COURSE ON RADIOLOGICAL PROTECTION AND QUALITY ASSURANCE IN RADIOLOGY. TELE-EDUCATION COURSE: A POSSIBLE SOLUTION TO CONTINUED POSTGRADUATE TRAINING

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INTRODUCTION

The creation of an interdepartmental project subsidised by the Spanish Ministry of Education has made it possible to create a series of specific didactic materials on Radiological Protection and Quality Assurance in Medical Radiodiagnostic Practices, leading to the publication of a specific manual and practical notebook. As a result, this material now constitutes the working basis for those professionals exposed to ionising radiation who are following the first continuous tele-education training course in Spanish via the Internet on this subject.

Interactive multimedia training and tele-education may become one of the alternatives that allow health science professionals to receive continuous training, if adequate content and aims have been established during undergraduate training

OBJECTIVES

The basic aim was to provide the student with scientifically up to date and pleasant teaching material, making the learning process easier by use of the computer. Tele-education via the Internet was later added to the course and has been extended to other professionals who also use radiation from the point of view of medical diagnostic imaging.

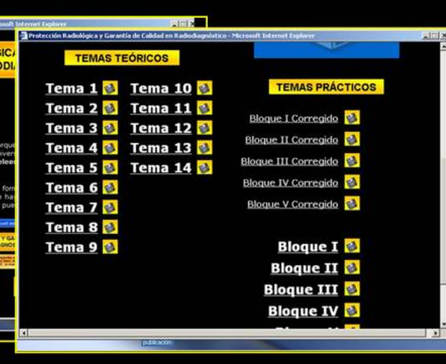
MATERIALS AND METHODS

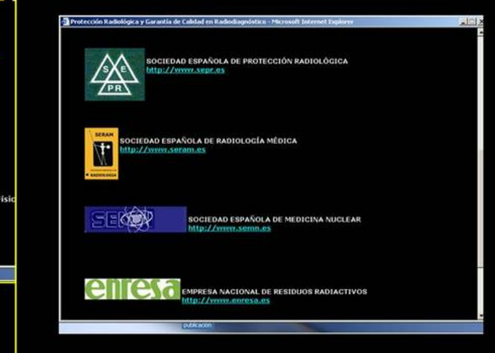
The study consisted of three different stages:

(1) In the first stage, the shortfalls and gaps in the teaching and learning process of our own students were identified, in order to create scientifically up to date and pleasant teaching material whose usefulness would be assessed with the same type of student a year later.

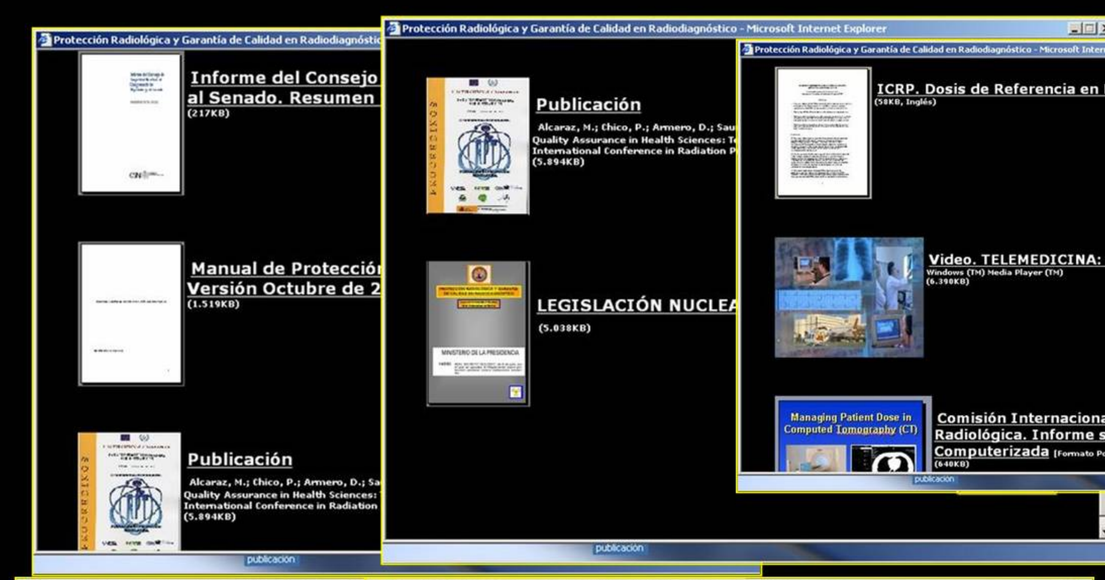
(2) During the second stage, the test was published after being approved for publication by the University of Murcia Publications Service. A guideline text was drawn up, including a practical notebook with those quality control tests considered to be essential and a self-assessment test lacking those answers felt to be most appropriate. All the material assembled was also published in CD-Rom format.

(3) Finally, an independent computer server was set up in the Radiology and Physical Medicine Unit of the University of Murcia, sponsored by the Experimental Radiology Research Group, which used its I.T. network (ATICA and SUMA programs) to provide coverage that allowed it to operate independently, with access control, downloads, notice board, IRC or chat rooms, FAQs, self-assessment programs and the possibility of sending practical answers, and different materials and publications give radiological protection and quality assurance. All this allowed the first tele-education course on Radiological Protection and Quality Assurance to be given over the Internet. However, the course offered two options in its first year of existence: physical attendance at the Faculty of Medicine and virtual attendance via the Internet.





Guideline text for the students



Information of the course

Diploma of the educational Promotion course

RESULTS

The course has been taken by 156 students: 28 graduates (5/6-year degree), 12 graduates (3-year degree), 23 specialists in radiodiagnostics, 6 nursing assistants and 87 students residing in 10 different countries: 5 European (Spain, Finland, Italy, Belgium and France) and 5 Latin American countries (Argentina (3 students), Cuba (3), Colombia (3), Mexico (2) and Paraguay (1)). In Spain, those taking part have come from the provinces of Vizcaya, Palma de Majorca, Badajoz, Albacete, Seville, Alicante, Madrid and Murcia. Only 3 students did not manage to pass the specific, compulsory progress tests, normally because they were unable to maintain Internet access for a variety of reasons.

At present, we are holding the 3ª edition of the tele-education course (October-December 2004). This edition has been officially approved to be regarded as free credits by the student within the improved study plans for Medicine, Dentistry, Nursing and Physiotherapy, as requested by the undergraduate students of said university degree courses themselves

CONCLUSION

During the training cycles, the use of appropriate teaching materials determines the level of knowledge that can be reached and, possibly, the initial professional capacity of the students. Interactive multimedia teaching and tele-education allow us to increase the students' interest in subjects that have been seen as boring and difficult by health science students.

During the later period, when they have left university, tele-education can provide continued training that achieves the basic goals of Radiological Protection and Quality Assurance, allowing professionals to familiarise themselves with this type of content, which they do not generally see as being.

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