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Session 5.4: Radiation Protection in Medicine
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Title: A cautionary tale of an RPE raising concerns with hospital managers about doses to patients from x-ray medical exposures

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Introduction

It is important that medical exposures, by far the largest artificial source of exposure of the world's population to ionising radiation, are justified and optimised. The European Basic Safety Standards Directive defines a "radiation protection expert" (RPE) as having the knowledge, training and experience needed to give effective radiation protection advice. This talk describes experiences of an RPE who was unfairly dismissed by hospital managers after raising concerns, after dose audits showed that radiation doses to patients from common x-ray procedures were substantially higher than national benchmarks.

Methods

The RPE, in quietly raising these concerns through internal hospital channels, was seeking to promote the IAEA/WHO Bonn Call for Action, which seeks to improve radiation protection in medicine. He was seeking to introduce a dose management system, so as to be able to harvest digital dose information automatically, to significantly improve dose audits and support optimisation programmes for diagnostic x-ray exposures.

Results

Newly-appointed relatively junior managers considered the RPE a troublemaker for raising these concerns. An employment dispute was engineered against him resulting in his dismissal. An employment tribunal confirmed that he had been unfairly dismissed. Both regulatory inspection and external review corroborated the concerns raised by the RPE. Nevertheless, despite this vindication, he has not been reinstated and has lost his career.

Conclusions

This case illustrates the dangers of concerns about radiation doses being filtered and suppressed by managers with no scientific qualifications or relevant knowledge of radiation safety matters. The latent period between exposure and manifestation of biological effects and the statistical nature of stochastic effects increase the difficulty that RPEs may face when trying to improve radiation safety culture in an organisation resistant to messages that improvements are needed.

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