

Studi Perancangan Fasilitas Kedokteran Nuklir di Indonesia Berdasarkan Regulasi Nasional dan Pedoman Internasional = Study on Facility Design of Nuclear Medicine in Indonesia based on National Regulations and International Guidelines.

Anita Nur Mayani, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20499854&lokasi=lokal>

Abstrak

ABSTRAK

Kedokteran nuklir merupakan salah satu bidang ilmu kedokteran yang memanfaatkan sumber radiasi pengion untuk pencitraan diagnostik maupun terapi pada pasien kanker. Jumlah pelayanan kedokteran nuklir yang dimiliki Indonesia sampai saat ini 17 rumah sakit dan hanya 10 yang aktif beroperasi melakukan kegiatan pelayanan kedokteran nuklir. Untuk mendukung program KPPI oleh menteri kesehatan, perlu dilakukan penambahan departemen kedokteran nuklir di Indonesia. Peraturan mengenai standar pelayanan kedokteran nuklir Indonesia diatur oleh Kementerian Kesehatan dan Badan Pengawas Tenaga Nuklir, namun belum melampirkan mengenai syarat konstruksi dan desain bangunan secara spesifik. Untuk itu penulis melakukan penelitian dengan melakukan studi literatur mengenai persyaratan fasilitas kedokteran nuklir Nasional dan Internasional serta melakukan survei observasi di fasilitas kedokteran nuklir di Indonesia. Hasil dari tinjauan persyaratan kedokteran nuklir adalah peraturan kedokteran nuklir di Indonesia sudah sesuai dengan pedoman kedokteran nuklir internasional, namun belum mengatur detail mengenai persyaratan konstruksi yang berkaitan dengan safety dan layout design. Berdasarkan hasil uji statistik dari 5 sampel fasilitas kedokteran nuklir di Indonesia, fasilitas kedokteran nuklir di Indonesia belum memenuhi aspek ruangan yang memenuhi persyaratan dan belum memenuhi aspek konstruksi yang berkaitan dengan safety. Hasil rekomendasi persyaratan dan perancangan fasilitas kedokteran nuklir berupa room layout, mechanical electrical dan equipment dirancang berdasarkan hasil studi literatur dan observasi survei di lima fasilitas kedokteran nuklir. Hasil perancangan room layout fasilitas kedokteran nuklir dinyatakan valid dengan expert judgement kepada lima expert di bidang kedokteran nuklir.

<hr>

ABSTRACT

Nuclear medicine is one of medical fields that uses ionizing radiation sources for therapeutic and diagnostic imaging for cancer. The number of nuclear medicine services in Indonesia is 17 hospitals, which only 10 is active in conducting nuclear medicine services because it doesn't meet the requirements. Regulations about the standards of nuclear medicine services Indonesia are regulated by Ministry of Health and Nuclear Energy Regulatory Agency (BAPETEN) but it have not yet been discussed the requirements for construction building and floor plan layout design. For this reason, the author did literature study about the requirements of National & International nuclear medicine facilities and observation survey in nuclear medicine facilities in Indonesia. This study is done by compare means analysis to review the requirements of nuclear medicine requirements and National & International nuclear medicine facilities and the current state of nuclear medicine facilities di Indonesia. The result of literature study are then carried out into layout design facility and developed by result of observation survey study on 5 nuclear medicine facility in Indoneisa. The results of this study nuclear medicine regulations are in accordance with international nuclear

medicine guidelines, but doesn't conduct the details regarding construction requirements and layout design. Based on the results of statistical tests from 5 samples of nuclear medicine facilities in Indonesia, nuclear medicine facilities in Indonesia have not met the aspect of the room that meets the requirements and does not meet the construction aspects relating to safety. Recommendations were made on the requirements and design of nuclear medicine facilities based on the results of literature studies, survey observations at five nuclear medicine facilities and expert judgment on five experts in the field of nuclear medicine. The results are recommendation of nuclear medicine facility's requirement and nuclear medicine facility design (room layout, mechanical electrical and equipment). The room layout is valid with expert judgement method by expert in the field of nuclear medicine.