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Introducing ICRP Publication 157

Ethics in Radiological Protection for Medical Diagnosis and Treatment

Chapter 3:

The Practical Implementation of Biomedical Ethics

- Key developments in clinical practice
that implement the core, procedural values of
biomedical ethics

3. The Practical Implementation of Biomedical Ethics

- **3.1 Professional oaths and codes of ethics**
- **3.2 Role of international, national and institutional ethics committees**
- **3.3 Clinical practice developments**
 - 3.3.1 Informed consent, incapacity, shared decision-making, and patient-centred care
 - 3.3.2 Privacy, confidentiality, and the stewardship of health information
 - 3.3.3 End of life care
 - 3.3.4 Professionalism and financial influences on medical decision-making
 - 3.3.5 Radiological safety culture and patient safety

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3.1 Professional oath and codes of ethics

- **Biomedical ethics, expressed in physician oaths.**
 - **World Medical Association (WMA)'s Declaration of Geneva**
 - Adopted in 1948, last amended in 2017
 - Modern perspective to the Ancient Greek Hippocratic Oath
 - Humanitarian aspects of medicine
 - Respect for autonomy and dignity of individual patient
 - Attend to physician's own health, well-being, in order to provide care of the highest standard.
 - **WMA's policy documents:**
 - Patients' rights; Patient safety; End of life care, etc.
 - **Code of Ethics of ICRP, 2014**

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3.2 Role of international, national and institutional ethics committees

- **International ethics committees**

- **World Medical Association (WMA)**
- **Council of Europe**
- **UNESCO**

Recommends establishment of national and institutional ethics committees. (Universal Declaration on Bioethics and Human Rights, 2005)

- **WHO**

- **National ethics committee**

advise government, national bodies/institutions, and inform the general public about biomedical ethics.

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3.2 Role of international, national and institutional ethics committees

- **Institutional ethics committees**
 - **Clinical ethics committee**
 - **Ethicists (ethics consultants)**
 - Participation of RP experts in ethics committee
 - Ad hoc bases
 - A member of the committee

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3.3 Clinical practice developments

- **3.3.1 Informed consent, incapacity, shared decision-making and patient-centered care**
 - Respect for **autonomy/dignity**
 - Patient's consent or **decline** of medical intervention (treatment or diagnosis) based on information of:
 - **Risks and benefit**
 - **Alternative**, including doing nothing
 - Free to make a decision **without coercion**

3.3 Clinical practice developments

- **3.3.1 Informed consent, incapacity, shared decision-making and patient-centered care**
 - Interpret medical information in light of the patient's value, through two-way exchange of information.
 - Key element in radiological protection in the clinical context.
 - Growing awareness toward improving transparency by communication and education about risks and benefit of the intervention (diagnosis, therapy).
 - **Image Gently**, 2007
 - **Image Wisely**, 2014

3.3 Clinical practice developments

- **3.3.1 Informed consent, incapacity, shared decision-making and patient-centered care**
 - Incapacity/vulnerability
 - Incapacity of informed consent – local regulations and cultural context.
 - Even hospitalized patients with psychiatric conditions often retain capacity of decision making.

3.3 Clinical practice developments

- **3.3.1 Informed consent, incapacity, shared decision-making and patient-centered care**
 - **Pregnancy/childbearing capacity**
 - Full information of risks of high dose diagnostic procedures or radiation therapy for a pregnant woman or a woman of childbearing.
 - The risks to the foetus, the possible effect on the continued pregnancy and the long-term well-being of the child.
 - Foetal doses below 100 mGy should not be considered a reason for terminating pregnancy.
 - Involving partner/father – sensitive issue.
 - Shared decision-making including radiation experts.

3.3 Clinical practice developments

- **3.3.1 Informed consent, incapacity, shared decision-making and patient-centered care**
 - **Children**
 - “**Assent**” - agreement of receiving interventions based on understanding of the risks and benefit, according to their capacity of understanding.
 - The extent of the parent involvement in consent for paediatric patients depends on the age and maturity of the patient.
 - The manner and scope may differ in different jurisdictions.

3.3 Clinical practice developments

- **3.3.2 Privacy, confidentiality, and the stewardship of health information**
 - Privacy and confidentiality - human dignity and autonomy.
 - Physical layout - bodily privacy
 - Expanding use of artificial intelligence (AI) and machine learning - consideration about the privacy in the settings of utilizing large amount of personal information.

3.3 Clinical practice developments

- **3.3.3 End of life care**

- End of life - reducing stochastic effects becomes less important.
- Imaging that is painful and disruptive for very ill and dying patients should be avoided when it will not benefit the patient.
- “Advance care planning (ACP)” - a process where patients can develop an explicit plan considering a future where they come to be incapable of expressing their own will.

3.3 Clinical practice developments

- **3.3.4 Professionalism and financial influences on medical decision-making**
 - **Conflict of interest** - diagnostic and treatment equipment; personal benefit from referral relationships.
 - Increased financial benefit can result in patients having an extension of treatment.
 - Clinical decisions must be made in the **best interests of the patient** and not for the gain of health professionals/institutions.

3.3 Clinical practice developments

- **3.3.5 Radiological safety culture and patient safety**
 - **Radiation safety culture** is harmonious with the broader concept of **patient safety**.
 - Combination of habits and knowledge of “*radiological protection in all its aspects for workers, patients, population and the environment, and in all exposure situations, combining scientific and social dimensions*” (IRPA, 2014).

3.3 Clinical practice developments

- **3.3.5 Radiological safety culture and patient safety**
 - **Culture** “*is the product of individual and group beliefs, values, attitudes, perceptions, competencies, and patterns of behaviour that determine the organisation's commitment to quality and patient safety*” (U.S. Joint Commission, 2021).
 - **Ethics** is a part of radiological safety culture, education and training in ethical values is extremely important.



Thank you for your attention!

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