

Medication Use, Storage, and Risk of Non-Communicable Diseases in Krong Banlung, Cambodia

Abstract

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Abstract

Introduction: Non-communicable disease (NCDs), particularly hypertension and type 2 diabetes mellitus (T2DM), are a rapidly increasing health burden in Cambodia. With national T2DM prevalence rising steadily, it is projected to pose a severe public health burden by 2050. Data on disease risk and medication use in rural and indigenous groups, particularly in Ratanakiri province, remain scarce due to limited healthcare access.

Objective: This study aimed to estimate the risk scores for hypertension and T2DM among residents of Krong Banlung, Ratanakiri, and to evaluate patterns of medication use and storage.

Methods: A cross-sectional study was conducted among 464 adults in Banlung, Ratanakiri Province, Cambodia. Data were collected via face-to-face interviews using a convenience sampling method. NCD risk was categorized using established assessment tools by using the Risk scoring algorithm, and the resulting data were processed electronically and analyzed using SPSS and Microsoft Excel to generate descriptive statistics.

Results: Findings showed that 8.7% of participants may develop hypertension within nine years, while 43% already elevated risk. About 4% (1 in 25) are at risk of developing T2DM with the decade. Although these rates are lower than some national averages, they are strongly linked to high BMI and physical inactivity. Common medications include paracetamol, ibuprofen, and antihypertensives like amlodipine. However, improper storage such as in draws or plastic bags at room temperature may reduce drug stability and effectiveness.

Conclusion: There is a considerable risk of hypertension and diabetes in this rural population, exacerbated by poor awareness of proper medication use and storage. The predicted NCD risk is closely linked to lifestyle factors such as overweight status and sedentary behavior. To mitigate these risks, the study recommends community-based health education, culturally tailored counseling, and improved guidelines for medication labeling and storage.

Conflicts of interest: There is no conflicts of interest in this study.

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