

Household Catastrophic Health Expenditure amongst OPMD and Oral Cancer patients in Public Healthcare of Malaysia

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ABSTRACT

Introduction: Oral cancer causes a significant disease burden and financial distress, especially among disadvantaged groups. While Malaysia has achieved universal health coverage via its highly subsidized public healthcare, household expenditure for treatment of oral potentially malignant disorders (OPMD) and oral cancer remains a concern in the equitability of care. This study aimed to estimate the extent of catastrophic healthcare expenditure (CHE) while identifying its cost drivers. **Methods:** This three-part study consisted of a prospective cross-sectional survey to collect health utilization data of patients, a retrospective medical record abstraction to identify resources consumed, and cost estimation modelling in two tertiary public hospitals. Out-of-pocket (OOP) payments for transport, care in public healthcare facilities, and other healthcare expenditures were tallied. CHE was defined as OOP spendings of more than 10% from total annual household income. Multivariate binary logistic regression was further applied to identify the association between sociodemographic factors and CHE. **Results:** A total of 104 patients were surveyed and their medical records abstracted. A Kruskal-Wallis test showed a statistically significant difference in OOP share over household income between OPMD, early- and late-stage oral cancer, $\chi^2(2)=51.05$, $p<0.001$, with the mean percentage of 9%, 22%, and 65% respectively. **Conclusion:** This study found that the prevalence of CHE in the first year of diagnosis was staggering at 86.5% for oral cancer and 19.2% for OPMD. Race (Indian) (OR=5.1, $p=0.046$) and B40 income group (OR=14.3, $p=0.023$) were shown as significant predictors for CHE. Our study demonstrated the provision of current subsidies may not be adequate to shield the more vulnerable group from CHE.

Safety and Efficacy of Low Dose Versus Standard Dose of Alteplase for Stroke Thrombolysis in Hospital Sultanah Nur Zahirah (HSNZ)

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ABSTRACT

Introduction: There is uncertainty whether lower dose (LD) Alteplase produces similar clinical benefit and safety for stroke thrombolysis compared to standard dose (SD). Thus, efficacy and safety outcomes in patients receiving LD (0.6mg/kg) and SD (0.9mg/kg) of Alteplase for acute ischemic stroke (AIS) were compared. **Methods:** AIS patients treated with LD or SD Alteplase from January 2014 until December 2020 were retrospectively analysed. Data were retrieved using Hospital Information System of Hospital Sultanah Nur Zahirah, Malaysia. National Institute of Health Stroke Scale score at baseline and post 24-hour, modified Ranking Scale (mRS) score post 90-day onset and occurrence of spontaneous intracerebral hemorrhage (sICH) post Alteplase initiation were recorded. **Results:** Of the 107 patients, 73.8% (n=79) received SD. The occurrence of sICH was higher in LD group (10.7% vs. 8.9%, $p=0.719$). Mean baseline NIHSS score was not significantly different (LD; 11.25 ± 5.77 vs. SD; 13.96 ± 6.61 , $p=0.057$). The Mean NIHSS score after 24 hrs. was reduced from baseline, but did not differ significantly (2.04 ± 6.04 vs. 4.84 ± 7.48 , respectively, $p=0.078$). Mean mRS score had no significant difference (3.07 ± 1.98 vs. 2.71 ± 1.81 , respectively, $p=0.375$). The mRS score of ≤ 1 was not significantly lower in the LD group (21.4% vs. 27.8%, $p=0.507$). Multiple logistic regression demonstrated male and diabetic patients were 3-fold ($p=0.029$) and 5-fold risk ($p=0.008$), respectively to get poor functional outcome (mRS score 2-6). Increment of baseline NIHSS score by 1 increased the risk of poor functional outcome by 11% ($p=0.012$). **Conclusion:** LD and SD Alteplase have comparable efficacy and safety outcome in treating AIS patients. Functional outcomes were related to gender, diabetes mellitus and baseline NIHSS score.