Evolution in the approach to chronic diseases

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Non-Communicable Diseases, what's in a name?



NCDs IN THE SDGs

NCDs gain in importance

- <u>3.4:</u> "By 2030 reduce by one third premature mortality from NCDs through prevention and treatment and promote mental health and wellbeing."
- Strongly related to NCDs: tobacco control, access to essential medicines and environmental measures
- Multisectoral and multistakeholder approach:
 - Interlinkages between NCDs and the other 169 targets should be supported by cross-cutting policies and implemented through multisectoral partnerships: food and nutrition security, climate change, and sustainable urbanization.

But,

- What are NCDs?
- Health looses terrain: from 3/8 MDGs -> 1/17
- goals are broad, targets without concrete quantification*
- Industrialization and economic growth vs. environmental measures?**

* Shifting to Sustainable Development Goals — Implications for Global Health Christopher J.L. Murray, M.D., D.Phil.
September 16, 2015 DOI: 10.1056/NEJMp1510082
** http://blogs.lse.ac.uk/africaatlse/2015/09/23/five-reasons-to-think-twice-about-the-unssustainable-development-goals/

Moreover,

- Focus on 'what' > 'how' things should change:
 - Sustainable?
 - e.g.: prevention of premature deaths by NCDs
- Do not address commercial interests related to sugar, alcohol, tobacco, etc. *

* Maurice, John. "UN set to change the world with new development goals." *The Lancet* 386.9999 (2015): 1121-1124.

A BRIEF HISTORY OF A SHIFTING PARADIGM

The Chronic Care Model



Developed by The MacColl Institute @ ACP-ASIM Journals and Books

Wagner, Edward H., Brian T. Austin, and Michael Von Korff. "Organizing care for patients with chronic illness." *The Milbank Quarterly* (1996): 511-544.Wagner 1996



Barr, V., et al. "The expanded chronic care model." *Hospital quarterly* 7.1 (2003): 73-82.

Innovative Care for Chronic Conditions Framework



Better Outcomes for Chronic Conditions

Epping-Jordan, J. E., et al. "Improving the quality of health care for chronic conditions." *Quality and safety in health care* 13.4 (2004): 299-305.



Shippee, Nathan D., et al. "Cumulative complexity: a functional, patient-centered model of patient complexity can improve research and practice." Journal of clinical epidemiology 65.10 (2012): 1041-1051.



EVOLVING THREATS

Open adaptive systems

- A system can be: a human being, a society, a network...
- Crucial to survive is the systems' ability to detect and recognize a threat and the ability to react effectively to it
- Most sustainable systems developed a learning capacity to react more adequately against recurrent threats
 - E.g. Immuunsystem
 - Resiliance building, health system strenghtening

from "simple" threats Adaptive systems reaction Detection of Recognition system of threat damage Random threat Reaction Learning -



To more "advanced" threats:

The system is not able to link a threat to system damage:

- The threat is difficult to detect
- System damage is not (immediatly) being detected: e.g. time lag between exposure and damage
- Outcome is unpredictable and non-linear (complex) (e.g. tipping points in NCDs)

-> systems take long (if at all) to adapt to these kind of threats without <u>an enabling environment and</u> <u>enabling information</u>

Global shift to more 'advanced' health problems

Simple

- Acute infectious
- Environmental disasters
- Treatment inexistent
- Treatment inaccessible
- Inaccessible health systems

Advanced

- Chronic lifestyle
- Climate change
- Resistance to treatment
- Compliance problems
- Overconsumption/misuse

Requiring different Solutions

Simple threats

- Treatment/2-3 prevention
- System strengthening
- Resilience building
- Natural selection
- Competition

Advanced threats

- Primary prevention
- Appropriate system use
- Lifestyle change
- Solidarity
- Cooperation, multisectorial

But how to get there?

- Create insight more than awareness
- Stimulate autonomy rather than trying to control
- Endorse skills and competences enabling selfmanagement
- Create an enabling environment
- Focus on the threat not on the damage: respect systems' limits (overconsumption...)
- Stimulate cooperation among & within different 'systems' instead of competition
- Stimulate (the perception of) relatedness

Thanks!