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Tell me a little bit about yourself.

I enjoy my profession and dedicating myself to the different activities I perform as a Medical Physicist with 19 years of experience in active practice in different fields such as radiation therapy, radiodiagnosis, radiation protection, and personal dosimetry. It has been gratifying.

How did you become interested in Medical Physics?

When I finished my degree in Physical Sciences, I started looking for specialization options, and just at that time, Dr. Modesto Montoya gave a talk about the Master's degree in Medical Physics at the Physics faculty of the National University of San Marcos, which sparked my interest in applying physics in medicine, especially because of the importance this career has for the health of the population.

Tell me about what a Medical Physicist does in radiation therapy.

The main objective of the work of the Medical Physicist in radiation therapy is to ensure that patients receive the prescribed radiation doses in the most optimal and safe way possible. To achieve this goal, the Medical Physicist performs multiple tasks such as calibration of radiation therapy equipment, treatment planning, and quality controls. In addition, the Medical Physicist is also responsible for the safety of occupationally exposed personnel, so he or she must be aware of compliance with radiation protection regulations at the facility.

Based on your own experience, what technical aspects do you consider to be evolving in radiation therapy?

Radiation therapy technology is advancing very rapidly for the benefit of patients. Radiation therapy equipment is currently designed to deliver a more focused dose of radiation to the patient, avoiding irradiation of organs at risk, which makes it possible to scale up the doses of radiation prescribed by radiotherapists, benefiting patients treated with radiation therapy. Another important aspect of the technological benefit is that it allows for more accurate knowledge of the radiation doses received by patients, which is essential for the studies conducted by radiotherapists.

How would you summarize the care to be taken for patient protection in the Radiation Therapy Service?

There are many precautions that must be taken with radiation therapy patients to prevent accidents. Radiation protection for the radiation therapy patient includes many aspects, some of which are apparently simple, such as identifying the patient correctly. However, an identification error could have serious consequences. It is important that radiation therapy personnel follow established protocols and maintain adequate communication to prevent accidents and maintain patient safety in radiation therapy.

What can you tell us about the importance of quality control of radiation therapy equipment?

Quality control of radiation therapy equipment is vital for the safety of patient treatments. The radiation doses prescribed by radiation therapists aim to irradiate tumor cells while avoiding irradiation of healthy tissue, which is why they must be delivered as accurately as possible. To ensure that radiation doses are being delivered to patients correctly, it is essential that the radiation therapy equipment is in condition to deliver the treatments, and this verification is performed in the equipment's quality control.

Likewise, what can you tell us about the need to implement quality assurance programs in radiation therapy services?

Quality assurance programs are essential for the safety of both patients and personnel working in radiation therapy. Currently, healthcare centers that have a radiation therapy service are well organized and are aware of the importance of quality assurance programs in radiation therapy. These quality assurance programs cannot be static, they must be updated as required. That is why it is very important to maintain constant meetings with the personnel involved in the quality assurance program.