

ABSTRACT

Evaluation of radiation worker doses using Thermoluminescence Dosimeters (TLDs) was conducted to monitor the amount of radiation exposure received by workers and to ensure that the exposure did not exceed the established Dose Limit Values (DLVs). This activity also aimed to support the implementation of radiation protection principles in order to ensure the safety of workers in the Cath Lab of RSUD Kojā, which has a high potential for radiation exposure due to the use of fluoroscopy. Dose monitoring was carried out through the analysis of TLD reading data collected during the period of 2021–2025. The results of the analysis showed that specialist physicians received the highest average dose of 0.385 mSv over the 5-year period, followed by scrub nurses with 0.201 mSv over 5 years, radiographers with 0.159 mSv over 5 years, circulating nurses with 0.123 mSv over 5 years, and medical physicists with 0.096 mSv over 5 years. All obtained dose values remained below the Dose Limit Value (DLV), which is an average of 20 mSv per year over a 5-year period and 50 mSv in any single year. Based on these results, the radiation exposure received by workers in the Cath Lab of RSUD Kojā remained within safe limits and was in accordance with the applicable radiation safety standards.

Keywords: radiation dose, Cath Lab, TLD, Dose Limit