Using Cost-Effectiveness Analysis for Interventions among Youths to Zero New Infections

Sukhontha Kongsin[1], Sukhum Jiamton[2], Pahsuvadn Kongsin[3], Kitiya Prom-On[1], Sittikorn Rongsumlee[1], Kyaw Min Soe[1], Nootchawan Boonruang[1], Saranya Boonyai[1], Benjaporn Youngvises[1], Kulyisa Tachapetpaiboon[1]

[1]Research Centre for Health Economics and Evaluation Faculty of Public Health, Mahidol University, Thailand
[2]Department of Dermatology, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
[3]Vajira Hospital, Thailand

Background:

Worldwide, financial crisis becomes major problem and concern and may affect policy towards triple zero.Financially, investment in prevention is less than in providing treatment and care. Cost-effectiveness analysis is crucial to provide informationfor policy makers to decide which intervention is the most cost-effective. The purpose of study was to assess the economic evaluation using cost effectiveness analysis (CEA) of HIV preventive interventions among youths.

Methods:

This study was conducted to calculate cost and effectiveness of 4 interventions for HIV prevention among 567 youths. The study on CEA consisted of 4 steps: 1) Identify 4 main interventions, 2) Analyze secondary data on cost, 3) Analyze data on effectiveness from face to face interview using questionnaire and 4) CEA to find out the most Cost-Effective intervention.

Results:

The costs for 4 interventions for youths were 1) development of enhancing life skills course, volunteering, networking and leadership,2) establish network and partnership through collaboration with government organizations, 3) Develop a network of cooperation between partners and the organizations working with youth, 4) capacity building and performance on AIDS awareness among youth through media,were 369,946 USD, 1,459,677 USD, 563,613 USD, and 1,516,387 USD respectively.The effectiveness of each intervention was 2,995, 12,562, 1, 641, and 20,930 HIV case prevented respectively.The cost-effectiveness analysis shows that the cost to prevent a case in four interventions was 123,116, 343 and 72 USDper HIV case prevented respectively.

Conclusions:

The most Cost-Effective intervention for youths from this study that was capacity building and performance on AIDS awareness through media should be promoted and supported by the authorities for better management of HIV prevention program. This intervention cost was higher but showed much more effective than others. The participation of young people on production process allow them to understand and appreciate to prevent HIV.

Key words:

- Cost-Effectiveness Analysis
- Intervention
- Youths
- HIV prevention

Intervention for HIV prevention among youths

Group	Distribute Condom	Health Education	Awareness Campaign	Outreach Activity	Development of enhancing life skills course	Collaboration with Government organization	Develop a network of cooperation between partners working with youth	Performance on AIDS awareness through media	N	Cost (USD)	Effectiveness (HIV case prevented)	Cost-Effectiveness (USD/ HIV case prevented)
Project 1		✔	✔		✔				12,520	369,946	2,995	123
Project 2	✔	✔	✔	✔		✔			50,000	1,459,677	12,562	116
Project 3	✔	✔	✔	✔			✔		19,200	563,613	1,641	343
Project 4	✔	✔	✔					✔	52,000	1,516,387	20,930	72

Table shows the cost effectiveness of 4 interventions for youths with different activities. Project 1 spent the least cost and accounted for 2,995 case prevented. Project 2 spent 1,459,677 USD and accounted for 12562 HIC cases prevented. Project 3 spent 563,613 USD and accounted for 1,641 cases prevented and it was the least cost-effectiveness (343 USD per HIV case prevented) among the 4 interventions. Project 4 was the costliest intervention (spent 1,516,387 USD) but accounted highest number of HIV case prevented (only 72 USD per HIV case)

IAS 2013
7th IAS CONFERENCE ON HIV PATHOGENESIS, TREATMENT AND PREVENTION
30 June - 03 July 2013 - Kuala Lumpur, Malaysia