The experience of using na e-learning tool for radioprotection training for diagnostic radiology and health workers

R. Lykawka$, J. M. Goulart$, M. Anés$, J. H. Dias$, V. B. Motta$, A. Bacelar$

$ Serviço de Física Médica e Radioproteção, Hospital de Clínicas de Porto Alegre, 90035-903, Porto Alegre, RS, Brasil
manes@hcpa.edu.br

RESUMO
Radiation protection training is a subject issue addressed in Brazilian health care regulation and intends to create safer procedures and facilities. In this paper we report our experience on implementing an e-learning radiation protection course for radiation occupationally workers and a specific course for non-occupationally workers. The attendees were selected respecting their occupancies and the evaluation about radiation exposure risk. We compared attendee ratio for presential and e-learning for both courses. The course 1 has achieve for presential 25.54% and for e-learning 78.82%, and course 2 for presential 4.90% and 80.97% for e-learning. The e-learning plataform has become a suitable tool to increase the adherence of radiation exposed and non-exposed occupationaly workers.

Palavras-chave: radioprotection teaching, e-learning

1. INTRODUCTION
Radiation protection training is a subject issue addressed in Brazilian health care regulation and intends to create safer procedures and facilities [1-3]. One of the greatest challenges in radiation protection education at hospital institutions is to achieve a great number of workers and with very different knowledge backgrounds. In this paper, we report our experience on implementing an e-learning radiation protection course for radiation occupationally workers and a specific course for non-occupationally workers. Our main goal was to extend to whole target audience and evaluate their adherence to this new learning tool.

2. METHODS
Between 2011 and 2014, the radioprotection training had presential classes and the call for target audience was by memorandum addressed to the respective unit. From 2015, we work with an e-learning training tool and created course 1 addressed to workers that are at risk for radiation exposure, also called as radiation occupationally workers, and course 2 for patientcare workers with a more informative approach about radiation at hospital institutions. The attendees were selected respecting their occupancies and the evaluation about radiation exposure risk. We compared attendee ratio for presential and e-learning for both courses.

3. RESULTS
Audience target for course 1 and course 2 are about 700 and 5200 at our hospital, respectively. The course 1 has achieve for presential 25.54% and for e-learning 78.82%, a increase about 3 times. On the other hand, course 2 presented an substantial increase of about 16 times when comparing the presential ratio of 4.90% and 80.97% for e-learning. In 2017, our preliminar results are 88.13% for course 1 and 82.90% for course 2.

The Brazilian regulation places the training of occupationally exposed workers as compulsory. Workers and institution are co-responsible to promote it. Despite this, even with the change of strategy to increase the adhesion of these workers, we did not reach them in their entirety.

4. CONCLUSION
In this paper we report our experience about using an e-learning tool to increase the adhesiveness to the radioprotection training course. The e-learning tool allowed the radiation protections supervisors to answer questions from the attendees and monitor their adhesiveness to the training course. Nevertheless, these results evidenced the need to review the action plans of continuing education in radioprotection at our institution.

5. ACKNOWLEDGMENT

We thank the personnel management coordination (CGP) of the Hospital de Clínicas of Porto Alegre for their support and encouragement in the development of the classes for the e-learning tool and in the provision of information for the preparation of this article.
BIBLIOGRAPHY

