Healthy Life Trajectories Initiative (HeLTI)

IAEA Meeting

Dr. Shoo Lee
Scientific Director, CIHR-IHDCYH
The Healthy Life Trajectories Initiative (HeLTI)

• **Goal:** Generate evidence and inform national policy for improvement of health and prevention of NCDs

• **Importance:**
  • NCDs responsible for 60% of deaths globally; higher in populations facing rapid disruption of traditional lifestyles/changes in nutrition
  • Evidence highlights long-term consequences of children exposed to poor early life conditions

• **Plan:**
  • Life cycle approach using the developmental origins of health and disease (DOHaD) concept
  • Innovative intervention cohort design – allows for rapid impact
HeLTI Linked International Intervention Cohorts

HeLTI Coordinating Centre
(WHO Secretariat & HeLTI Office)

China  India  South Africa  Canada (2)

Enabling Platforms

- ReACH: Canadian DOHaD Cohort Registry
- Pathways to Health Equity for Aboriginal Peoples
- Canadian Epigenetics, Environment and Health Research Consortium

IAEA contributing €50 000 to each International Cohort to support radioisotope costs
HeLTI Linked International Intervention Cohorts

Collaboration of parallel linked pre-conception, pregnancy, and infancy DOHaD risk-intervention cohorts

Primary Objectives:

- Conduct a set of coordinated studies across the life trajectory to evaluate interventions to reduce the prevalence of NCDs

- Generate mechanistic knowledge, and evidence that will guide policy and actions in short term and identify research and programmatic needs for long term

- Improve health outcomes, particularly related to pregnancy, early life and childhood
## Interventions – ECHO Report

<table>
<thead>
<tr>
<th>Pre-conception</th>
<th>Pregnancy</th>
<th>Infancy</th>
<th>Childhood</th>
<th>Family and community</th>
</tr>
</thead>
</table>
| • Iron and folate supplementation  
• Prevention and treatment of infections  
• Increased physical activity | • Macro/micro nutrient supplementation  
• Appropriate physical activity  
• Smoking cessation, stress management | • Early initiation of breastfeeding  
• Healthy complementary foods  
• Optimal care practices | • Breastfeeding up to 2 years of age  
• Play and stimulation  
• Management of TV and screen time | • Family counselling and action plans for diet and physical activity  
• Communal activities/health events, e.g. cycling, safe walking routes, healthy school menus  
• Community messaging about street or fast-food vendors and portion sizes |
| | | | • Improved dietary habits  
• Smoking cessation  
• Health counselling | |
Catherine L. MAH
70% of every food dollar in Canada

CONTEXT: HIC, MATERIAL DEPRIVATION, SUPPLY CHAIN CONSTRAINTS

EMERGING RESEARCH
- Data quality (env, sales, diet)
- Retailer-led changes
- Merchandising
- Entrepreneurialism
- Short supply chains
- Missing “middle”
- Horizontal/vertical diffusion
- Other retail settings

OUTCOMES
- Healthier and fresh food availability
- Prepared food
- Targeted purchasing
- New business practices—spirit of experimentation
- Changes in public health practice and municipal policy development
- No change in diets or food insecurity

THE MODEL
Retailer: powerful ally, value chain gatekeeper, economic participation

HEALTHY RETAILING
Target of health promotion: stores

Catherine L. Mah MD FRCPC PhD | catherine.mah@dal.ca
Vienna IAEA-WHO-UNICEF Joint Workshop | October 4, 2017
Manuel RAMIREZ
A better nutrition in the first 1000 days is associated with less chronic diseases in adulthood

- Exposure to Atole in the first 3 years of life reduced fasting glucose 7.0 mg/dl; systolic blood pressure 3.0 mmHg; triglycerides 22.2 mg/dl and increased HDL-c 4.7 mg/dl in adulthood.

- Increases in BMI between 3 and 7 years had stronger associations with adult fat mass and abdominal fat than with fat free mass; increases in length prior to age 3 years were most strongly associated with increases in FFM.

Source: Stein et al, AJE 2006; Corvalan et al, IJE 2007
Simon BARQUERA
FIGHTING OBESITY IN MEXICO: SUPPORTING THE DESIGN AND EVALUATION OF EFFECTIVE OBESITY PREVENTION POLICIES

MAIN EFFORTS:
- Bloomberg project: evidence for policy change developing an alliance to identify and promote policy change: Soda Tax
- Other initiatives: Labeling, Marketing, School regulations
- INFORMAS Food Environment Policy Index

FEEDBACK LOOPS:
- Trade: Subsidies to sugar producers
- Breast-Feeding practices and SSBs consumption strong pressure from industry (marketing, labeling, PR)
- Conflict of interests in policies

Second year evaluation of soda tax policy in Mexico: sustained reduction in SSBs purchases:
2014-2015: average ↓ 7.6%
-5.1 Liters/capita/year

Simon BARQUERA
INTEGRATING BABY FRIENDLY HOSPITAL INITIATIVE INTO THE HOSPITAL QUALITY ASSESSMENT SYSTEM IN VIETNAM

**BF Criteria**

**Ladder of Hospital Quality Criteria in Vietnam**
- Grade 5: Very Good Outcome • Patient Very Satisfied
- Grade 4: Good Outcome • Patient Satisfied
- Grade 3: Complete Structure • Process Started
- Grade 2: Complete Structure • Process Started
- Grade 1: Nothing / Violations of Laws • No Improvement in Quality

**Ladder of Hospital Quality Criteria in Vietnam**

**OBSTETRIC & PEDIATRIC, BFHI 4 STANDARD**

**Quality Standards**

- Patient Orientation: 19
- Human Resource Dev.: 14
- Clinical Quality: 38 (5)
- Quality improvement: 8
- 5 Criteria of Nutrition

**Duong Huy Luong**
Tackling the Double Burden of Malnutrition: The Malaysian Experience

MyBFF@School
MyBFF@Home
MyBFF@Work

Sugar Subsidy Removal

Ceria, Respek, Gigih, Aktif, Sihat
Healthy Eating, Be Active Trend
ToyBox Study Malaysia

5% thin, 8% stunted
1 in 5 Malaysian Children is OBSESE

Food Basket
Community Kitchen
Community Feeding
Salt Iodisation

Igor SPIROSKI
Letter to the Editor

Principles behind evaluations of national food and beverage taxes and other regulatory efforts

Dear Editor,
Considerable controversy surrounds taxes and other regulatory policies (such as restricting marketing to children and setting mandatory standards for foods available in schools) being implemented around the world to discourage unhealthy eating. Thus, it is imperative that, where implemented, these policies are evaluated to the highest standard, considering the specific elements of how the taxes and regulations are designed, existing consumption trends and any weaknesses in the available data used.

A crucial way to ensure a high-quality evaluation is to ensure that the evaluation team has the competency, skills and experience to conduct the evaluation. They must also be independent and have no conflicts of interest with regard to the findings. Another mechanism to support high-quality evaluations is to establish an independent advisory committee to evaluate how the tax affects this trend line). Interrupted time series analyses/difference-in-difference analyses are an example of well-established methods. Experimental designs, while desirable when circumstances permit, are generally not feasible as there is no meaningful control. Analyses should adjust for variables at the individual or household level, as well as contextual variables that change over time and could be associated with the outcome of interest (e.g., demographic composition and inflation rates); this is particularly important in the absence of a true experimental design.

3 Data utilized in the evaluation must be of acceptable quality and representative of a meaningful population or subpopulations. National representativeness is ideal, but this must be balanced with what is available.

4 All studies should provide detailed descriptions of the
Gladys MUGAMBI