

DFID SRH & HIV RPC at the XVI International AIDS Conference, Toronto, 2006

Abstract

MOPE0677 - Cost-effectiveness of voluntary counselling and testing within the integrated HIV/TB/STI ProTEST intervention in Malawi

L. Kumaranayake¹, C. Watts², P. Vickerman², R. Chimzizi³, C. Golombe³, N. Hargreaves⁴, S. Vyas², A. Muvira⁵, K. Msowoya³, K. Floyd⁶, F. Salaniponi³, P. Godfrey-Faussett⁷

¹London School of Hygiene and Tropical Medicine/ Dalhousie University, Economics, Halifax, Canada, ²London School of Hygiene and Tropical Medicine, Public Health and Policy, London, United Kingdom, ³National Tuberculosis Programme, Lilongwe, Malawi, ⁴National Tuberculosis Programme and Liverpool School of Tropical Medicine, Lilongwe, Malawi, ⁵Consultant, Lilongwe, Malawi, ⁶World Health Organization, Stop TB, Geneva, Switzerland, ⁷London School of Hygiene and Tropical Medicine, Infectious and Tropical Diseases, London, United Kingdom

Background: The Malawi ProTEST project increased coordination, collaboration and service provision by TB/HIV stakeholders. Voluntary counselling and testing (VCT) was an entry point for TB screening and case detection, screening and treatment of sexually transmitted infections, provision of cotrimoxazole preventive therapy and isoniazid preventive therapy. The study examines the cost-effectiveness of VCT among clients and their partners in Lilongwe, Malawi.

Methods: A prospective-cohort study of VCT clients was conducted to provide information on reported sexual behaviour over a six-month period following VCT attendance. A dynamic, deterministic mathematical model (VCT 1.0) was developed to estimate VCT intervention impacts on HIV transmission among sub-groups of the VCT population and their long-term and casual sexual partners for a three-year sustained behaviour change. Financial and economic costs of implementing activities were retrospectively collected from a provider perspective for a three-year period. Ingredients and step-down allocation processes were used to estimate costs. Average costs of VCT were estimated for the recruitment period of the cohort study and presented in US \$2005.

Results: 5200 individuals attended the VCT centre over the 4-month cohort recruitment period with 99% of individuals completing the VCT process. The client HIV prevalence rate was 14.5%. The economic cost per person completing VCT was \$12, and the cost per HIV person detected was \$96. Thirty-two percent (107) of HIV infections were averted and the cost per HIV infection averted was \$603 (range \$371-\$2083). Integrated HIV/TB/STI services allow for early detection and treatment of HIV/AIDS related illnesses. Preventing HIV infections will also avert a range of opportunistic illnesses such as tuberculosis.

Conclusions: The costs and cost-effectiveness of VCT is influenced by the composition of HIV positive and negative individuals among clients, their relative risk behaviour and general population HIV prevalence. In this setting VCT is both feasible and cost-effective within an integrated service delivery package.