

1. Abstract

1.1. Background:

The European Directive 2013/59/Euratom is a basic safety standard (BSS) provided to members of the European Union regarding all forms of radiation with a specific chapter on medical radiation. The directive increased the onus on those involved in a patients' medical imaging journey to provide risk and benefit information.

The literature in the systemised review came from many different countries and covered many of the professional groups. However, there were only two studies study which mentioned Nurse Practitioners, one in the USA and one in Australia, which given the increase of advanced practice in the UK, encompasses the ability to manage clinical care in partnership with individuals, families and carers (HEE, 2017) and is an important participant group about which little is known. Minimal studies included student or qualified radiographers.

1.2. Methodology:

This research project was carried out using grounded theory (GT) methodology and included three groups; non-medical referrers (NMRs), radiographers, and final year student radiographers, imminently to become autonomous practitioners, all of whom could be involved in the risk benefit discussion. Semi-structured interviews (SSIs) were carried out (seven student radiographers, six radiographers, and seven NMRs) and analysed using constant comparison and thematic analysis.

1.3. Results:

Results regarding radiation knowledge were encouraging when compared to what is known about medical referrers, and there were similar themes, with similar results, such as communication, arising in this research project. One of the biggest areas highlighted for future research and improvement was the difference in Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) training undertaken by NMRs and the possibility of this being extended to radiographers.

1.4. Conclusions:

Although knowledge of radiation and risk was comparable to what is already known about medical professionals there are many improvements that could be made. The most significant would be the possible standardisation of IR(ME)R training for NMRs. There is also some evidence that a recap of teaching on radiation and risk for students, and regular training for radiographers would be beneficial.

1.5. Aim:

- To investigate the knowledge, awareness, and perception of NMRs, radiographers, and final year student radiographers, of radiation, dose, and risk and whether the new Directive 2013/59/EURATOM has impacted clinical practice in relation to the risk benefit discussion.

1.6. Objectives:

- To investigate the current knowledge of radiation, dose, and risk of NMRs, radiographers, and final year student radiographers.
- Through thematic analysis and constant comparison of collected data, to identify any areas for possible improvement of radiation, dose, and risk knowledge.
- Make recommendations to improve the knowledge and training of IR(ME)R referrers, operators, practitioners, and patients, in relation to radiation, dose, and risk.