

TEACHING ETHICS, HUMAN RIGHTS AND MEDICAL LAW TO UNDERGRADUATE DIAGNOSTIC RADIOGRAPHY STUDENTS

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ABSTRACT

Members of society are fast becoming aware of their rights and many practitioners are at risk of losing their licence to practise due to unethical practices. The growing human rights violations commonly seen in vulnerable groups also pose challenges to healthcare workers, such as diagnostic radiographers, who often find themselves in situations where they have to disobey the laws to uphold ethical standards. This paper is a presentation of how ethics, human rights and medical law has been integrated into the undergraduate diagnostic radiography curriculum, and can be applied to other healthcare professions. To alleviate resistance to human rights teachings, I recommend the use of real life examples that are less sensitive 'politically' but true in order to gain the attention and cooperation of the diverse culture of the students.

Keywords: Human Rights, Medical Law and Diagnostic Radiography Students

1. OVERVIEW

The paper is structured around the three-year undergraduate teaching programme for diagnostic radiography, as offered in South Africa. Students are expected to gain an understanding of theoretical concepts and to apply these in the practical environment. The theoretical concepts range from natural and human sciences to radiographic techniques and imaging principles. All these concepts are then integrated in the practical environment where radiographic examinations are performed on patients.

The decision to have the teaching of ethics, human rights and medical law mandatory in the undergraduate curricula was based on the complaints lodged against healthcare practitioners at the Health Professions Council of South Africa (hereafter HPCSA). It was realised that ethical violations are growing at an alarming rate and that the community is fast becoming aware of their rights. Having healthcare workers' names removed from the register and thus preventing them from practising their professions further posed a threat to the human resources crisis currently ravaging the healthcare institutions nationally.

The need to integrate the teaching of ethics, human rights and medical law into healthcare professions like diagnostic radiography is further motivated by the need to keep up with advances in science and technological developments in healthcare service delivery. According to the Universal Declaration on Bioethics and Human Rights as adopted by acclamation on 19 October 2005, “ethical issues raised by the rapid advances in science and their technological applications should be examined with due respect to the dignity of the human person and universal respect for, observance of human rights and fundamental freedoms” (UNESCO, 2007).

2. THE NEED TO INTEGRATE TEACHING OF ETHICS, HUMAN RIGHTS AND MEDICAL LAW INTO HEALTHCARE PROFESSIONS' UNDERGRADUATE PROGRAMMES

The need to include ethics, human rights and medical law in education programmes is better explained through a brief explanation of these terms. Ethics is defined as “moral principles or values” (Ehrlich & McCloskey, 2004: 9). According to the World Medical Association (2005: 9), “ethics is the study of morality careful and systemic reflection on and analysis of moral decisions and behaviour.” The manual further states that ethics is primarily a matter of knowing, whereas morality is a matter of doing as applied in healthcare service delivery. The term “medical ethics” is sometimes used and it is defined by the committee on Ethics, Human Rights and Professional Practice of the HPCSA as “careful and systemic reflection on and analysis of moral decisions and behaviour in the healthcare environment”.

Human rights on the other hand are defined as “rights of the individuals, inherent in the fact that they are human. All individuals must be treated in a fair and equal manner taking into consideration freedom and human dignity”. In her presentation at the *Train the Trainer Workshop* held at the University of Cape Town in 2005, Shaheeda Karbanee stated that a simple definition of human rights is provided when the phrase is broken down and analysed as separate words. “Human relates to every living person and a right is a principle, concept or rule which is accorded to the person and which may not be violated” (Karbonnee, 2005).

Medical law is defined as “laws governing the relationship between providers and users of healthcare”. The World Medical Association (WMA) defines it as “laws that specify how healthcare professionals are required to deal with ethical issues in patient care and research” (WMA, 2005:13).

3. RELATIONSHIP BETWEEN ETHICS, HUMAN RIGHTS AND MEDICAL LAW

Ethics, human rights and medical law have been found to be closely related in healthcare provision.

Starting with ethics and medical law from the Medical Ethics Manual, ethics are described as being applicable across national borders and as prescribing higher standards of behaviour. This is different from medical law, which is said to be different from one country to the next. Looking at the relationship between ethics and human rights, Baldwin-Ragaven, De Gruncky and London (1999) explain this relationship as being based on “the principles of health professional ethics and human rights which have as their common aim the respectful and dignified treatment of people both as individuals and collectively” (1999:8). According to Amnesty International (1996:3), human rights and ethics have at their heart a certain understanding of the value of the human individual and of his or her right to be treated with respect and dignity. It is for this reason that the ethics of healthcare professionals should reinforce human rights and make healthcare professionals allies in the promotion and protection of the basic rights of all patients.

The paper focuses less on overseas events and examples so as to avoid falling into the mental trap that “certain incidences would not necessarily happen to us and the possible result that as South African healthcare professionals, we may lose focus of the events that are unique to our society.” The experience I gained through the interactions with students in both theoretical and practical environments helped me identify some common ethical dilemmas, explain their origin and then use them as the basis for teaching. The ethical dilemmas presented in the next section are in no particular order of importance and are by no means conclusive.

4. COMMON ETHICAL DILEMMAS FOR DIAGNOSTIC RADIOGRAPHERS

The common ethical dilemmas presented here are based solely on my experience and observation in the practical environment throughout my career as a lecturer in diagnostic radiography.

4.1 Performance of professional acts versus access to healthcare

According to the HPCSA's ethical rules of conduct for radiography, as tabled under Annexure Ten, diagnostic radiographers shall perform professional acts only at the written request of a practitioner approved by the board for such purpose which in the opinion of the radiographer, was based on good and sufficient grounds. This creates a dilemma in most emergency cases where the patient may be in a life-threatening situation. If the appropriately qualified person is not available to conduct the clinical examination and then request the radiographic examination, the radiographer cannot perform it. From the patient's perspective, it may appear that he is being denied access to healthcare. The dilemma is in most cases due to a human resource crisis as found in state healthcare institutions, especially those in under-served communities, as acknowledged by the Department of Health in its National Human Resource Plan for Health as launched in 2006.

Radiographers usually complain about unnecessary requests. According to Mendelson and Murray (2007:1) lack of understanding of the role of imaging in specific clinical situations leads to unnecessary imaging or the request for the inappropriate imaging modality. Other reasons for inappropriate or unnecessary requests for imaging are: short consultation times by medical practitioners, which could further be attributed to human resource crises, fear of litigation and even intellectual laziness. Having radiographic examinations is in most cases interpreted by patients as evidence that thorough examinations were done, while radiographers view this as unnecessary radiation exposure to patients. By the same reasoning, patients may be unknowingly under or over-served. Medical practitioners may be utilising imaging procedures for reasons outlined above. What they do not realise is that this puts radiographers in a difficult situation, as it is not always easy to refuse to perform the requested examination as the patient has the right to access healthcare services.

4.2 Dual loyalty

According to the regulations defining the scope of the profession of diagnostic radiographers, radiographers are required by law to perform only examinations which have been requested by an appropriately qualified healthcare professional, avoiding unnecessary radiation exposure. The policy of Radiation Control Directorate (RCD) states that “a radiographer in his or her professional capacity may refuse or accede to the request provided that sufficient ground exists for his or her decision”. This applies in situations where the patient is referred to the department for a radiological procedure and in the radiographer's perspective this procedure would not benefit the patient. Despite objections by the radiographers, such procedures are in most cases performed. The radiographer would be caught between loyalty to the employer and the patient.

Excessive radiation exposure during fluoroscopic or computed tomography procedures is another example. A radiographer cannot ask the physician to terminate the procedure before full diagnostics information has been obtained. The radiographer may have noted that the patient has been exposed to radiation far beyond the permissible doses. The patient's right to safety from excessive radiation has been violated, but the radiographer can do nothing, except make a record of the screening time.

Dual loyalty may also be encountered where the radiographer has to protect the actions of the employer, because he or she benefits from those actions or omissions. This could be due to unavailable resources or accessories such as protective lead clothing for patients or even a clean gown to be worn by patients during radiographic examinations, as well as immobilisation devices.

4.3 Immobilisation versus false imprisonment

Diagnostic radiographers are expected to produce and record anatomical regions and physiological systems for diagnostic purposes while ensuring that patients, staff and the general public are protected from excessive radiation. To avoid repeating radiographic examinations due to “motion unsharpness”, the radiographer uses immobilisation devices. The use of head clamps for skull radiography has been discontinued due to incorrect use, which resulted in depression fractures being sustained by most paediatric patients. According to Ehrlich and McCloskey (2004:74) some patients or even family members accompanying patients for x-ray examinations, complain as they are annoyed by the use of some immobilisation devices.

4.4 Radiographer's concerns versus patient's right to privacy and confidentiality

According to the Amnesty International (1996:10) the patient should be examined privately by a healthcare professional only. Depending on the patient's clinical history, cooperation and reasons behind the history, the radiographer's safety may not always be guaranteed. Radiographers sometimes need the assistance of escorts or family members for reasons such as immobilisation. Adhering to the recommendation of Amnesty International as stated above may not always be possible. This dilemma is most evident with patients from vulnerable groups or victims of human rights violations, like abused children and tortured prisoners.

For abused children, the assistance of the escort may be necessary to help with immobilisation or mummifying the patient. In the case of a prisoner, the radiographer may not feel comfortable with the idea of being left alone with this patient, in case the prisoner attempts to escape or commit some other unwanted act on the radiographer. In both cases, chances of the patient's ability to raise awareness of the possible violations are compromised. On the other hand, having the escort assisting during the procedure violates the right to confidentiality and privacy.

The situation may bring about another dilemma which relates to the information or clinical history presented by either the patient or the escort. The radiographer may have difficulty in deciding whose information is correct. This explains the need for healthcare practitioners to be skilled in identifying possible human rights violations. Amnesty International provides some guidelines in this regard.

5. DIAGNOSTIC RADIOGRAPHER AS WITNESS OF HUMAN RIGHTS VIOLATIONS

Diagnostic radiographers form part of the accident and emergency team and as such are well placed to meet victims of human rights violations.

Because of the radiographer's scope of practice, they can do very little in as far as stopping the abuse is concerned. The actions taken during or after experiencing situations similar to those discussed in the preceding section are regarded as crucial contributors to the defense of human rights and the rule of law. As stated previously, the scope of the radiographer includes production of quality images and caring for patients. Even though the uncovering and exposing of human rights violations is not their primary function, this flows inevitably from their exposure to different patients. How does he or she become a patient's advocate?

Amnesty International (1996:12) outlines the role of healthcare professionals in exposing human rights violations as follows:

- Determine the presence of signs of trauma and evaluate their origins.
- Evaluate the witness's allegations of torture through an interview and note, among others, consistency of the information provided as well as the witness's state of mental health.
- Document evaluation; medical or death certificates, radiographs, ballistic reports, etc.
- Forensic investigation autopsy of the deceased detainee or other victims of human rights violations. This is highly applicable in forensic radiography where the need to produce quality images is extremely important.

It is evident from the guidelines presented that all healthcare practitioners should be skilled in report writing to provide an accurate documentation of the events and findings.

6. INTEGRATING ETHICS, HUMAN RIGHTS AND MEDICAL LAW INTO THE CURRICULUM

As mentioned in the introductory paragraph, the major challenge that I had with regard to teaching human rights, relates to issues of diversity of the student population as well as the fact that this subject is in most cases politicised. Taking into account the different cultural backgrounds and diversity of my students, I used some role-plays and real life examples that are less discomforting. I chose the content and depth according to the year of study and the lesson to be learned.

7. TEACHING ETHICS, HUMAN RIGHTS AND MEDICAL LAW IN THE FIRST YEAR

First year students are usually very excited by the prospect of interacting with the patients in the clinical environment and producing images of the internal structures. Before they can interact with patients, however, they are introduced to the following concepts and their practical application in the work environment.

7.1 Professionalism

Teaching focuses around registration with the HPCSA, the Patients' Rights Charter and Patients' Responsibilities. In this section, human rights issues emerge and students are given the opportunity to indicate whether they consider the actions or omissions on the part of the healthcare worker as being acceptable or not. A brief explanation of why we have the legislature promulgating various laws is used to introduce the subject of medical law. Textbooks and most literature sources used in diagnostic radiography education in South Africa come from overseas countries. Even though the basic principles and understanding of patient care issues are universal, I noticed that using a lot of overseas examples sometimes creates confusion for the students, especially in the work environment. To alleviate the confusion and enhance student's ability to integrate theory into the practical environment, I encouraged students to focus on South African specific situations. An example is the right of women to have an abortion, which is not applicable in other states.

7.2 Communication skills

Communication skills refer to both verbal and non-verbal communication. The need to develop communication skills and be able to interact with patients from different cultural backgrounds is valuable in dealing with patients as outlined in the next section.

7.3 Caring for a patient with special needs

These are patients with physical, mental or any other disability who may need immobilisation, transportation or even the use of specialised equipment and accessories for survival. Inappropriate handling of these categories of patients may result in loss of life or permanent disability. There is also the risk of introducing infectious organisms, especially to patients who are on life support apparatus. Healthcare practitioners must show compassion.

7.4 Safety in the x-ray department

According to the ethical guidelines as tabled by the HPCSA, the radiographer must ensure that the department is designed in such a way that the possibility of accidents is minimised. Accidents range from excessive exposure to radiation to falls due to wet and slippery floors. All these are still focused on caring for the patient and ensuring the right to a safe and healthy environment at all times. Creating a clean and infection-free environment also applies here.

7.5 Assessments

Assessments conducted for the first year students include theoretical tests, written assignments and practical assessments.

During practical assessments, the students' communication skills, transfer techniques and application of radiation protection as well as other safety measures are observed. Typical theory questions include but are not limited to the following:

- Write short notes to describe the difference between the ethical and clinical responsibilities of the diagnostic radiographer.
- State the medico-legal prerequisites which must appear on the radiograph and explain why they are termed medico-legal prerequisites.
- Describe in your own words why it is a legal requirement that diagnostic radiographers should be registered with the HPCSA.

8. TEACHING ETHICS, HUMAN RIGHTS AND MEDICAL LAW IN THE SECOND YEAR

Second-year students are gradually maturing in the profession and are usually still excited by the different cases they encounter in the practical environment. The students are introduced to specialised procedures, which demonstrate physiological systems. Some of these procedures may be invasive. Equipment used is somewhat more complex. The students are expected to apply the basic knowledge gained in the first year.

Taking into consideration the complexity of the procedures and the equipment used, the students are introduced to steps in assisting patients through the decision making process, the signing of the consent form and the right to seek a second opinion. Focus is mainly on elaborating on concepts learned in the first year. To demonstrate how ethics, human rights and medical law are integrated into the second year studies, I will use the example of the specialised procedures to demonstrate the urinary system.

These procedures involve the use of iodinated contrast media, which are beneficial to the patient because they help with the visualisation of the anatomical structures on radiographs. In some individuals, the contrast media may even endanger the patient's life due to allergic reactions. Fluoroscopic equipment has the advantage of providing dynamic studies but also results in high radiation doses.

Good communication skills are essential for explanations of the procedure to help the patient make an informed decision after possible risks and benefits of the procedure have been explained. Students are challenged as to how they would handle patients who are not capable of making decisions themselves. This could be due to age (implications of the Child Act), language barriers, mental retardation or severe medical or traumatic conditions. In addition to decision-making comes the need to maintain aseptic techniques.

The students are offered the opportunity to understand consequences of some actions or omissions which may be detrimental to the patient, like the use of expired or contaminated instruments and medications. The implicated practitioner may face consequences such as being charged with negligence.

Dual loyalty still presents itself with regard to specialised procedures where the radiographer may be asked to perform a procedure which could possibly be avoided. According to the study conducted by Mendelson and Murray (2007:1), most radiologists are aware that diagnostic imaging is often used inappropriately, but still radiographers are required to continue with the procedure. Different reasons for this are identified in state and privately-owned institutions. In state healthcare institutions it may be due to fear of litigation while in private institutions it may be for financial interest.

As is the case with first years, there are theoretical and practical assessments for this group of students. Theoretical assessments may include questions such as:

- Define the concept “informed consent” and explain why it is necessary for the patient who is due to have an excretory urography procedure.
- Discuss 'ALARA principle' in relation to the use of fluoroscopic equipment and procedures. Use a specific procedure as an example.
- Describe the spread of micro-organisms and your role in ensuring that the patient's right to a healthy and safe healthcare environment is not violated.

9. TEACHING ETHICS, HUMAN RIGHTS AND MEDICAL LAW IN THE THIRD YEAR

Third-year students have gathered and learned a lot about performing various radiographic examinations as well as assisting with specialised radiological procedures. They are at the stage where they should be prepared to take responsibility for their actions in the clinical environment as independent practitioners. Students are introduced to management principles, which include managing personnel and the facility as a whole. Facility management includes quality control of equipment and accessories used in the imaging process. The knowledge of ethics, human rights and medical law is still essential. New concepts, like Labour Relations and Employment Equity, Policies of the Department of Health especially those dealing with the use of and exposure to radiation, are introduced. With regard to the HPCSA, the students are introduced to guidelines on record keeping, establishing and maintaining a private practice as well as continuing professional development.

Taking a closer look at the size and content of the acts and policies as listed above, it is clear that one academic year will not be enough to cover everything in detail while at the same time focusing on producing optimum quality radiographs. In as much as all these acts and policies eventually contribute to the welfare of the patient, they can however not be dealt with comprehensively.

Teaching through practical examples is implemented. The impact that an unhappy staff member or subordinate would have on service delivery or on the welfare of the patients may be discussed, for instance. From the Department of Health's RCD, diagnostic radiographers are expected to minimise unnecessary radiation exposure of the patient, staff and the public. The students receive an introduction to quality control tests performed by radiographers. Other guidelines relate to licensing and installations of radiation-emitting equipment. Failure to comply with the regulations constitutes a contravention of patients' rights to a healthy and safe environment.

From the HPCSA, students' attention is drawn to the need to maintain registration as well as participation in continuing education development programmes. Continuous assessment takes place in the practical environment just as was for first and second year students. With regard to theoretical assessments, these take the form of oral presentations on case studies. In addition to that, students are tested theoretically with questions similar to these:

- Describe the role of the Radiation Control Directorate regarding patients' rights to a healthy and safe environment.
- Describe the expression "impaired person" and explain the procedure to be followed by the practitioner who wishes to have his name restored on the HPCSA's register.
- Explain the concept "medical records" in the context of diagnostic radiography and explain why these should be kept for certain periods.

10. Conclusion

The World Health Organisation states that, "health is a state of complete physical, mental and social wellbeing and not merely absence of disease or infirmity". In line with this statement, I structured the diagnostic radiography programme to prepare students for independent practice where they would perform professional acts and conduct themselves in a way that guarantees the patient's total wellbeing. Teaching these subjects is not an easy exercise as I have indicated in the introductory paragraph.

Challenges encountered ranged from students receiving their practical training at different healthcare institutions to the social and economic status of patients and the quality of care given to patients at the different centres such as state to private institutions. With regard to the diverse culture and background of the students, I avoided the use of human rights violations as were revealed during the Truth and Reconciliation Commission, as real life examples. I resorted to using ethical dilemmas and focused on less sensitive examples. This worked for me as I managed to draw the attention and participation of almost all students in various activities and projects.

In conclusion, I realised that to integrate the subjects of ethics, human rights and medical law in the curriculum does not necessarily need a special module. Having a specific module may mean that the subject is limited to one group of students. Focusing on the need to have these integrated and taught in a longitudinal fashion throughout the three-year programme, seems to work better. There is just a need to identify areas where the subjects could be integrated.

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