

Poster Presentations

Radiation Leakage in Some Healthcare Centers in Palestine

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Abstract

The values of power flux density in some healthcare centers in Palestine have been measured. The average values of measured power flux density were 2000 μ W, 402 μ W, 1262 μ W and 28 μ W in Arab Specialist hospital, Patient friend's society, Salfeet hospital and Rafediya hospital, respectively.

The magnitude of electric field, magnetic field and the specific absorption rate (SAR) were calculated from the measured power flux density, which were less than the standard levels limitation of exposure to EMR.

The dose rate for X and Gamma rays, beta radiation flux density inside the control room and waiting room in the X-ray rooms have been measured and their values were less than the maximum permissible dose for workers recommended by the Palestinian Ministry of Health in all tested rooms.

The effect of X-ray on radiologists, health in healthcare center has been studied. Blood oxygen saturation (SPO₂%), heart pulse rate (HPR), systolic blood pressure (SBP) and diastolic blood pressure (DBP) of the selected radiologists were measured before and after their shift, a significant impact does not appear in measured health parameter after exposure to EMR in radiology departments.