DENGUE - The application of Latin American Social Medicine and Collective Health approaches to address health inequities in LMIC

Subtitle
Recognizing processes of social determination in health: Dengue in Tumaco-Colombia

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Competencies
- To recognize processes of social determination in health and learn to address them using approaches articulated by the Latin American Social Medicine and Collective Health movement.
- To understand processes of health-illness as social processes and recognize the multiple dimensions of complexity in health and processes of social determination in health.
- To understand the difference between recognizing processes of health-illness as social processes and recognizing the influence of social determinants (and contexts) on health.

Audience
- Junior and senior researchers in health and social sciences
- Professor of health and social sciences
- Graduate students developing Master ?s and PhD degrees

Opening paragraph
The adoption of neoliberal economic models in Latin American countries between the late 1980's and early 1990's has led to a significant change in the agricultural production model, with a clear incentive to exportation-oriented agribusiness, especially that based on extensive monoculture (banana, soy-bean, corn, cotton etc.). This change was supported and is sustained by the extensive use of chemical agents for crop protection and pest control, whose consequences for human health have comprehensively been addressed by a recently published dossier by

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The exportation-oriented agribusiness has further created favorable environments for the reproduction of dengue, which can be observed in Tumaco in southwestern Colombia - together with several other health and life threatening dynamics that shape Colombia, Tumaco and accordingly also the processes of social determination in health.

Decision making role

You are a Master of Public Health student and are conducting research on dengue in Tumaco-Colombia. After completing the theoretical chapters of your thesis, you started conducting interviews with dengue patients in the region and decided to bring a summary of one of the interviews to your next research group meeting in order to discuss it in further detail. You are especially interested in discussing the interview in relation to the theoretical framework you developed in the first two chapters of your thesis and hope your colleagues can help you clarify some links.

Decision

The theoretical framework you constructed predominantly draws on the Latin American Social Medicine and Collective Health approaches and is based on the assumption that it is possible to discern the contours and distribution of social structures and particularly the social class, gender and race/ethnicity dimensions (triple inequity, matrix of domination) of marginalization, exploitation and oppression that define and reproduce inequities at regional, national and international level. In this regard you opted for concepts, analytical variables and explanatory models that allow you to understand the dialectic processes of health-illness as expressions of social structures resulting from marginalization, exploitation and oppression, predominantly linked to capital accumulation (what Breilh calls the "social determination of health").

Core questions consequently need to include at least the following: How is Tumaco-Colombia inserted into the global dynamics of capital accumulation? Which processes of marginalization, domination and exploitation are engendered by this insertion and which dimensions of domination are at stake? How does that influence the modes of life and living conditions according to social class, gender and ethnicity/"race" in this specific historically and socially shaped context? What does that mean for processes of health-illness around dengue and dengue prevention in Tumaco-Colombia?

Rather than choosing a number of risk factors that are generally related to dengue and calculate the probability of dengue occurrence or simply relating dengue to its social determinants (health services, water and sanitation, housing and clustering, environment, poverty), you intended to understand the processes of social determination of dengue. In this regard, you sought to move beyond decontextualized and disembodied "risk factors" interacting with equally decontextualised "bodies" (mainstream biomedical and lifestyle epidemiology) and sought to do more than simply relating "social determinants of health" to dengue, which reduces the interaction between social context/structures and health-illness to an external link between social factors and health.

Development

SUMMARY OF THE INTERVIEW CONDUCTED ON JANUARY 14th, 2014

Maria is 33 years old, mother of 4 children and seeks medical attention at the local health center as the fatigue, dizziness, fever, muscle and joint pain she has been experiencing during the last weeks is compromising her ability to work. Her husband died when paramilitary forces invaded her village and killed all alleged collaborators of the "guerrilla" forces and Maria has been working at the local banana plantation ever since.

The health center is relatively far away and waiting times are excessive as merely two medical doctors are attending. María cannot afford to stay away from work for a whole day, and therefore tried to ease her pain with over-the-counter drugs, readily available at the grocery store right next to her house until her symptoms became stronger and her supervisor at work send her to the health center.
After several hours at the health center, she is attended by a young doctor, who barely examines her but immediately diagnoses dengue fever. A public health specialist employed by the hospital is called in and explains that Maria could have reduced her probability of being bitten by an infected mosquito if she would have emptied water from containers in her house and would have stored undercover, or throw out, anything that can hold water.

The public health specialist seems upset with Maria’s behavior and asks her to participate at the workshop on dengue prevention that is being offered by the health center.

Dengue and export-oriented agribusiness
Agribusiness and neoliberal development model → subsunction of vector, virus and patterns of exposure/vulnerability (→ vulnerabilization):

- Banana production → extensive pesticide use → eliminates natural predators of mosquitoes
- Large-scale agricultural production → deforestation → diminishes predators’ refuges
- Agribusiness → destroys biodiversity and biomass → contribution to warming → shortens life cycle and replication time of the virus → accelerates transmission rate

Extracted from Breilh (2013). La determinación social de la salud como herramienta de ruptura hacia una nueva salud pública. 20.11.2013, Quito: http://de.slideshare.net/mjbreilh/dss-nov-20-2013-jaim-breilh?from_search=1

Social Determinants of Health

She is not very enthusiastic about the workshop as she participates at the workshop each and every year – just as her friends and colleagues do – and still there is no change. Every year dengue is declared an emergency and every year workshops are being offered, but the specialists do not seem to find a solution.

Maria is sure that the solution does not lie in the workshops. As far as she remembers dengue has not been a problem when she was a child and only emerged when Tumaco became home to extensive banana plantations and shrimp hatcheries. Maria and her friends often talk about these issues but she repeatedly emphasizes that she is no expert and does not know anything about dengue.

When talking about the way she acquired dengue, Maria continuously refers to her living conditions and notes that the water supply is irregular, which makes it necessary to have water containers in the house. Every now and then, the local authority issues a letter and makes announcements on the local radio, asking all inhabitants of Tumaco to save water, but Maria is sure that water is primarily consumed by the banana plantations and shrimp hatcheries.

END OF THE SUMMARY - INTERVIEW CONDUCTED ON JANUARY 14th, 2014

Closing paragraph

It is clear to you that processes of health-illness are not limited to the individual level and that the social determination of dengue in Tumaco-Colombia is strongly linked to the social, historical and economic characteristics of Tumaco.

You are expected to have a discussion on the processes of social determination in health and particularly Dengue in Tumaco and the difference between recognizing processes of health-illness as social processes and recognizing the influence of social determinants (and contexts) on health with your colleagues. This will need to include a
discussion on Tumaco and the dynamics (armed conflict, major economies, history) that have shaped the city and Southwestern Colombia in general.

It might be best to start off the discussion by revising the above outlined theoretical framework, clarifying the key concepts and discussing the differences between this and alternative theoretical frameworks applied in research on dengue.

You would further like to discuss the interview with colleagues and are particularly interested in how they relate your theoretical framework based on the Latin American Social Medicine and Collective Health movement to the interview.