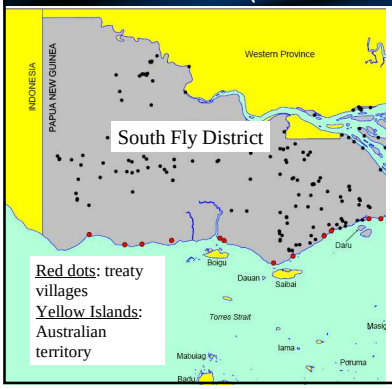
Tuberculosis control in the PNG-Australia cross-border region: What's needed and why

Kamalini Lokuge

Fellow, National Centre for Epidemiology and Population Health
Australian National University

The PNG-Australia cross-border region (Torres Strait region)



- straddles Australia-Papua New Guinea (PNG) border
- PNG and Australian land mass < 5km apart
- Estimated 59,000 cross-border movements in 2008-09
- Cross-border contact protected by treaty
- Cross-border movement results in cross-border health seeking

Health care in the Southern Fly

- **Most remote and sparsely populated District in PNG**
- **Already spending more on health care per capita than other Districts.**

Despite this:

- **Few health staff outside of Daru, the capital**
- **Remote clinics run out of drugs and supplies frequently: e.g. Clinics without HIV testing and treatment, without condoms, without treatment for malaria**

- **Treaty village of Mabadauan:**
  - **15 min by boat from Saibai Clinic in Australia, most villagers go to Saibai weekly to trade**
  - **> 2 hours by boat from Daru, costs over 2 months average salary for the round trip (salaries in Southern Fly lower than average)**
  - **Most common reason for visits to Saibai Clinics by treaty villagers were malaria and TB**

Where would you go, Saibai or Daru, if you were living in Mabadauan and got sick?

Torres Strait Treaty

- ***'The Treaty is recognised as one of the most creative solutions in international law to a boundary problem touching on the lives of traditional inhabitants.'***

- **The Joint Advisory Council (overseeing the treaty, established under Article 19) '*** ***is required to ensure that the traditional inhabitants are consulted and given full and timely opportunity to comment on matters of concern to them….,'***

http://www.dfat.gov.au/geo/torres_strait/brief.html

What is drug resistant TB ?

- **Multi-drug resistant TB (MDR-TB):** resistant to isoniazid and rifampicin (main drugs used to treat TB)
- **Extensively drug-resistant TB (XDR-TB):** resistant to rifampicin and isoniazid, plus to a fluoroquinolone and at least one injectable TB drug

Contributing factors to drug resistance in the PNG context :

- **Lack of DOTS program in many areas:**
  - **use of loose drug formulations, non-prequalified drugs**
  - **Poor adherence and monitoring**
  - **Limited diagnostic capacity, including no in-country capacity for drug resistance testing available to NDoH**

- **HIV, weak health system, lack of skilled human resources**

Drug-resistant tuberculosis in the Southern Fly

WHO expert TB review team comments on situation in Southern Fly six months ago:

"Multi-drug resistance has passed from being created from bad treatment to now being established in a community by itself and spreading among community members,"

"When treatment is delivered under the current conditions which many patients are having, then it's a matter of months or years before we have forms of TB that cannot be cured."

MDR-TB in other areas of PNG: unknown as no DST surveys / testing information

Context: What is an effective TB program for the Southern Fly?

In a context with community level-transmission of MDR-TB, this means

- **DOTS-plus :**
  - 2-year treatment regime of multiple, often toxic drugs taken every day: patients need support from community health workers AND skilled health staff to stay on treatment
  - Treatment must be accessible to patients: Community-based direct observed therapy
  - Capacity for rapid diagnosis of TB, and of drug resistance, when patients first present with cough
  - Cannot achieve this without functioning basic health services.

Response to date

History of cross-border tuberculosis care:

- Began as clinician response to patient needs
- Initially on Thursday Island, moved to Sabai-Boigu (protected zone)
- Early 2011: Dispute between Queensland health and Commonwealth on who/how to fund continued care.
- Queensland health: all patients to be transferred to PNG by June 2011
- Clinicians raised concerns about risk to patients and risk of increased drug resistance (most cross-border care patients were receiving MDR-TB treatment)
- Delayed handover until appropriate management for MDR-TB available in Daru
- Last handover clinics for existing patients occurring now

Current plan

- **World Vision: aim to strengthen TB services (DOTS) in Southern Fly**
  - Training treatment support workers
  - Capacity for decentralized diagnosis and treatment
  - Focus on the PREVENTION of MDR-TB development
- **AusAID supporting PDoH:**
  - MDR-TB diagnosis and treatment in Daru
  - Mobile outreach clinics to treaty villages for TB care
- **Currently, no Global Fund support for TB in Western Province**

Australian Aid in PNG / South Fly

- the biggest issue 'is the security of the infrastructure on the other side of the border and the professional people to actually operate in those remote communities'.

  Mr Toshi Kris, TSRA

- ... millions of dollars have been spent by the state to build all the health centres, but there is no money to maintain those health centres. So you have a health centre out there and within 12 months the screen door cannot shut because it is frozen due to the salt content..

  Councillor Pedro Stephen, Torres Shire Council

- far too often, the achievements from Australia's aid program were 'short-lived and left no tangible lasting benefit'.

  Foreign Affairs, Defence and Trade References Committee

Conclusion

Real opportunity for effective programs in the South Fly:

a) Partners with track record supporting DOTS in PNG
b) Significant resource commitments from PNG & Australian Governments
c) Focus on accountability for outcomes (preventing XDR-TB!)
d) Opportunity to show the way for the rest of PNG and the Pacific

Real threats to effective programs in the South Fly:

a) Underestimating the technical, social and resource challenges of controlling established MDR-TB : need DOTS-plus partners
b) Lack of a long-term strategy aimed at integrated TB services
c) Lack of participation by communities and health workers in policy and program development and delivery.

Listen to the people who live with the problem rather than come with a plan.