

peer reviewed **OPINION ARTICLE**

An opinion on radiography, ethics and the law in South Africa

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Abstract

This opinion article explores a range of ethical issues that could impact on the daily work of all radiographers. The article focuses on informed consent, over servicing and unqualified persons performing radiographic and ultrasound examinations. The aim of the article is to lay the groundwork for future debates regarding the issues which are presented.

Keywords

Informed consent, role extension, perverse incentives, sonography, mammography

Introduction

The field of radiography in South Africa is complex and presents a multitude of ethical issues. There are four categories of radiographer in this country – diagnostic, therapeutic, nuclear medicine and ultrasound [1]. This article has relevance to all the categories of radiographer in South Africa. The section on informed consent is of particular importance, as is the section addressing relationships with ones employers and superiors.

The discipline of radiography as a whole is often regarded as a supporting function in the healthcare chain, and a stepping-stone in the diagnostic process. This status of the discipline seems to have left many radiographers in a position of substantial confusion. In the course of numerous bioethics presentations for radiographers in South Africa, several ethical and legal issues have recurrently come to my attention. This article aims to address some of these issues and to offer ethically and legally acceptable solutions. The proposed solutions are not absolute – they are based on personal discussions and experiences – and their practicability needs to be scrutinised. Consequently, this article should be seen as a starting point only.

Radiography at present

In South Africa radiography forms an integral part of the healthcare process. A patient who has presented at a healthcare facility will be referred to the relevant department (radiology, nuclear medicine, etc.) for necessary procedures which will usually be performed by a radiographer and sometimes by a radiologist with a radiographer in assistance. It is sometimes beyond the purview of the radiographer to disclose scan results to patients [2]. Rather, the process generally entails that a radiologist writes a final report on the scans and sends this to the referring doctor, who will communicate the results to the patient [3].

Although this system is laudable, in terms of promoting patient-centred care and ensuring that the margin for misdiagnosis is minimised, it does not afford radiographers much professional autonomy in their working environment. It means that radiographers are in a precarious position when there is no radiologist present to issue necessary instructions, and the restrictions on communications with patients put radiographers in a complicated position when patients ask difficult questions (see Box 1).

Informed consent

According to the National Health Act No. 61 of 2003, medical procedures may not be extended to patients in South Africa without their informed consent [4]. Informed consent involves familiarising patients with their health condition, explaining procedural options available, and also elaborating on the possible consequences of any given option. This would require a discussion about anticipated risks and benefits of procedures and the consequences – both social and psychological – thereof. The probable costs of procedures also warrant discussion. For an informed consent to be valid, it is important that the patient is of consenting age (the age of consent for different healthcare procedures varies in South Africa according to different pieces of legislation)

and that the patient is able to critically engage with the information presented. The patient should then make a voluntary decision about the proposed treatment plan. Dissemination of information should account for the patient's language preferences and level of literacy [4].

It is apparent that, as a field which constitutes a building block in a larger process, there is some confusion among radiographers about informed consent. Questions arise such as: 'Who is responsible for getting consent?', and 'How much can a radiographer tell the patient when obligated to act in accordance with instructions from a radiologist?'

Radiographers, legislation and informed consent

This section considers the legal and professional status of the radiographer; examining informed consent requirements for practising radiographers in South Africa.

Legally speaking, the situation is as follows: The Health Professions Act No. 56 of 1974 stipulates who is considered a healthcare professional. In terms of the Act, a healthcare professional is a person who practises a profession which requires registration with the Health Professions Council of South Af-

Box 1: Responding to difficult and sensitive questions without breaching scope of practice

Q: A patient who has a palpable mass with evidence of metastasis in the breast tissue which is suggestive of malignancy may, after a mammogram, enquire of the radiographer: "Do I have cancer?"

A: Although, through extensive training in pattern recognition, the radiographer may be fairly sure that this is the case, he cannot, within the radiographic scope of practice, report this finding to the patient. Some radiographers with whom I have communicated say that in these situations, the best solution is to respond with something along the lines of: "Don't worry yet, this mammogram is just one small part of a bigger set of tests and diagnostic procedures. Your doctor will have to look at all the results from all the different procedures in order to determine if there is something wrong." Speaking in a reassuring tone and taking the time to display empathy will also improve the experience for the patient.

rica (HPCSA). Registration is determined by whether or not there is a professional board of the HPCSA which regulates the profession in question [5]. Radiography is regulated by the Professional Board for Radiography and Clinical Technology [2]. Therefore, radiographers are considered healthcare professionals in terms of the Health Professions Act.

The National Health Act No. 61 of 2003 outlines the legal and professional duties of 'health care providers'. Stipulated is the requirement for 'Consent of User' which is detailed in Chapter 2, Section 7. The section emphasises that 'A healthcare provider must take all reasonable steps to obtain the user's (patient's) informed consent' [4].

But are radiographers healthcare providers? And does the legal duty to obtain informed consent fall to radiographers? A healthcare provider is defined as any person registered in terms of a particular piece of regulatory legislation [4]. One such piece is the Health Professions Act. As noted above, radiographers are registered with the Council in terms of the Health Professions Act. We can therefore draw the conclusion that a radiographer is a 'health care provider' in terms of the National Health Act No. 61 of 2003 (see Box 2). Consequently, radiographers are legally responsible for obtaining informed consent from their patients for any procedure within the radiographic scope of practice which the patients might require.

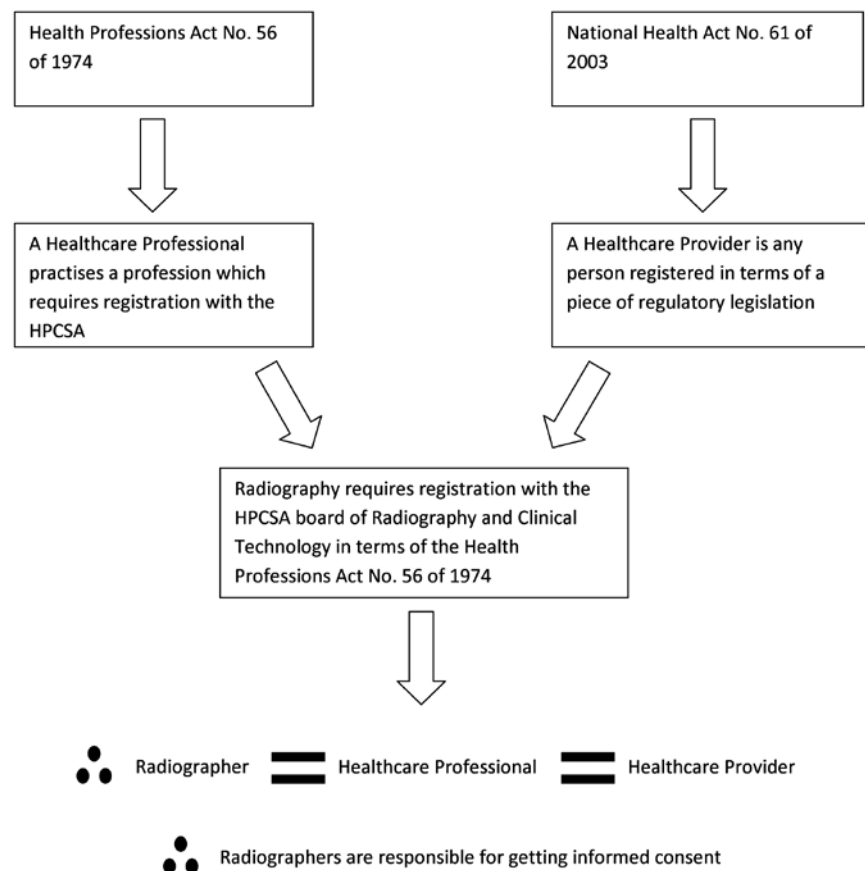
Defining responsibilities and informed consent

An issue which came to my attention during the course of my presentations is that radiographers do not have clearly defined responsibilities in the chain of treatment. Frequently, they are unsure whether they should be getting consent, or whether this is the responsibility of the referring doctor or radiologist. From the legal deduction above, it is quite clear that the informed consent is the responsibility of the radiographer (as well as all other healthcare professionals/providers). It would be advisable then for medical teams to brainstorm informed consent issues within their respective institutions and develop protocols to ensure that informed consent is appropriate and valid.

Informed consent and problems with interpreters

This legal justification for the radiographer to ensure that informed consent is obtained poses another, perhaps more challenging, question: 'How does one get informed consent from a patient in an institution where there is a shortage (or complete absence) of translators and the radiographer cannot speak the

Box 2: Conferring a legal duty to obtain informed consent on a Radiographer: South African Legislation - The Radiographer as Healthcare Provider and Healthcare Professional



This diagram depicts the interaction of South African legislation which pertains to informed consent and radiographers. The figure shows how certain legislative documents link together to ultimately confer a legal duty to obtain informed consent on Radiographers (as well as all other healthcare professionals).

language of the patient?'

To answer this question, we have to consider the context in which we practise in South Africa. Severe resource constraints – whether owing to a certifiable lack of financial means, mismanagement of funds or high-level corruption – characterise almost every aspect of service delivery (and non-delivery) in the public sector. Within these resource constraints, the government is obliged 'to take reasonable legislative and other measures ... to achieve the progressive realisation of ...' our human rights to health care, food, water and social security [6]. This means that government must prioritise certain aspects of healthcare provision over others that it deems less important.

From a legislative perspective, it appears that informed consent is an important right of the patient in the South African healthcare system. Informed consent is mentioned in the Constitution [6], the National Health Act No. 61 of 2003 and in the HPCSA Ethical Rules

and Regulations [7]. From a practical perspective, however, it is evident that many radiographers practising in state hospitals do not have access to interpretive resources some (or most) of the time. Access to these resources is necessary to ensure the ethical and legal validity of informed consent, taking into account the language requirements inherent therein.

So what should a radiographer practising under such circumstances do, given the legal obligation to obtain informed consent? Although there is no easy answer, there are alternative options.

- A family member accompanying the patient could act as an interpreter. However, the patient would need to consent to the disclosure of medical information to the interpreter; if the radiographer cannot speak the patient's language, this might be problematic.

- A hospital staff member or patient advocate could translate. Again, this solution poses some confidentiality problems, and possible breaches of confidentiality should be weighed against acting in the best interests of the patient before such decisions are made.
- The use of other communication methods, such as drawing and gesturing, can aid patient understanding. The development of a generic patient information sheet, translated into the official languages, should help. Once again, this solution is contingent on the fact that the patient can read, posing yet another challenge.

In short, this is a complex situation in which the person at the coal face (the radiographer; in this case) sometimes faces a dilemma: provide a service to patients without their informed consent in order to practise in the best interests of the patient, allowing speedy diagnosis and initiation onto treatment; or do not provide the service, as doing so without informed consent is illegal, even though it may be in the best interests of the patient. It would be advisable for radiographers in such a case to weigh up the situation as it applies to the individual patient, ask superiors for advice, and ensure that any action which is taken can be legally and ethically justified.

Addressing a problem with a superior or referring colleague

Another, more sensitive, issue which has come up frequently during discussions is the relationship between radiographers and their superiors. It appears that radiographers find themselves near the bottom of the food chain and are ill-equipped or too apprehensive to confront and address worrying issues. Such issues include the problem of perceived overservicing, and pointing out to radiologists that they have missed an important abnormality on the image which should be factored into the report and diagnosis. Radiographers often find themselves on the receiving end of a great deal of wrath and contempt when they do this. I shall address these issues separately.

Overservicing

In their booklet entitled *Guidelines on Overservicing, Perverse Incentives and Related Matters*, the HPCSA expressly states that overservicing is a common problem in modern medicine, often exemplified by 'ordering or providing more tests, procedures or care than is strictly necessary'. Healthcare providers – radiographers and radiologists included – shall not perform (or direct to be performed) any pro-

cedure on a patient which is not indicated [8].

It has come to the attention of radiographers with whom I have interacted that some doctors refer patients for scans such as magnetic resonance imaging (MRI) and computerized tomography (CT) on a routine basis. These scans would not generally be indicated owing to patient age or current state of health. Radiographers have questioned how they should proceed in such a situation, given the inherent professional complexities which include fears that if they report overservicing they may experience unpleasant treatment from their superiors. In the private sector radiographers also feared reporting overservicing by those radiologists who pay their salaries.

Although the *Guidelines on Overservicing, Perverse Incentives and Related Matters* do not expressly dictate a course of action in matters such as these, ethical and legal considerations suggest that medical practitioners who perpetuate overservicing should be reported to the relevant authority. The HPCSA guidelines which prohibit overservicing have legal standing – violation of these guidelines is considered an offence. From the perspective of a radiographer it is advisable neither to be party to such matters nor to be complacent about them. Therefore, reporting issues is the most sensible option.

Ethically all healthcare professionals have an obligation to act in the best interests of their patients. There are many arguments as to why performing non-indicated scans is not ethically acceptable. The process and outcomes of imaging can cause emotional distress, and, it is not in the best interest of the patient to go through this unnecessarily. Some imaging techniques are expensive and it is unethical to expect patients to pay for superfluous services (in the private sector) or to expect the taxpayer to do likewise (in the public sector).

The author recognises that the process of reporting is a sensitive issue as it may be interpreted as impugning the reputation of superiors. I propose that the best way to go about it is to report the problem to one's immediate senior. If no support is forthcoming from that person then it would be advisable to report to the next senior person. Another school of thought suggests that the most appropriate course of action is to speak to the person at issue in private and tell them very politely that one considers something to be amiss in the situation. In practise many radiographers with whom I have spoken consider this option to be unfeasible as the cost of victimisation that comes with it outweighs the benefit of reporting a superior. A third school of thought suggests that the most

appropriate course of action would be to report the offending party to the ombudsman of the HPCSA. This is a feasible option that helps to protect the whistle-blower by providing a degree of confidentiality, and it is important for radiographers to be aware of this function of the HPCSA.

Challenging the diagnosis of a superior

Although radiologists are legally mandated to read, interpret and report on images, the author has been made aware of numerous cases where the radiographer believes that the radiologist has made a mistake or missed important pathology when reading them. Although comprehensive analysis of images and writing reports on the analysis is not necessarily within the scope of practise of a radiographer, these aspects are covered in their training. Pattern recognition is, for instance, an area in which radiographers can make a substantial contribution, on the condition that their pattern-recognition training has been provided by an accredited institution.

Common thought is that two minds are better than one, and team work characterised by open communication, respect for the individual competencies within the team and rigorous debate is in the best interests of the patient. Therefore I would argue in this case that, firstly, radiographers need to be more proactive in challenging their superiors, secondly that radiologists need to recognise the ability for quality pattern-recognition amongst their radiographers and, thirdly, that the scope of practise of radiographers needs to be extended.

Ethically speaking it is important to remember once again that the obligation of the healthcare professional is to act in the best interests of the patient. The multidisciplinary approach is, it is argued, also in the best interest of the patient. Therefore, challenging a superior on this basis is ethically acceptable, and indeed imperative.

Of course this is easier said than done (owing in large part to the issues raised in the previous section). Once again, it may be a good idea to approach a direct superior for aid and advice on this issue if one is fearful of the consequences. This is an issue that ought to be brought out into the open and that warrants continued discussion and debate. In my experience it is not only radiographers who experience problems with their medical colleagues. I submit that a good way to ensure the efficiency and efficacy of multidisciplinary teamwork is to address the issues which appear to be hindering it.

Unqualified persons performing mammograms and ultrasound

Another issue which has come to my attention is that of mammographers performing ultrasounds, sonographers performing mammograms, and other such happenings. Radiographers have queried the ethical and legal ramifications of such practise. According to both the ethical tenets and the legal standpoint, this kind of behaviour is unacceptable. I shall discuss each issue in turn.

Ethical issues

In this era of patient-centred medicine, patients and their healthcare providers have certain reciprocal rights and obligations towards each other. Healthcare providers have an obligation to act in the best interests of their patients, while patients are obliged to be truthful about their condition to ensure that the most appropriate treatment option is chosen.

An unqualified healthcare practitioner who performs a procedure on a patient is not acting in the best interests of the patient. It is important to remember that the process of diagnostic scanning can be a traumatic experience for the patient. It is vital that unnecessary mistakes are not made. Films taken by an unqualified person may be unreadable or show apparent abnormalities that are not in fact present, which could lead to patients being treated for a non-existent condition, or remaining untreated for a condition. This would constitute a waste of resources and would not be in the best interests of the patient.

Therefore, radiographers performing aspects of radiography for which they are not qualified is unethical, and such behaviour should not be condoned.

Legal issues

Legally, the field of radiography is separated into different categories: diagnostic radiography, therapeutic radiography, nuclear medicine and ultrasound [1]. Within each category are subsections that require particular competencies. According to the HPCSA's *Rules of Conduct Pertaining Specifically to the Profession of Radiography and Clinical Technology*, radiographers 'shall not in [their] practise exceed

the limits of the category or categories in which [they are] registered' [2]. Given that the HPCSA has quasi-legal standing in South Africa (owing to the fact that the HPCSA is mandated by the National Health Act [4] and, because of its legislative status, the Council is considered a legal body and has disciplinary powers), rules such as this must be adhered to if one wishes to practise within the scope of the law.

Reporting deviational behaviour

As considered beforehand, health professionals who become aware of illegal and unethical practises are obliged to report them. The questions of possible victimisation, the most appropriate recipient of the report, and the consequences of reporting still remain, and unfortunately are not easy to answer. Given, however, that the healthcare professional has an overriding ethical (and legal) obligation to act in the best interests of patients, reporting of such unethical and illegal behaviours should be undertaken to avoid foreseeable harm to patients.

Conclusion

Whereas this article has attempted to highlight some day-to-day issues being faced by radiographers 'on the ground', there is no question that the advice and guidance provided is not definitive and needs to be debated. Most importantly, radiographers themselves need to start discussing these issues and developing sustainable solutions that meet both the ethical and legal requirements of practise.

Development of protocols and procedures should take place at a departmental and institutional level. Once again, this is easier said than done. Under-resourcing means that the workload of radiographers (as with most other healthcare practitioners) is unfeasibly high, which leaves little time for brainstorming meetings and the development of protocols. This is only the beginning of the debate, and it must be taken further.

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