

ABSTRACT**The effects of X-rays radiation exposure toward lymphocyte on Radiographer in ABCD Hospital in Mataram 2014**

The existence of X-ray radiation sources in ABCD hospitals is used as one of the health facilities and the role of management of the facilities is still not optimal in providing protection for radiographer and the use of personal protective equipment is still a rare thing to be done properly by the radiographer. This research is quantitative research with causal relationship. The research was conducted in 4 hospital in Mataram, West Nusa Tenggara (NTB) from June to October 2014. The population in this study were 30 people, they are all radiographer who work in the ABCD hospital. In this study, the sampling technique used was the random sampling technique in which the number of the sample in this study were 28 radiographer. The data in this study were analyzed using univariate analysis and regression analysis. The result in this study showed that the total number of the radiographer who have abnormal levels of lymphocytes in ABCD hospital were 9 people and total number of the radiographer who have normal levels of lymphocytes were 19 people. The characteristics of the radiographers that affect the lymphocyte levels were age ($p = 0.028$), radiation protection training ($p = 0.046$), the use of PPE (Personal protective equipment) ($p = 0.026$) and radiation dosage ($p = 0.046$). The radiation protection efforts were committed by the hospital A is still not good meanwhile hospital B, C and D is already good. The conclusion of this study showed that the exposure of X-ray radiation in the ABCD hospital has influences on lymphocyte levels of the radiographer which evaluated by the dose of radiation, radiation protection training, the use of PPE and age of the radiographer.

Keywords : *radiation, X-rays, radiation dosage, radiographer characteristic*