

## ABSTRAK

Gery Putri Asmarani

### GAMBARAN DOSIS RADIASI DAN KARAKTERISTIK TERHADAP PROFIL DARAH PETUGAS RADIOLOGI TAHUN 2022 (Studi Kasus di RS Islam Masyithoh Bangil Kabupaten Pasuruan)

xiv + 64 Halaman + 5 Gambar + 13 Tabel + 7 Lampiran

Radiasi yaitu pancaran energi bentuk gelombang atau partikel yang dipancarkan oleh sumber radiasi atau zat radioaktif. Penggunaan radiasi di ruang radiologi memberikan manfaat dan memberikan efek buruk untuk pekerja. Dampak yang ditimbulkan akibat paparan radiasi pada tingkat molekuler yaitu bersifat langsung maupun tidak langsung. Penelitian ini bertujuan untuk mengetahui gambaran faktor pengaruh kadar profil darah pada petugas radiologi setelah terpapar radiasi di Rumah Sakit Islam Masyithoh.

Metode penelitian ini adalah obesrvasional yang bersifat *cross sectional* dengan analisis secara deskriptif. Data dikumpulkan dari seluruh populasi berjumlah 3 orang yang bertugas di ruang radiologi Rumah Sakit Islam Masyithoh Bangil. Selanjutnya data yang terkumpul, di tabulasi kemudian dianalisis secara deskriptif.

Hasil penelitian didapatkan dosis radiasi dan karakteristik terhadap profil darah petugas radiologi mengalami perubahan. Kadar leukosit yang memiliki perubahan yaitu umur 18-40 tahun, masa kerja  $\leq 6$  tahun, dosis radiasi  $< 5$  mSv, dan jumlah pasien  $> 7$  orang. Pada kadar trombosit dengan umur, masa kerja, dosis radiasi, dan jumlah layanan pasien tidak mengalami peningkatan atau normal.

Kesimpulannya adalah terdapat perubahan kadar leukosit terhadap umur, masa kerja, dosis radiasi, dan jumlah layanan pasien. Pada kadar trombosit setelah penanganan pasien tidak terjadi peningkatan atau normal. Diharapkan penelitian selanjutnya dapat dikembangkan di beberapa rumah sakit dengan variabel dan karakteristik yang lebih banyak.

Kata Kunci : Radiasi, leukosit, dan trombosit

Daftar Bacaan : Buku, e-book, dan jurnal (2010-2021)

## ABSTRACT

Gery Putri Asmarani

### DESCRIPTION OF RADIATION DOSAGE AND CHARACTERISTICS OF THE BLOOD PROFILE OF RADIOLOGY OFFICERS IN 2022 (Case Study at Masyithoh Bangil Islamic Hospital, Pasuruan Regency)

xiv + 64 Pages + 5 Images + 13 Tables + 7 Attachments

Radiation is the emission of energy in the form of waves or particles emitted by a radiation source or radioactive substance. The use of radiation in the radiology room provides benefits but can also have an adverse effect on workers. The impact caused by radiation exposure at the molecular level can be direct or indirect. This study aimed to determine the description of factors influencing blood profile levels on radiology officers after exposure to radiation at Masyithoh Islamic Hospital.

This research method was observational which is *cross sectional* with descriptive analysis. Data were collected from the entire population of 4 people who served in the radiology room at Masyithoh Bangil Islamic Hospital. Furthermore, the data collected was tabulated and then analyzed descriptively.

The resulted of the study, namely the radiation dose and the characteristics of the radiology officer's blood profile changed. Leukocyte levels that have changes are age 18-40 years, working period 6 years, radiation dose < 5 mSv, and the number of patients > 7 people. The platelet levels with age, working period, radiation dose, and number of patient services did not increase or were normal.

The conclusion of the study was that there were changes in leukocyte levels with respect to age, working period, radiation dose, and number of patient services. There was no increase or normal in platelet levels after treatment. It is hoped that further research can be developed in several hospitals with more variables and characteristics.

Keywords : Radiation, leukocytes, and platelets

Reading List : Books, e-books, and journals (2010-2021)