

EFOMP comment - ICRP "Ethics in Radiological Protection for Medical Diagnosis and Treatment".

On behalf of EFOMP, I thank the ICRP for the efforts provided in drafting this important document entitled "Ethics in Radiological Protection for Medical Diagnosis and Treatment".

EFOMP agrees with the general structure of the document and, in particular, with the following key points (comments are added point-by-point where necessary):

- pag. 18 "(50) In radiological protection, the imperative to do more good than harm is reflected in (though not limited to) the principle of justification. Beneficence and non-maleficence can be interpreted together as maximising benefit and minimising risk". This is a fundamental point, especially for medical practitioners who have the clinical responsibility of the procedure, and also for all the healthcare professionals that are part of the optimization team (radiologists/radiation oncologists, medical physicists, radiographers), as defined by TG 108. A reference to the optimization team could be inserted in the text. Perhaps the imperative to do more good than harm is also reflected in the principle of optimization. If you agree, it might be appropriate to cite it directly.
- pag. 19 "In biomedical ethics, the healthcare provider's responsibilities include obligations to equity and sustainability in health systems. Thus, health care providers often face ethical dilemmas between what is "best" for individual patients and what is sustainable and equitable in a health care system that serves everyone. The WMA Declaration of Geneva pledges that the health and well-being of the patient will be the first consideration (WMA, 2018a)."
- pag. 21 "Efficiency and sustainability are promoted by avoiding the overuse of imaging and addressing the ever-growing costs of overuse of technological improvements outside of the context where they provide clinical benefit".
- pag. 23-24 "... Truth-telling includes empathy in attending to the manner of the disclosure of information, by for example, having an appropriate degree of confidence in what is disclosed, preparing an appropriate setting for the patient to hear what is disclosed, ensuring the patient has the opportunity to have supporting friends and family present or available, being prepared for discussion of follow-up, and also being prepared to delay decision-making until the patient has absorbed information and is ready to make decisions". To establish an effective medical doctor-patient relationship and to take weighted and shared decisions it is fundamental to have time. More generally, the variable "time" is important to maximise the patient benefit. If deemed appropriate, this point could be addressed in more details in the document.
- pag. 80 We agree that it is essential to strengthen training in radiological protection ethics. In this regard, the link between radiological protection ethics and the ethical codes of the different healthcare professionals involved in medical exposures is particularly important.

Additional comment

Actions ensuring the radiation protection of workers and members of the public are often strongly interconnected with those dedicated to the radiation protection of patients. For example, radiation exposure of nuclear medicine and interventional radiology workers is correlated with patients' absorbed dose. However, it is possible to have two professionals dealing with the physical part of radiation protection, e.g. in Europe the medical physics expert for patient protection and the radiation protection expert for staff and public protection.

In this scenario, the decisions to protect staff and members of the public from the harmful effects of ionizing radiation may not be aligned with those to protect the patients. Therefore, the effectiveness of radiation protection depends on the effectiveness of communication and liaison between two different professionals.

ICRP Publication 139 states that "Occupational exposure in interventional procedures is closely related to patient exposure and, therefore, management of occupational protection should be integrated with patient protection. ... Measures to protect staff should not impair the clinical outcome, and should not increase patient exposure". Therefore, staff protection provisions should take into account patient protection provisions.

In practice, in many European countries medical physics experts take full responsibility for the physical aspects of radiation protection in hospitals, including protection of patients, staff, members of the public, volunteers, etc. Where this is the case, radiation protection management including all the necessary actions to ensure radiation protection for all, is simplified and more effective.

In this regard, EFOMP has recently published the update of the "Malaga Declaration", one of the main statements of the Federation, where it points out "The Medical Physics Expert (MPE) as defined in the directive 2013/59/ EURATOM should be the healthcare professional to supervise and assume the responsibilities for radiation protection activities in hospital settings, including patients, working staff, members of the public and visitors. The Radiation Protection Expert (RPE) in hospital settings should be an MPE, since medical physicists have the highest level of radiation physics knowledge and training" (<https://www.efomp.org/index.php?r=news/view&id=317>).

If the task group considers it useful, a case study could be added as an example of 'good practice' describing a scenario in which all physical aspects of radiation protection, dedicated to the protection of patients, staff and the public in a hospital setting (e.g. in a nuclear medicine or interventional radiology department) are managed by a medical physics unit, whose members are able to optimise the exposure of patients and workers in a harmonious way, in line with ICRP Publication 139.

Minor comment

Pag. 52 "examination before seeing them. The director of radiology and the imaging medical physicist", please remove the word "imaging" before medical physicist.