

# A Study on Knowledge, Attitude and Practice towards Return and Disposal of Unused Medications (ReDiUM) Among General Public in Sibul: A Descriptive, Cross-Sectional Study

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## ABSTRACT

**Introduction:** There is growing concern on inappropriate disposal of unused medications and its consequences to the environment and public health. Misconception among public on the disposal of unused medications to environment due to convenience and lack of appropriate education is a matter of discussion in our study. This study was designed to determine Knowledge, Attitude and Practice (KAP) towards return and disposal of unused medications. **Methods:** A cross sectional study was performed using validated questionnaire with 500 randomly selected individuals among public in Sibul including those participating in pharmacy-based events as well as patients attending Out-patient Clinics in Sibul Hospital. They were interviewed on KAP towards return and disposal of unused medications. **Results:** The mean knowledge score obtained from our study was 5.426. For knowledge part, 81.6% of participants knew that returning unused medications to pharmacy is a correct way. However, 70.2% of participants wrongly answered for correct statement "Incineration as a way of drug disposal", probably because they had mistaken term of "incineration" as open burning. There is a statistically significant relationship between education level of subjects and knowledge with  $P=0.002$ . Nevertheless, no correlation among other socio-demographic data and knowledge of participants. Meanwhile, for attitude and practice, majority participants showed positive attitude and practice on return and disposal of unused medications. **Conclusion:** As there is a statistically significant relationship between education level and knowledge, therefore pharmacist plays a role in creating public awareness on safe medication disposal by highlighting importance of drug return and safe medication disposal methods.

# Scan Findings of Ischaemic Heart Disease in Adults Aged 30 - 40 Years Old as Detected and Evaluated on Myocardial Perfusion Scintigraphy

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## ABSTRACT

**Introduction:** Ischaemic heart disease (IHD) is on the rise among adults under 40-years. Radionuclide myocardial perfusion scintigraphy (MPS) can provide imaging information to diagnose, evaluate and risk stratify IHD. Nevertheless, local data are limited on the usage of this technique in identifying IHD among young adult patients. The objectives were to determine important clinical characteristics of these patients who underwent MPS for IHD detection and highlight their scintigraphy findings. **Methods:** A case-series and pictorial review of adults aged 30-40 years old ( $n=34$ ) who had two-day protocol MPS using <sup>99m</sup>Tc-tetrofosmin done between January and December 2019. Scan acquisition being performed as per standard departmental protocol. Reversible perfusion defect signified ischaemia whereas irreversible perfusion defect implied infarction. Clinical information and scan findings were compiled and analysed. **Results:** The average age of the patients was 36.59 years. Females were predominant ( $n=19$ , 55.9%). Majority had  $\geq 2$  cardiovascular risk factors ( $n=22$ , 64.7%). Small proportion of patients had morbid obesity ( $n=3$ , 8.8%) and intermediate risk for pre-test IHD probability ( $n=12$ , 35.3%). Imaging findings of MPS included normal perfusion ( $n=9$ , 26.5%), artifact ( $n=1$ , 2.9%), ischemia ( $n=23$ , 67.6%) and infarction ( $n=1$ , 2.9%). Mean ejection fraction on stress MPS was 66%. Patients with  $\geq 2$  cardiovascular risks and intermediate probability were significantly associated with abnormal MPS findings ( $p<0.05$ ). **Conclusion:** IHD was observed in 70.5% of adults under 40-years who were referred for MPS. Those who had  $\geq 2$  cardiovascular risks and intermediate probability were significantly associated with abnormal MPS findings. Attention should be given during scintigraphy images interpretation and reporting of these particular patients.