ANTHRO 208: WEEK 10
A Syndemic Approach to Relationships between TB, diabetes, mobilities and poverty

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OUTLINE

- Understanding disease in a biocultural framework
- Why thinking anthropologically is necessary/helpful – ethnography plus OR epidemiology plus
- Understanding how history matters
- Explanatory models, stigma
- The concept of 'syndemics'
- Mobilities
- Inequality – why it matters

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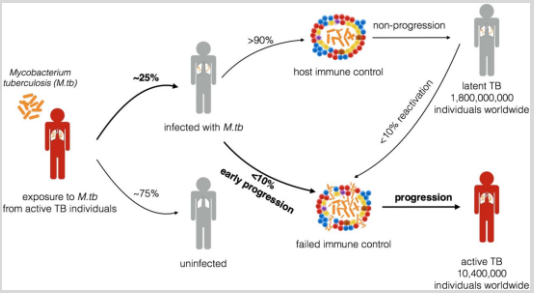
TB 101 – why biology matters



https://www.biorxiv.org/content/biorxiv/early/2018/08/28/401984/F1/graphic-1.large.jpg?width=800&height=600&carousel=1

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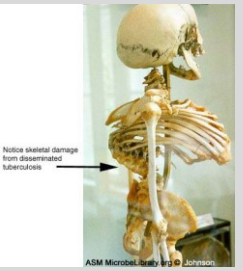
TB and bioarchaeology

- Pre-contact tuberculosis?



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Post-European settlement (colonisation and disease)

- Demographic impact
- Impact on resources
- Introduction of new diseases

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A Tale of TB and DM

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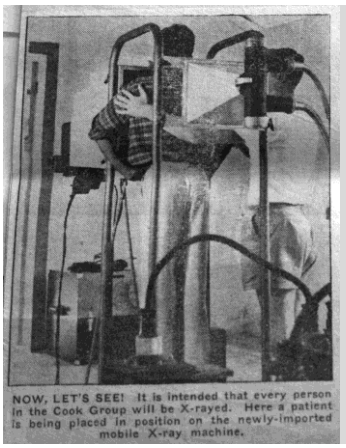
NOW, LET'S SEE! It is intended that every person in the Cook Group will be X-rayed. Here a patient is being placed in position on the newly-imported mobile X-ray machine.

The legacy of TB

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Mysteries of TB today

- In NZ Pacific Islanders have, on average, about 12 times the incidence of TB than Pakeha New Zealandersk, Maori 3 times the rate.
- Across the Pacific rates of TB vary greatly from less than 5 per hundred thousand (Cook Islands) to more than 300 Per hundred thousand (Tuvalu and Kiribati)
- [the need to query epidemiology – epidemiology plus OR ethnography plus]

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Transnationalism and TB

- Why is it that TB is higher amongst Cook Islanders living in NZ than in the Cook Islands?
- Why is TB so high among Tuvaluans both in NZ and at home?
- Can we separate out here and there?

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Explanatory Models of TB

- "Samoan TB" and New Zealand TB – two different conditions

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Power/knowledge and **explanatory models**

- Everyone has multiple explanations for particular episodes of illness – these are deployed in different settings. Even within WBM more than one explanation.
- BUT be aware of power differentials –
- "Tongans frequently attributed their diabetes to God's will"
- "Pakeha talked of their diabetes in relationship to bad luck"

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Stigma and TB

- Ideas of contagion and shame feed into stigma – stigma creates costs in three ways
  - – the damage caused by stigmatising attitudes
  - - but also the damage caused by attempts to avoid stigma
  - - And 'the eyes off the ball' effect (defined by Littleton)

Stigma: an attribute, behavior, or reputation which is socially discrediting in a particular way: it causes an individual to be mentally classified by others as an undesirable, rejected stereotype rather than in an accepted, normal one (Erving Goffman)

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The immigrant 'other'

- "The arrival of active cases of tuberculosis from overseas constitutes the public health hazard and represents a financial burden to the New Zealand tax payer." (Ryan NZMJ 1972 cited in Bryder 1991:88).
- In response Mackay (Wellington Doctor) pointed out that rather than bring in tuberculosis disease Pacific Islanders were mainly contracting it once in New Zealand.

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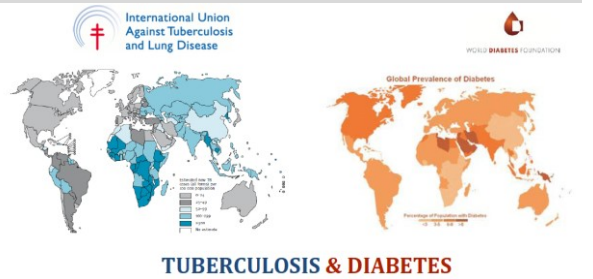

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Syndemic

Combines synergy and epidemic to conceptualise the intersection of multiple epidemics including both diseases and epidemic social problems such as poverty. Further a syndemics frameworks describes situations where adverse social conditions (e.g. poverty, oppression) stress a population, weaken its natural defenses and expose it to a cluster of interacting diseases (Mendenhall p12-13)

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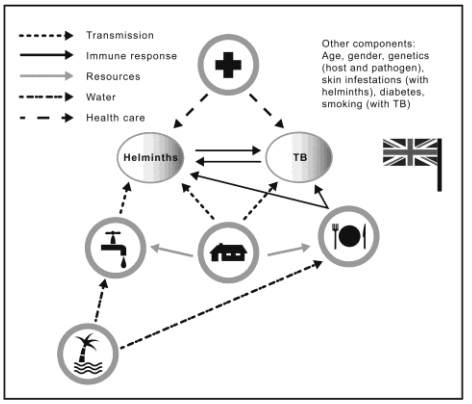

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Time.....

Unlike comorbidities, syndemics involve time, one condition may come

A long time **before**

OR

With the other

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So what about TB and DM in NZ?

Well so far no comprehensive epidemiological study. We have had to rely on the statistics of other agencies: e.g. Autopsy studies, ESR data

In 2011 c18% of TB cases had an immuno-suppressive illness (ESR 2012) : 3 with HIV but 48 with other (renal failure, DM, gastrectomy etc).

In 2009 we estimated for general NZ population 7% of adult TBD was DM related but among Pacific Islanders c31% of cases due to DM (Soc Sci Med 2009).

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Data from elsewhere

Pacific Estimate:

42% of TBD due to DM (Bostrom 2010)

Kwajalein, Marshall Islands:

32% of TBD cases with DM
(Hawaii J Med Public Health. 2013 May; 72(5 Suppl 1): 77–86.)

India:

National estimate 15% of TBD with DM BUT in Kerala 44%of TBD cases with DM. (PlosOne ublished: Oct 15, 2012 DOI: 10.1371/journal.pone.0046502)

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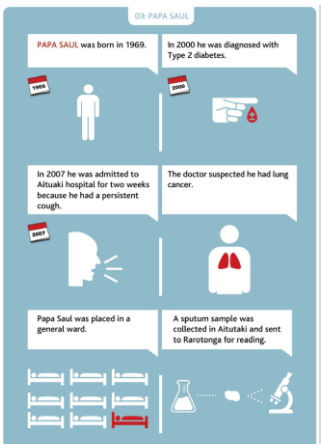

Ethnographies of TB and DM

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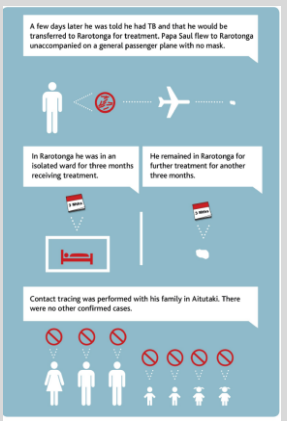

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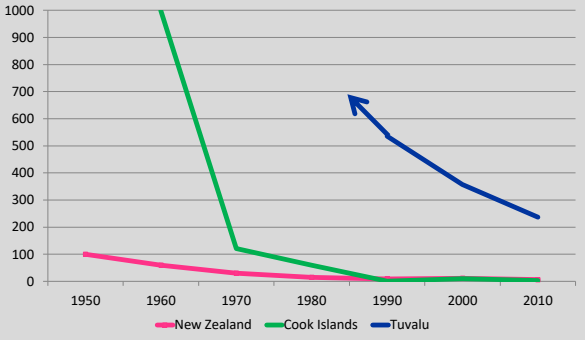
Thinking about New Zealanders more broadly: TB



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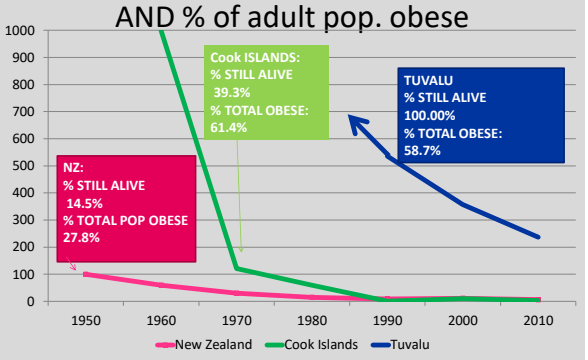
Current risk: % of current pop. born before TB rates reduced (below 100/100,000) AND % of adult pop. obese



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And current conditions

- Migration and stress
- Living conditions - housing
- Discrimination and stigma
- Access to health care

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So what do we need?

- Epidemiological data
- Work with any population currently with DM that has had historical or current TB (NOT JUST ETHNICITY but area of origin as well, or instead of)

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What would happen if?

TB and diabetes services were based on a syndemic model and integrated in various ways

- *Eg Family diabetes prevention as part of Tb treatment?*

Lessons were learned from TB for diabetes

- *What further public health measures would protect against diabetes?*
- *How can they get political traction?*

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AT MULTIPLE SITES

- Public health services
- Hospitals/ the clinic
- Ministry of health
- Medical schools
- GP services

BEYOND THE MINISTRY OF HEALTH

- Labour (migration)
- Employment
- Housing
- Education
- The usual suspects

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Beyond disease

Me: You may know that this Tuvaluan word, '*ola lei*', is now used by us as a Tuvaluan word for this English word 'health', right? What is your understanding about this word '*ola* lei'? What is '*ola lei*' to you?

Him: *Ola lei*? You mean *ola lei*? [*He looked at the ceiling with a stony face*]

Me: Yes! *Ola lei*.

Him: Oh! Oh ... Oh. [*Paused and silent for eight to 10 seconds*]. *Ola lei*, huh?

Me: Yes ...

Him: You mean to which *ola lei*? *Ola lei* in terms of having good life or *ola lei* in terms of the Department of Health?

Me: Any.

Him: Uhmmm .. .*ola lei*, huh? Oh ... oh ... it is hard, aye? I don't know ... I could not express it in words ...

Me: Why not?

Him: I don't know ... probably because *ola lei* is a very big word aye? *Ola lei* has so many tentacles ... like the tentacles of an octopus [*laugh*].

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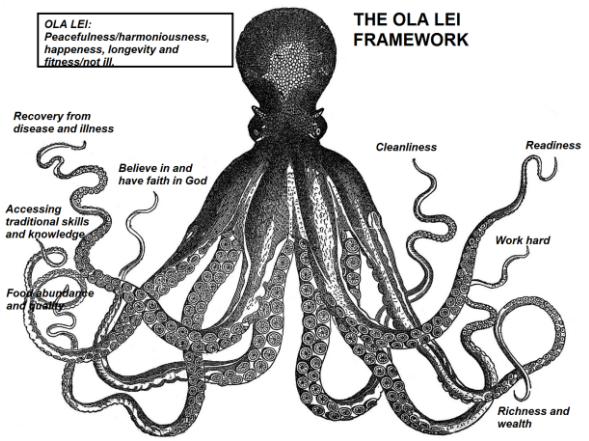

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Your exercise!

- This lecture has been about the complexities of analyzing an infectious disease and thinking beyond the immediate to the bigger root causes.
- I am going to show this video:
- Collateral Damage (Episode 6) of Unnatural Causes (Kanopy video)
- You can access it directly from the library
- https://auckland.kanopy.com/video/collateral-damage [you will have to sign in] or watch it here
- BUT look at the next page for your exercise for this week.

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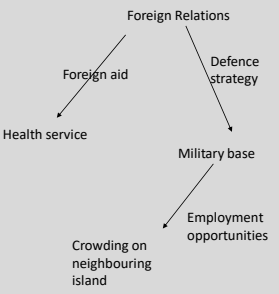
Documentary – collateral damage

- Based on the documentary, draw a diagram or a map of the connections involved in understanding TB in the Marshallese
- Make sure you link across the different levels (from micro- to macro-) and that you have examples of the relationships e.g.
- UPLOAD TO CANVAS – TAKE A PHOTO, DRAW A POWERPOINT SLIDE, DO IT ON WORD, WHATEVER WAY BUT AS YOU DO IT THINK ABOUT THE TIES.



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Acknowledgements

- All our participants
- All our advisors
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