Challenges of TB Control in Papua New Guinea

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Order of presentation

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PNG Demographics

- PNG population as at 2011 Census 7.060 million people
- National growth rate 2.83%
- 22 provinces
- Capital is Port Moresby – pop 318,000
- Official language is English
- Diverse Cultural and Ethnic groups with over 800 different local language groups
- Geographically difficult terrain, lies North of Cairns and the Cape, shares common border with Torres Strait Islanders
Epidemiology

• PNG ranks second in the Western Pacific Region, next to Cambodia, in terms of estimated TB prevalence, incidence and mortality.

• Among all the provinces, National Capital District has been identified as the hot spot, which contributes to 25% of the country’s TB burden, despite being home to only 5% of the country’s population.

• While the majority of the PNG population lives in rural areas, the urban areas bear the higher burden of TB.
Epi cont..

- High transmission of TB about 70% in urban over-crowded communities, in the last 5 years.
- A high proportion of infectious patients are the young economically productive age group 15-35 years old; who are also very mobile.
- There is high transmission of TB within households. And 28% of all TB cases are children (2013)
Epi cont...

- TB/HIV co-infection - about a half of all provinces have high TB/HIV burden
- New Emerging threat already on our soil is the Multi Drug Resistant TB (MDR) & Extreme Drug Resistant (XDR) TB
- WHO Estimated MDR TB rate (2013)
  * Retreatment 24%
  * New 4.5%
Estimated prevalence rate of TB, per 100,000 population

40% reduction of prevalence rate compared to 1990

Steady decline of prevalence rate after start of GF round 6 grant

Prevalence rate

Years


Prevalence rate
694 665 639 619 603 592 581 573 567 562 556 550 550 548 550 548 543 531 514 498 480 461 437

Prevalence rate (per 100,000 population)
Estimated Mortality rate per 100,000 population

70% reduction of mortality rate compared to 1990

Start of GFATM Round 6 grant
National TB Program overview

PNG is using the DOTS strategy to fight TB

5 Components of DOTS
1. Political Commitment with increased & sustained funding
2. Case detection through quality assured bacteriology
3. Standardized treatment, with supervision & patient support
4. An effective drug supply & management system
5. Monitoring & evaluation system, & impact measurement
TB Services in PNG

• TB services are integrated in Public Health Service delivery (part of primary health care). 90% in public, church run or private providers
• 1 NTP at the national level, 22 provincial health divisions are responsible for TB control implementation
• 275 basic management units (BMUs) in all of 89 districts responsible for diagnosis, treatment, registration and reporting of TB cases
• Short course chemotherapy, DOTS introduced in 1995. DOTS strategy implementation gained momentum in 2007, rolled out country wide in 2012
• Implementing partners include, World Vision, DFAT, MSF, Hope World wide, Burnet Institute
• Funding mainly from National Government and Global Fund Grants. TB diagnosis and treatment is free for patients
Challenges of implementing TB control in PNG

- Many factors affects the way we implement TB program in PNG
- Naturally its’ geography, ethnically and culturally diverse people, political instability and unpredictable economic situations
- Within the health system; poor coordination and communication between different levels of government because of fragmentation of organizational and administrative health structures.(NTP has no power at implementation at lower levels)
- Lack of provincial/district/community health posts ownership
- Over reliance on partners
TB program specific factors

• Low NTP manpower centrally

• TB patients present late for diagnosis, resulting to on-going transmission in the community

• Limited supervised treatment, high defaulters

• High rates of sputum not done, clinicians relying more on clinical and Xrays

• High childhood TB rates, Low BCG coverage (60%)
Social economical Determinants of TB

- Increase in informal settlements in cities, eg Port Moresby 45%. Increase rural urban migration 7.8% in POM alone
- High cost of living, overcrowded housing in settlements, poor ventilation etc
- High unemployment rate
- Background malnutrition in children, poor adult nutrition
- High HIV prevalence amongst the younger 15-45years old
Emerging MDR/XDR TB

• First Case of MDR TB reported in 2008 from Daru Hosp, Western Prov
• Since then, cases now present in 3 hot spot; WP (167), NCD (106), Gulp Provinces (16)
• A DRS survey is recently being completed in 4 Provinces and preliminary results shows prevalence of MDR TB
• Infrastructure in all provinces not suitable for PMDT. Currently being established in the hot spots.
• Weak involvement of provincial health offices in the implementation of MDR TB, monitoring and supervision
• Slow microscopy turn around time, Gene Xpert used for dx Rif resistant since 2012
• Currently partnering with QMRL for full DST & culture
• No in-country culture / DST yet thus slow turn around time for results, currently being built in Port Moresby
• To date approximately between 200 – 300 MDR cases exist for PNG, most pending confirmation
XDR TB

- Daru Is = 10 XDR cases
- Port Moresby = 3 cases
- Compassionate access to BDQ + LNZ through the Greenlight Committee support
- 1 XDR rendered cured!!
- Sensitive TB duration 6-8/12, cost < K200/pt
- MDR/XDR TB duration 18-36/12, cost K15,000 – K45,000/pt
Government response

• National strategic Plan for TB control 2015-2020
• Application to the GFATM , approved
• M/XDR-TB Emergency Response Team established
• TB campaign is supported by Prime Minister
• NEC submission ( fund request for 2015, approved)
• NEC submission ( Accelerated TB response in Daru, Western Province, approved)
• Collaboration with partners more strategic
• Health Improvement Committee
• Clinical Collaboration Group with QLD/Torres Health
National Strategic Plan for TB control, 2015-2020

• Timeframe: 2015-2020, aligned with WHO End TB strategy and National Health Sector Plan

• 4 strategic objectives and 16 interventions

• NSP prioritized 30 BMUs (10% of BMUs) in 14 provinces
  – 75% defaulters (all cases)
  – 65% smear not done
  – 53% of national TB burden

• NSP Total estimated budget: PGK 408 million
Concept Note to GFATM 2015-2017

• Developed under the leadership of NDoH jointly with partners
• Approved by GFATM, October 2014
• Total budget USD$ 17 million for TB and USD $5 million for Health System Strengthening (HSS)
• Implementation start date: 1\textsuperscript{st} April, 2015
• GFATM support 28 BMUs in 12 provinces
• DFAT supports 2 BMUs
• Government supports the other 200+ BMUs
M/XDR-TB Emergency Response Team

- Established in August 2014 after the visit of the RD of WHO/WPRO
- Monthly meetings with representatives of three hot spot provinces (NCD, WP and Gulf)
- Partners’ actively participating
- Highlights of provincial responses:
  - Preliminary status reports and action plans prepared and submitted and funds allocated
  - Intensive LTFU tracing for MDR-TB (decreased from 36% to 7%, NCD)
  - Treatment partner posts established and some labs made functional (NCD)
TB campaign supported by PM
Inter-ministerial Task Force

• Chaired by Minister of Health and HIV
• Whole-of-society approach (different government departments, private sector and community members)
• To tackle the socio-economic determinants of TB
• Seek extra financing of TB program by the government bodies
Summary/ Recommendation

• In order to address TB, in addition to guaranteeing optimal TB care to all those who need it, parallel actions are required on multiple fronts aimed at improving and strengthening health care system, mitigating risk-factors and addressing socio-economic determinants.

• Health cannot do it alone, it requires intergovernmental cooperation between line agencies and service deliverers

• Improved on-going cooperation with bordering countries to further strengthen surveillance and control of diseases on rural treaty inhabitants and migrants
Thank you