A lifecourse approach

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New Ways of thinking about the Social Determinants of Health
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Group work exercise

Your group is the health promotion and disease prevention unit in the local/area health service. Following the most recent executive/board meeting, your manager comes to the team and advises that the CEO and other Board members wish to see a more explicit “life-course” approach in all policy, programs and strategic direction documents. Your manager requests that the unit submit a proposal for how the life-course approach could be strengthened in all the programs, policies and activities of the unit. There is no additional funding for this approach, and your manager wants a proposal within 10 days so it can be presented at the next Board meeting in a month’s time.
Overview

• An introduction to a life-course approach
  - Epidemiology & frameworks
• Relationship to action on SDH and equity
  – Why it has currency
• What does it mean in practice
  – Clarifying the intent
  – Focus on early childhood but not the interactions
  – Boost to cohort studies
• What’s the potential
  – Examples and some thinking on “how to”
  – Potential “pitfalls”
Introduction & background

• Lifecourse comes from within epidemiology and is a way of

• Three models/explanations
  1. Critical period
  2. Accumulation
  3. Pathway

• More recent explanation/or fourth explanation – social mobility model (Pollitt et al, 2005)
Working definition

A life-course approach considers how health later in life is shaped by earlier experiences. It is not, however, simply taking a longitudinal view. A life-course approach means not only considering the roots of adult health and illness in an individual’s health during the previous stages of the life course, but also systematically considering the economic and social (along with biomedical and other relevant) factors across the life course that influence health. (Braveman, 2013)
Critical period

- refers to *critical periods* in the life-cycle of growth and development where an exposure to a negative factor or a lack of a particular factor has a negative effect, resulting in permanent and irreversible damage or disease.

- examples include maternal exposure to thalidomide in pregnancy and limb development, or poor or undernutrition during pregnancy resulting in low birth weight and a higher risk of chronic disease(s) and related risk factors in childhood and adult life. (Graham, 2002; Ben-Shlomo et al, 2002)
Accumulation models

- Accumulation models indicate that exposure to disadvantage or advantage at different life stages has a cumulative dose/response effect on health:
  - “In this model, poor circumstances throughout life confer the greatest risk of poor health in adulthood, while poor circumstances at one life stage can be mitigated by better circumstances earlier or later in life.” (Graham, 2002; p.2008)
Pathway models

where early life circumstances provide the initial stage for the later life trajectory but the effect of disadvantage is indirect with poor childhood conditions influencing social trajectories into and through adulthood (Graham, 2002). For example, limited or no participation in formal childcare prior to school, starting school unprepared to learn and maybe undernourished as a result of family circumstances, setting up a trajectory for potentially limited educational attainment which impacts on employment and other life prospects.
Social mobility model

• The hypothesis is that socioeconomic mobility across the life-course impacts on adult health, although there are different theories about the health effects.

• This model also includes the theory of health selection i.e. those who are already less healthy are more likely to have downward social mobility because they have fewer opportunities to work, earn income etc (Pollitt et al, 2005)
Some comments about the models

• not exclusive of each other but interrelated and they provide “probabilistic” explanations of how life circumstances and exposures might work not deterministic

• “… help to identify points of intervention where chains of risk may be broken and a new life-course trajectory established.”

  however

• “Stopping the additive effect will have health benefits but residual damage will remain.” (Ben-Shlomo et al, 2002; p.287)
Examples of research & related work

• The Australian Longitudinal Study on Women’s Health – women in 3 cohorts aged 18-23, 45-50 and 70-75, when study began in 1996
• The Avon Longitudinal Study of Parents and Children (ALSPAC) - which is also known as Children of the 90s - is a long-term health research project. More than 14,000 mothers enrolled during pregnancy in 1991 and 1992, and the health and development of their children has been followed in great detail ever since.
Relationship to SDH

Meet

Jack and Eduardo
Lifecourse at work re inequalities

Jack retires early at 60 years of age.

Eduardo died early at 60 years of age.

What potential for different trajectories if a lifecourse and equity lens used?
From a chronic disease perspective

Source: Department of Health website, 2009, Australia.
Relationship to social determinants & equity

• Historical antecedents of adulthood inequalities in childhood, adolescence, early adulthood
• Increasing call for its recognition in field of SDH – Hilary Graham (2002)
• Intergenerational transmission of inequities – a chance to break the cycle
• But what does this mean in practice?
• And what happens in practice?
Life course in key policy documents

- Health throughout Life – Healthy Ageing (Australia) (2009)
- European review of social determinants and the health divide (2013)
Healthy ageing a lifecourse approach

• that the most benefit in one age group can be derived from interventions in an earlier age group,
• intervening at one life stage or during one health episode is **not enough** for prolonged improvement of health outcomes.
• need to identify ways in which we can ensure that we adopt some of the principles behind the lifecourse approach to chronic disease development & give consideration to actions to prevent the development of chronic disease across the lifespan
• to concentrate activity during the periods of people's lives that are critical for disease development.
Life-course in practice: personal reflections

• Might reorient focus towards early child development but not necessarily in terms of practice and or its relationship to other life stages
• Development of life-stage programs and policies eg. adolescent health, healthy ageing – not necessarily the interactions between the life-stages
• Conflation with / shorthand for action on equity & inequities
• Epidemiological evidence not necessarily definitive or consistent
• Stimulus to cohort studies & improved data collection
The potential of a life-course approach

• Increased potential for greater coordination and prevention across the system if adopted in a reflexive way – opening way for dialogue

• Potential for improving health equity if there is deliberate focus on equity issues eg. moving from the issue to potential social stratification, unequal distribution of risk and the upstream causes

• If done well, might move us from rhetoric to improved action on early childhood as an investment – “making the case” – and potentially prevention

• Making better use of existing evidence & sources to improve health outcomes
Examples

- Wisconsin - Lifecourse Initiative for Health Families
- Systems approach – lifecourse approach to clinical practice
- Lifecourse and equity lens for NCDs - Europe
Life-course & clinical practice example

1. ensuring *longitudinal and intergenerational integration* across the system (a lifelong developmental/lifelong intervention approach, a whole of family approach)

2. *vertical integration* (across different clinical health care settings eg. primary to hospital, to long term care), vertical integration across health disciplines (e.g. cardiology, neurology etc) and

3. *horizontal integration* across other sectors (eg. developing integrated, multi-sector service systems that become lifelong “pipelines” for healthy development)

   (Cheng & Solomon, 2013)
Life-course & equity lens for NCDs

• In development for WHO Regional Office for Europe & taking Health 2020 forward
• Increasing specificity of life-stages
• From life-stages to life-course
• All age interventions e.g. tobacco control/smoking bans AND age-specific initiatives
Potential “pitfalls”

• Life-stage approaches without really improving the scope for prevention – missing the interactive element
• Determinism
• Ageism
Stakeholders & champions to date

• Early child and family & maternal health programs
• ? Gerontologists