

## **Households' Health Expenditures on Acute Gastroenteritis in Malaysia**

### **ABSTRACT**

Acute gastroenteritis (AGE) causes significant health and economic burden on society. The aim of this study is to estimate households' direct and indirect expenditures on AGE and its predicted factors. This cross-sectional study was conducted between December 2019 and March 2020 using a bilingual proforma distributed using Survey Monkey among individuals with self-reported AGE in all 14 states of Malaysia. The finding revealed the average expenditure for a single episode of AGE was RM395.58 ( $\pm$  SD 798.02). The mean indirect expenditure was higher at RM259.14 ( $\pm$  SD 379.92) vs. direct expenditure of RM136.44 ( $\pm$  SD 596.47). The highest expenditure was seen among those who obtained inpatient care. The multiple linear regression analysis showed that household income (RM0.13; 95% CI: 0.01, 0.27;  $p=0.043$ ) and type of healthcare facility (private vs government) (RM1842.05; 95% CI: 395.13, 3288.98;  $p=0.014$ ) had significant association with households' total health expenditure on AGE. Acute gastroenteritis incurred substantial cost on all affected households regardless of care-seeking modalities. Interestingly, the main economic burden of AGE was the indirect cost of productivity loss; interpreted in terms of days away from work. In conclusion, AGE instigated economic burden on both households and employers. The household income and type of facility were found to be significant factors associated with the households' health expenditures due to AGE. This study recommends food safety awareness among the public and enforcement of safe food handling practices among food vendors and industries.