
English Summary

CAUSES AND MANAGEMENT OF CANCER PAIN

Dwi Djuwanto

*SeJangkung Community Health Center,
Sambas, West Kalimantan, Indonesia*

Pain is a common symptom of cancer. One-third of cancer patients will present with pain and the majority will experience pain in the last weeks of life. Cancer pain is an important but neglected public issue in developed and developing countries alike. Several million cancer patients suffer it each day through the use of a limited number of relatively inexpensive medications. It is vital that all professionals involved with the treatment of cancer patients, especially those who care for the high proportion who eventually die of their disease, be familiar with the basic principles of analysing and treating their pain.

Cermin Dunia Kedokt. 1993; 88: 20-3
Dd



DOSE CALCULATION OF DIAG- NOSTIC X-RAY USING EXPOSURE FACTORS

**Susetyo Trijoko, Suyati, Agung
Nugroho**

*Centre for Standardization and Radiation
Safety Research, BATAN, Pasar Jum'at,
Indonesia*

Dose for diagnostic X-ray has been calculated by using exposure factors of X-ray machine. Diagnostic X-ray machine Tanka model RTO-125 of the Centre for Standardization and Radiation Safety Research (PSPKR), Batan, was used in this experiment. The factors considered in this work include peak-voltage, electric current, time exposure, field-size, focus-detector distance, and backscatter. Those measured factors were then used to calculate doses for various treatments. Experimental results showed that the calculated doses agreed well with the direct-measurement doses, with maximum difference of 5.2%. So it is concluded that this method is good and basically could be applied for any X-ray diagnostic machine.

Cermin Dunia Kedokt. 1993; 88:31-4
St, Sy, An