. Patient centred care in diagnostic radiography (Part 1): perceptions of service users and service deliverers. *Radiography*. 2021;27(1):8–13.
- [12] Hyde E, Hardy M. Patient centred care in diagnostic radiography (Part 2): a qualitative study of the perceptions of service users and service deliverers. *Radiography*. 2021;27(2):322–331. doi:10.1016/j.radi.2020.09.008.
- [13] Hyde E, Hardy M. Patient centred care in diagnostic radiography (Part 3): perceptions of student radiographers and radiography academics. *Radiography*. 2021;27(3):803–810. doi:10.1016/j.radi.2020.12.013.
- [14] Jardien-Baboo S, van Rooyen D, Ricks E, Jordan P. Perceptions of patient-centred care at public hospitals in Nelson Mandela Bay. *Health SA Gesondheid*. 2016;21:397–405.
- [15] National Department of Health (NDOH). *The Patient Rights Charter*; 2016. <https://knowledgehub.health.gov.za/system/files/elibdownloads/2023-04/PATIENTS%252520RIGHTS%252520CHARTER%252520-%252520Eng.pdf> (Accessed 18 September 2023).
- [16] Department of Public Services and Administration of South Africa (DPSA). *Revised Batho Pele Revitalisation Strategy*; 2022. <https://www.dpsa.gov.za/dpsa2g/documents/sdi/2022/Batho%20Pele%20Revitalisation%20Strategy%20March%202022.pdf> (Accessed 12 September 2023).
- [17] Health Professions Council of South Africa (HPCSA). *Radiography and Clinical Technology News 2022*; 2022 Issue 01/08/2020. [https://www.hpcsa.co.za/Uploads/professional\\_boards/rct/newsletter/RCT\\_newsletter\\_2022.pdf](https://www.hpcsa.co.za/Uploads/professional_boards/rct/newsletter/RCT_newsletter_2022.pdf) (Accessed 14 September 2023).
- [18] Jardien-Baboo S, van Rooyen D, Ricks E, Jordan P, ten Ham-Baloyi W. Best practice guideline for patient-centred care in South African public hospitals. *Afr J Nurs Midwifery*. 2019;21(2):20. doi:10.25159/2520-5293/4590.
- [19] De Poy E, Gitlin L N. *Introduction to research: understanding and applying multiple strategies*. 6th ed. St Louis, MO: Elsevier; 2019.
- [20] Qualtrics. *Qualtrics. Provo*; 2023 Utah, USAVersion: March 2023. Available at. <https://www.qualtrics.com>.
- [21] National Department of Health. *Patients' Rights Charter*; 2016. <https://knowledgehub.health.gov.za/elibrary/patients-rights-charter-english>.
- [22] Konstantinidis K. The shortage of radiographers: a global crisis in health-care. *J Med Imaging Radiat Sci*. 2023 ISSN 1939-8654. doi:10.1016/j.jmir.2023.10.001.
- [23] Hayre CM, Blackman S, Eyden A. Do general radiographic examinations resemble a person-centred environment? *Radiography*. 2016;22:E245–E251 (Online). Available. doi:10.1016/j.radi.2016.07.001.
- [24] Bleiker J, Knapp KM, Hopkins S, Johnston G. Compassionate care in radiography recruitment, education, and training: a post-Francis Report review of the current literature and patient perspectives. *Radiography*. 2016;22(3):257–262.
- [25] Van der Venter, R. Robins, S. & Joubert, T. 2023. Beyond textbook learning: patients as teachers for South African undergraduate radiography students. 54(2). (Online). Available: [https://www.jmirs.org/article/S1939-8654\(23\)00049-8/fulltext](https://www.jmirs.org/article/S1939-8654(23)00049-8/fulltext).
- [26] Hellman E, Lindgren M. Radiographers' perceptions of patients care needs during a computed tomography examination. *J Radiol Nurs*. 2014;33(4):206–213.
- [27] Alcindor M, Cadet M. Nurses consider family involvement as an important element of patient care. *Evid Based Nurs*. 2021;24:100.
- [28] Jazieh AR, Volker S, Taher S. Involving the family in patient care: a culturally tailored communication model. *Glob J Qual Saf Healthc*. 2018;1(2):33–37. doi:10.4103/JQSH.JQSH\_3\_18.
- [29] Prior SJ, Campbell S. Patient and family involvement: a discussion of coled redesign of healthcare services. *J Particip Med*. 2018;10(1):e5 PMID: 33052119; PMCID: PMC7489197. doi:10.2196/jopm.8957.
- [30] Maphumulo WT, Bhengu BR. Challenges of quality improvement in the healthcare of South Africa post-apartheid: a critical review. *Curationis*. 2019;42(1):1–9.
- [31] Morton L, Cogan N, Kornfalt S, Porter Z, Georgiadis E. Baring all: the impact of the hospital gown on patient well-being. *Br J Health Psychol*. 2020;25:452–473. doi:10.1111/bjhp.12416.
- [32] Masango M. The African concept of caring for life. *HTS Theol Stud*. 2005;61(3) 10.4102/hts.v61i3.465.
- [33] Downing and Hastings-Tolsma An integrative review of Albertina Sisulu and Ubuntu. *Relev Car Nurs*. 2016;21:214–227 10.1016/j.hsag.2016.04.002.