

MINI ORAL 1 [ID#145]

Budget Impact and Clinical Outcome Analysis of Thailand National Antidote Project

Thanjira Jiranantakan¹, Sonvane Tanuchit², Witthawat Pantumongkol², Sripen Tantivess², Pattara Leelahavarong², Netnapi Suchonwanich², Charuwan Sriapha³, Suchai Suteeparuk⁴, Suda Vanaprasart⁵ and Winai Wananukul⁶

1. Faculty of Medicine Siriraj Hospital, Mahidol University
2. Health Intervention and Technology Assessment Program
3. Ramathibodhi Poison Center
4. Faculty of Medicine, Chulalongkorn University
5. Faculty of Medicine, Khonkaen University
6. Faculty of Medicine, Ramathibodi Hospital, Mahidol University

BACKGROUND/OBJECTIVE: The Thailand National Antidote Project was established in 2011 with the aim to enhance antidote and antivenom access. This study aims to evaluate the project's budget impact and clinical outcomes.

METHODS: Financial reports and purchase summaries of antidotes and antivenoms between 2011 to 2015, were reviewed. Data from the National Health Security Office's database, designed to collect information relating to patients who received antidotes or snake antivenoms under the project and annual reports from 2011 to 2018, was evaluated and compared with deaths reported to the Registry Office.

RESULTS/CONCLUSION: The total budget utilized through the Thailand National Antidote Project during 2011-2015 was 196.2 million baht, averaging 39.2 million baht annually. The annual budget spent in 2013-2015 increased significantly from that of 2011-2012, due to the increase in the amount of antivenom purchased. The total budget across 2011 to 2015 consisted primarily of the purchase of antidotes and antivenom (167.6 million-baht, 85.5%), and capacity building (27.7 million baht, 14.1%). Case consultation services through poison centers and poisonous animal clinics constituted the remainder (0.75 million-baht, 0.4%). The cost of expired antidotes and antivenoms (waste) was 84.0 million-baht, or 50.12% of the purchased value.

During 2011 to 2018 a total of 1,237 patients received antidotes, while during 2013 to 2018 a total of 26,613 patients received antivenom. The number of patients who received antidotes but died within 7 days or 30 days was 37 (3%) and 55 (4.45%) respectively. The number of patients who received antivenom but died within 7 days or 30 days was 20 (0.08%) and 40 (0.15%) respectively.

The Thailand National Antidote Project has been successful in solving antidote and antivenom shortages, and has provided good clinical outcomes. However, significant costs have been incurred due to expired antidote going to waste.