DFID TB KNOWLEDGE PROGRAMME

BRIEFING NOTES

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The cost effectiveness of the Zambian ProTEST project

Background

Since the rise of the HIV epidemic there has been an acknowledgement of the joint nature of the HIV and TB epidemics. HIV infections is the strongest risk factor for progressing from latent to active TB.[1, 2, 3] In turn TB is associated with a more rapid progression of HIV.[4] Until recently much of the activity around TB and HIV have occurred in parallel without addressing the interaction between actors working on the two diseases. In the past WHO and UNAIDS promoted "a dual strategy for a dual epidemic", wherein little effective collaboration took place.[5] More recently WHO has moved towards a phased implementation of HIV and TB activities, which is an integrated approach to the dual epidemic. This approach focuses on strengthening health services and considers TB-treatment as an integral part of an HIV strategy.[6]

ProTEST

ProTEST is an initiative which addresses the dual epidemic of HIV and TB through improved collaboration between services for HIV and TB and by supporting and/or providing a package of care for people living with HIV/AIDS (PLWH). It uses voluntary counselling and testing (VCT) as an entry point for provision of care and prevention services for HIV and TB. Within the VCT service clients are screened for STIs, all HIV-infected people are screened for active TB. People with suspected active TB are referred to the national TB services, others were offered isoniazid preventive therapy [PT]. Additionally, clients were given information on services for PLWH, such as: the ProTEST clinic, a weekly clinic for HIV-infected individuals; post-test club; youth friendly services (YFS); hospice; home based care; etc. This study looked at the cost-effectiveness of ProTEST Zambia core components: ProTEST co-ordination, VCT, PT, outreach, ProTEST clinic.

Methods

Cost collection was based on the *Costing Guidelines for HIV Prevention Strategies*.[12] Annual financial and economic provider costs were collected from the two ProTEST sites in Zambia from November 2000 to October 2001. Matero was a new site, where the costing covered the first year of all ProTEST activities. Chawama was a mature site with a long standing VCT centre and was in the second year of ProTEST activities during the costing.

1 Quigley M, Mwinga A, Hosp M, eta l. (2001) "Long-term effect of preventive therapy for tuberculosis in a cohort of HIV-infected Zambian adults. AIDS 15:215-222.

2 Mwinga A, Hosp M, Godfrey-Faussett P, et al. (1998) "Twice weekly tuberculosis preventive therapy in HIV infection in Zambia." AIDS 12: 2447-2457.

3 Raviglione MC, Harries AD, Msiska R, Wilinson D, Nunn P. (1997). Tuberculosis and HIV: Current status in Africa. AIDS. 11 (Suppl B):S115-S123.

4 Wallis R, Vjecha M, Manijeh A et al. (1993) Influence of tuberculosis on human immunodeficiency virus (HIV): enhanced cytokine expression and elevated B2-microglobulin in HIV-1-associated tuberculosis." JID: 167: 43-48 and Goletti D, Weissman D, Jackson R, et al (1996) "Effect of Mycobacterium tuberculosis on HIV replication.." J Immunology 157: 1271-1278 in Mwinga et al (1998)

5 Tuberculosis and AIDS. UNAIDS point of view, October 1997. UNAIDS, Geneva, 1997.

6 Dermot Maher, Katherine Floyd and Mario Raviglione (2002) Strategic framework to decrease the burden of TB/HIV, TB/HIV Working Group of the Global Partnership to Stop TB, WHO Geneva WHO/CDS/TB/2002.296

Key findings

Chawama and Matero served quite different client groups. Although Chawama had more clients coming for pre-test counselling, there was a rapid loss-to-follow up, with only 40% presenting for testing. Once detected, HIV-positive people were equally likely to start preventive therapy but those starting in Matero were more likely to complete the 6 month drug regimen (18% complete PT in Chawama versus 47% in Matero). It is common for new VCT services to have very high rates of HIV-positive patients and for them to be in a later stage of infection, often with symptomatic HIV. This may explain the different patterns of client flows and PT completion. The annual economic cost of all ProTEST activities was around $82,000 in Chawama and $30,000 in Matero. The cost of ProTEST co-ordination and meetings was about 4% of total costs in Chawama and 9% in Matero. VCT was 57% and 27% of total costs in Chawama and Matero, respectively. The ProTEST clinic cost 22% and 48% in Chawama and Matero, respectively. ProTEST activities can operate for as little as $23 per person. Unit costs are highly dependant on use and completion of the VCT process and the PT regimen. The clinic seems to have fairly constant costs per visit. The cost of VCT in Zambia compares well with the cost of VCT elsewhere in Africa. One must not overlook the cost of co-ordination when integrating interventions.

Future activities: research and implementation

ProTEST pilot projects are also ongoing in Malawi and South Africa. Cost analyses are being undertaken for these sites. Additionally mathematical, epidemiological modelling will be used to estimate the impact of ProTEST in terms of HIV and TB infections averted. WHO is supporting new ProTEST projects in numerous countries in Sub-Saharan Africa as part of the phased implementation of TB/HIV projects.

Collaborating Partners

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- Zambart (Zambian AIDS related TB project), Lusaka, Zambia
- Kara Counselling and Training Trust, Lusaka, Zambia

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Conference Presentation

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