ABSTRACT

The use of Computed Tomography (CT Scan) in medical diagnostics provides significant benefits, however it also poses potential risks of radiation leakage that may endanger radiation workers and the public. This study aim to analyze corrective action for radiation leakage in the CT Scan room of RSUD Karawang by comparing radiation exposure levels before and after improvements. The research method includes measuring radiation exposure using a surveymeter at several point around the CT Scan room, identifying the cause of leakage, and evaluation the effectiveness of the corrective actions implemented. The result show that prior to corrective action, there was one measurement point with the highest radiaton exposure of 5,52 µSv/h, exceeding the permissible limit located at the operator entrance area. The leakage was cause by gaps between the door and the wall, nail installations on the lead shielding, and insufficient shielding on the air conditioning drainage pipe. The corretive actions included the addition and repair of lead shielding at several points, including replacing the operator door and improving the wall structure. After the improvements, the measurement result showed a significant decrease in radiation exposure, ranging from 0,05 to 0,13 µSv/h, which is below the safety limit by BAPETEN. Therefore, the implemented corrective actions were proven effective in reducing radiation leakage in the CT Scan room.

***Keyword** : BAPETEN, CT Scan, Radiation Leakage, Radiation Protection, Surveymeter*