

Radiation exposure during interventional procedures a concern for some developing countries

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Interventional radiology procedures are on the rise in developing countries and there is a significant need for optimization of these procedures to ensure patient safety. Many facilities in these countries lack the concept of patient dose estimation and dose management, putting patients at a higher risk of developing complications due to overexposure from radiation during interventional procedures, according to a study performed by the International Atomic Energy Agency in Vienna, Austria.

The study included data from 55 hospitals in 20 countries—mostly in Eastern Europe, five in Africa and six in Asia. "We found that a substantial number of coronary angioplasty procedures performed in the [developing countries](#) in this study are above the currently known dose reference level," said Madan M. Rehani, PhD, coordinator of the study. "We also found that kerma area product (KAP), a method to determine dose estimations, was available in almost half of the facilities, but none had experience in its use," said Dr. Rehani.

"There is a significant lack of awareness about patient dose estimations and dose management among interventional radiologists and cardiologists in developing countries. Our goal is to introduce these concepts to them and achieve effective implementation," he said.

"Most training centers need to establish a culture of dose assessment and

dose management—including programs for residents with radiation protection as an essential component—to improve patient safety. Dose monitoring devices for angiography equipment should also be considered," said Dr. Rehani.

This study appears in the August issue of the *American Journal of Roentgenology*.

Source: American Roentgen Ray Society

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