

Wednesday June 17 Day 3 Research in the field of Risk Perception, Communication and Ethics related to Radiological Protection.

Session 3 – **Communication and risk perceptions in radiation protection in medicine**

The radiology informed consent from recommendations from European Society of Cardiology,	Clara Carpeggiani, Italy
Use of ionising radiation for medical purpose what is the risk perception of hospital personnel ?	Catrinel Turcanu, Belgium
Low doses of radiation-hot spot in dose perception and radiological protection.	Sylwester Sommer, Poland

What have we learnt from the process over these three days?

In medical exposure, specifically in diagnostic radiology and nuclear medicine procedures, the process for informed consent is quite often lacking and weak.

The effective dose in medical imaging could reach tens of mSv per exam. Experts may disagree on the extent and existence of related risk of cancer and on the LNT assumption, also in field different by medicine.

What have we learnt from the process over these three days?

The context plays a great role in perception of ionizing radiation (e.g. industry vs medical).

We have examples of higher trust in the institutions, responsible for risk governance, and consequently lower risk perception.

Perception of IR risk represents a part of the overall perceived job risk (e.g. In hospital), and the non-IR risks are almost equally important.

What do we think are the key challenges to take forward ?

To have a real implementation, day to day, of Justification and Optimization principle in medical imaging .

To effectively apply 3 "A" approach

→ Appropriateness, Awareness, Audit

To be able to inform about dose and risk (e.g. patients)

→ including what you know and what you do not know
(in view of prudence)

To continue scientific research on dose and risk estimations, and at the same time to consider how to live with uncertainties to a certain extent.

What do we think are the key recommendations/solutions ?

The physician has the work of care to patients and at the same time they are facing communication to the patient, but their educational path may this aspect not always considered.

Need to do best !

Try to follow the process: - safer behaviour with respect to IR work risks -increased feeling of safety and controllability → also lower risk perception

Be sure about the implementation of 3"A" s approach

Engage with **stakeholders** on protection choices at low dose and aspects of communication of uncertainties.

What do we think are the key recommendations/solutions ?

"Optimisation is a frame of mind, always questioning whether the best has been done in the prevailing circumstances, and if all that is reasonable has been done to reduce doses." ICRP 103