Primary Health Care: rationale, evolution and current challenges to its revitalisation and impact.

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Peoples Health Movement

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Human Resources for Health
Outline of Presentation

- Global disparities in health and nutrition
- The role of undernutrition and ‘overnutrition’ in health and disease
- Key determinants of malnutrition in South Africa and globally
- Comprehensive Primary Health Care, its scope and potential
- ‘Selective’ Primary Health Care and its evolution in the context of neoliberal globalisation
- Key actions to revitalise CPHC
AFRICA and SOUTH ASIA’S CRI SIS

Mortality 1 - 4 year olds

Territory size shows the proportion of all deaths of children aged over 1 year and under 5 years old, that occurred there in 2002.
Despite successes, growing inequalities in global health

Figure 1: Life expectancy at birth by region, 1970–1975 and 2000–2005

Trends in Maternal Mortality Ratio (per 100,000 live births) by UN MDG Regions

WHO 2010
U5MR reduction - Progress but needs to be accelerated


Number of <5 deaths (in millions)

- 1970: 10.4 (Africa: 3.7, Asia: 6.7)
- 1980: 7.6 (Africa: 3.9, Asia: 3.7)
- 1990: 6.7 (Africa: 4.3, Asia: 2.1)
- 2000: 5.0 (Africa: 4.5, Asia: 0.9, Other: 1.7)
- 2008: 3.7 (Africa: 4.5, Asia: 0.6, Other: 0.5)

Target: 2015 MDG
- 2015: 0.5 (Africa: 0.5, Asia: 2.2, Other: 1.4)

Note: 52% of the decline in under-five deaths is attributed to MDGs.
Figure 2.2: Under-5 mortality rate per 1000 live births by level of household wealth.

Source: Gwatkin et al. (2007), using DHS data.

The social gradient is not confined to poorer countries. Fig. 2.3 shows national data for some areas of the United Kingdom (England and Wales) for people classified according to levels of neighbourhood deprivation. As can be seen, the mortality rate varies in a continuous way with degrees of deprivation (Romeri, Baker & Griffiths, 2006). The range is large: the difference in mortality between the most and least deprived is more than 2.5-fold.
Leading global risk factors and contributions to global burden of disease: % DALYs, World

- Infant and maternal underweight: 9.5
- Unsafe sex: 6.3
- High blood pressure: 4.4
- Tobacco: 4.1
- Alcohol: 4
- Unsafe water, sanitation, and hygiene: 3.7
- High cholesterol: 2.8
- Indoor smoke from solid fuels: 2.7
- Iron deficiency: 2.4
- High BMI: 2.3
- Zinc deficiency: 1.9
- Low fruit and veg intake: 1.8
- Vitamin A deficiency: 1.8

Ezzati et. al. 2002
Undernutrition – THE FACTS

- Undernutrition is the underlying cause of the death of 2.6 million children each year - one-third of the global total of children’s deaths.

- **One in four** of the world’s children are stunted. That means their body and brain has failed to develop properly because of malnutrition.

- **450 million** children will be affected by stunting in the next 15 years, if current trends continue.
Malnutrition – the global situation

• In 2001-2003 >1 billion people undernourished
• Since 1990-92 the undernourished population has fallen by less than in 1980s)

• In 2005 22mn children were overweight
• By 2015 some 2.3bn adults will be overweight
  700mn will be obese
Double Burden
Key Determinants of Disease and Death: the Example of Undernutrition in South Africa and Globally
Causes of under-five deaths in South Africa

- Neonatal causes; pneumonia, diarrhoea and other child illness; and HIV/AIDS each account for 30% of U5 deaths

According to Child PIP 60% of children were underweight and a third were severely malnourished

Based on SA Burden of Disease estimates for 2000

Lancet Vol 371 April 12, 2008, 1294-1304
South Africa
Nutritional Status in Children under 5

- Overall, 12 percent of children are underweight, 27 percent are stunted and 5 percent are wasted (DHS 2003).
- NFCS (2005) showed 18% stunting

- There are no indications that the nutritional status of children has changed substantially over the past 10 years.
Undernutrition and Dietary Intake

The National Food Consumption Survey (2005) showed:

• 1 in 3 women and children are anaemic
• 1 in 3 children and 1 in 4 women have Vit A deficiency
• 45% of children are Zinc deficient
Determinants of Undernutrition
Globally
Risk Factors/Determinants

Biological  Behavioural  Societal  Structural

DOWNSTREAM  UPSTREAM

Burden of Disease study, PGWC
Majority of People in Surveyed Countries Report Rising Price of Food As Most Pressing Concern

A large majority in each country indicate that the increasing cost of food has become their most pressing concern this year. People in Nigeria are most likely to be in overall general agreement that this is the case, while Bangladesh has the greatest numbers who feel strongly that food prices have become their most pressing concern.

Q3. To what extent do you agree or disagree that the rising price of food has become your most pressing concern this year?
The majority of people in Peru and Nigeria report that they have reduced the quantity of food they buy for their family. About half indicate the same in Bangladesh.

Those in India are least likely to have reduced the food they buy – but it should also be noted that compared to the other countries, more people in India say they are never able to afford to buy nutritious food such as meat, milk or vegetables.

Q4 And since the rise in food prices over the last year, please tell me whether you have…?

a. Reduced the amount of food you buy for your family
Trade agreements and agricultural trade

- **Agreement on Agriculture 1994** – pledged countries to open markets by reducing tariffs, non-tariff barriers, export subsidies and domestic agricultural support.

- **Agreement on Application of Sanitary and Phytosanitary Measures** – further reduced trade barriers by adoption of equivalent food safety standards.

- **Technical Barriers to Trade Agreement** – ensured national regulations, voluntary standards etc would not impede trade.

- **TRIPs** – expanded scope of private property rights on food products, including patents on seeds.
Speculation in Commodities: the ‘Food Casino’

The dramatic rise in food and other primary commodity prices was traced to real economic causes and processes, even though 2008 turned out to be a year of record grain production internationally.

This deregulation of commodities derivatives markets in 2000 allowed entry of large institutional investors into commodities derivatives markets. Following the deregulation, data from the Chicago Board of Trade (CBOT) show that traded volumes on agricultural commodity futures increased significantly, in most cases annually at around 50 per cent.
Purely speculative trading tends to increase price volatility and undermine traditional forms of speculation. As prices have become more volatile and convergence less predictable, the futures market has lost its price discovery and risk management functions for many market participants.

A study conducted by Lehman Brothers calculated the volume of index fund speculation increased by 1,900% between 2003 and March 2008.

Morgan Stanley estimates that the number of outstanding contracts in maize futures increased from 500,000 in 2003 to almost 2.5 million in 2008.

Already in 2006, Merrill Lynch estimated that speculation was causing commodity prices to trade at 50 per cent higher than if they were based on fundamental supply and demand.

‘Land Grabs’: the new colonialism

More than 200m hectares claimed between 2000 and 2010, the majority in sub-Saharan Africa (International Land Coalition, 2011). Ethiopia recently sold 3m hectares to an Indian food company.

17% of Sierra Leone's arable land purchased by 2011.

Socfin SL, a Belgian company recently secured a 50-year lease for 6,500 hectares of farmland in Malen chiefdom for an annual rent of $5 per hectare.

The Malen Land Owners Association denounced working conditions as "near-slavery", with labourers earning just over $2 a day in temporary jobs.
Northern agricultural subsidies: Japan, the EU and the US

Source: UNDP HDR 2005
World Agricultural Trade

• Increase from US $243bn in in 1980-84 to US$ 467bn in 2000-01

• In developing countries on average food import bills as share of GDP more than doubled 1974 - 2004 (FAO 2004)

• Large increase in exports of high-value foods eg fruit, veggies etc

• Food imports - into developed countries increased by 45%  (1970-2001) - into developing countries increased by 115%
I'M HUNGRY!

STOP TALKING POLITICS!
Determinants of ‘Overnutrition’
Globally and in South Africa
The shape of things to come
The Changing Food Environment
Food groups: the big five

- Milk and dairy products
- Veggie and veggie products
- Meat and meat products
- Fruits and fruit products
- Cereals and cereal products
Definitions

- **Food**: any substance intended to be, or reasonably expected to be, ingested by humans, which provides nutrients needed to maintain life.

- **Unprocessed foods**: parts of plants (seeds, leaves, roots, fruits ...) or animals (muscles, offal, milk, blood ...), fungi, and algae shortly after harvesting, butchering, extraction or gathering from the nature.
Most unprocessed foods:

- 1) are highly perishable and cannot be stored for a long time and

- 2) require intense culinary processing (preparation, seasoning, mixing with other foods, and cooking) to be digestible, safe, and palatable.
Definitions

- **Food processing**: a series of operations by which unprocessed foods are converted into foodstuffs to prolong their duration, enable storage, and reduce (or abolish) time/effort spent in culinary procedures.
# Types of food processing

<table>
<thead>
<tr>
<th>Type</th>
<th>Extent/purpose</th>
<th>End product</th>
<th>Trade-offs with health and well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Minimal modifications of whole foods to prolong their duration, enable storage, and reduce time/effort in their culinary preparation</td>
<td>Minimally processed FOODS (cleaned, chilled or frozen, vacuum-packed fruits and vegetables; dried and packaged grains, pasteurized milk, plain yogurt, frozen meat …)</td>
<td>Positive</td>
</tr>
</tbody>
</table>
## Types of food processing

<table>
<thead>
<tr>
<th>Type</th>
<th>Extent/purpose</th>
<th>End product</th>
<th>Trade offs with health</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Extraction of substances from whole foods enabling the manufacture of highly storable ingredients used in the culinary elaboration of dishes/meals made from whole foods</td>
<td>Processed culinary INGREDIENTS (refined oils, fats, sugar, starches, flours …)</td>
<td>Positive if used wisely</td>
</tr>
</tbody>
</table>
## Types of food processing

<table>
<thead>
<tr>
<th>Type</th>
<th>Extent/purpose</th>
<th>End product</th>
<th>Trade offs with health</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Extraction of substances from whole foods followed by their subsequent assembling (usually with lots of additives and little or no whole food), enabling the manufacture of long shelf-life, ultra-palatable, ready-to-consume products</td>
<td><strong>Ultra-processed PRODUCTS</strong> (breads, cookies, cakes, pastries, chips, cereal bars, and savory or sweet snacks in general, pizza, burgers, nuggets and ready dishes and meals in general, soft drinks … )</td>
<td>Increasingly negative</td>
</tr>
</tbody>
</table>
Ultra-processed products

Ingredients: sugar, enriched wheat flour, canola/palm/soy oil, cocoa (processed with alkali), high-fructose corn syrup, cornstarch, baking soda and/or calcium phosphate, salt, soy lecithin (emulsifier), vanilla (artificial flavor), chocolate.

Ultra-processed products

INGREDIENTS: SUGAR; WHOLE GRAIN CORN FLOUR; WHEAT FLOUR; WHOLE GRAIN OAT FLOUR; OAT FIBER; SOLUBLE CORN FIBER; PARTIALLY HYDROGENATED VEGETABLE OIL (ONE OR MORE OF: COCONUT, SOYBEAN AND/OR COTTONSEED OILS)†; SALT; SODIUM ASCORBATE AND ASCORBIC ACID (VITAMIN C); NIACINAMIDE; REDUCED IRON; NATURAL ORANGE, LEMON, CHERRY, RASPBERRY, BLUEBERRY, LIME AND OTHER NATURAL FLAVORS; RED #40; BLUE #2; TURMERIC COLOR; YELLOW #6; ZINC OXIDE; ANNAITTO COLOR; BLUE #1; PYRIDOXINE HYDROCHLORIDE (VITAMIN B₆); RIBOFLAVIN (VITAMIN B₂); THIAMIN HYDROCHLORIDE (VITAMIN B₁); VITAMIN A PALMITATE; BHT (PRESERVATIVE); FOLIC ACID; VITAMIN D; VITAMIN B₁₂.

† LESS THAN 0.5g TRANS FAT PER SERVING.
Ultra-processed products
Ingredients: chicken, water, food starch-modified, salt, autolyzed yeast extract, wheat starch, natural flavoring (botanical source), safflower oil, dextrose, citric acid, sodium phosphates, natural flavor (botanical source), enriched bleached wheat flour, yellow corn flour, baking soda, sodium acid pyrophosphate, sodium aluminum phosphate, monocalcium phosphate, calcium lactate, spices, wheat starch, dextrose, corn starch.

Prepared in vegetable oil (Canola oil, corn oil, soybean oil, hydrogenated soybean oil with TBHQ and citric acid added to preserve freshness).

Dimethylpolysiloxane added as an antifoaming agent.

What is wrong with ultra-processed products (UPP)?
Overall, when compared to whole or minimally processed foods plus culinary ingredients, UPP have:

- less protein
- less fiber
- more free sugar
- more total, saturated and trans fats
- more sodium
- and, for solid products, more energy per volume

Mechanisms linking UPP to overeating and obesity

✓ High energy density (all UPP)

✓ Liquid calories (all sugared beverages)

✓ Hyper-palatability (all UPP)

✓ Super size servings (several UPP)
  Report of the DGAC on the Dietary Guidelines for Americans 2010

✓ Mindless eating (all UPP)

✓ Aggressive marketing (all UPP)

See also *Public Health Nut* 14(1): 5-13, 2011
and *World Nutrition*, Nov 2010; 1, 6: 237-269 (www.wphna.org)
Aggressive marketing strategies (advertisements, discounts etc) change social norms concerning serving sizes of UPP!

The Wall Street Journal, March 18, 2010

McDonald's spokeswoman Danya Proud … said more than 90% of U.S. restaurants sold drinks for $1 last summer, which "should give you an indication of its success for our business."
... and social norms concerning when, where and how much to eat!
The marketing of UPP targets kids using fun to sell

* Marketing foods to kids: using fun to sell; the appeal of crazy colors, flavors, and more. Consumer Research Magazine 01 March 2002
Changes in the share of food groups in urban household food acquisitions. Brazil: 1996-2009

**G1: Whole or minimally processed foods**

**G2: Processed culinary ingredients**

**G3: Ultra-processed products**

Snacks and fast meals
(‘mindless eating’)

Δ % TOTAL KCAL

-6
-4
-2
0
2
4
6

RICE
BEANS
MEAT
MILK

OILS/FATS/FLOURS/SUGAR
BREADS
COOKIES
SOFT DRINKS/SWEETS
SAUSAGES
READY MEALS

Shared, complete meals made from scratch
Caloric share of food groups in total household food acquisitions in Brazil

**Brazil 2002-3**
- Processed culinary ingredients: 37.5%
- Ultra-processed products: 20.0%
- Whole or minimally processed foods: 42.5%

**Brazil 2008-9**
- Processed culinary ingredients: 31.8%
- Ultra-processed products: 27.7%
- Whole or minimally processed foods: 40.5%

Source: Monteiro et al 2010 and Moubarac J-C et al (submitted) based on Brazilian Household Budget Surveys
Caloric share (%) of ultra-processed products in total household food acquisitions*

* Estimated from national food expenditure surveys: Brazil (HBS), UK (LCF), Canada FOODEX), Chile (EPF), Colombia (ENIG) y Mexico (ENIGH).
Obesity among adults and the caloric share of ultra-processed products in six countries*

* Estimated from national food expenditure surveys and health and nutrition surveys around the same years.
Obesity among adults and the caloric share of soft drinks in six countries*

* Estimated from national food expenditure surveys and health and nutrition surveys around the same years.
Determinants of ‘Overnutrition’ in South Africa
Risk Factors/Determinants

Downstream

Biological

Behavioural

Societal

Structural

Upstream

Burden of Disease study, PGWC
Overweight and chronic disease in rural S Africa

In a 2005 study of a rural black population from Limpopo Province, South Africa:

- **51% of women were overweight or obese**
- Diabetes diagnosed in 8.8% of women and 8.5% of men
- Hypertension was found in 25.5% of women and 21.6% of men

Dietary changes

- **Dietary intakes of 1751 apparently healthy adults**, stratified according to gender and stratum of urbanization were assessed using a validated quantitative food frequency questionnaire (QFFQ).
- Mean energy and protein intakes for all strata were adequate. Mean intakes of micronutrients were low in comparison to reference standards.
- Fruit and vegetable consumption was low throughout the sample. Food intakes showed a shift from the traditional high carbohydrate, low fat diet to a diet associated with non-communicable diseases.

MacIntyre et al, Nutrition Research 22 (2002) 239–256
Societal Factors in Obesity

• There is a shortage of healthy low-fat food and little fresh fruit and vegetables in the townships.

• ‘Low-fat milk is not available in our shops’, stated one of the CHWs after she had tried to cut down on the fat in her diet.

• ‘I am scared of exercising because I will lose weight and people may think that I have HIV/AIDS.’

## Market Sizes - Historic - Retail Value
### RSP - R mn - Current Prices

<table>
<thead>
<tr>
<th>Category</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaged food</td>
<td>69475</td>
<td>74462</td>
<td>78929</td>
<td>84062</td>
<td>92671</td>
<td>101192</td>
</tr>
</tbody>
</table>

Source: Packaged Food: Euromonitor from trade sources/national statistics
Bread, Pastry, Cakes, Biscuits and Other Baker's Wares

Value of imports from world in Rand


<table>
<thead>
<tr>
<th>Category of Packaged Foods</th>
<th>Subcategory</th>
<th>Sales Volume*</th>
<th>Rate of Change of Sales Volume (%), 2005–10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakery</td>
<td></td>
<td>2009.3</td>
<td>16.2</td>
</tr>
<tr>
<td>Meal solutions</td>
<td></td>
<td>547.2</td>
<td>18.5</td>
</tr>
<tr>
<td></td>
<td>Canned/preserved food</td>
<td>241.8</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>Frozen processed food</td>
<td>102.1</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td>Chilled processed food</td>
<td>95.9</td>
<td>−2.8</td>
</tr>
<tr>
<td></td>
<td>Sauces dressings and condiments</td>
<td>88.1</td>
<td>27.0</td>
</tr>
<tr>
<td></td>
<td>Ready meals</td>
<td>70.1</td>
<td>43.1</td>
</tr>
<tr>
<td></td>
<td>Soup</td>
<td>11.1</td>
<td>32.6</td>
</tr>
<tr>
<td>Impulse and indulgence products</td>
<td>Confectionery</td>
<td>119.4</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>Sweet and savoury snacks</td>
<td>87.9</td>
<td>27.5</td>
</tr>
<tr>
<td></td>
<td>Snack bars</td>
<td>1.9</td>
<td>42.6</td>
</tr>
<tr>
<td></td>
<td>Ice cream</td>
<td>76.0</td>
<td>14.7</td>
</tr>
<tr>
<td>Dried processed food</td>
<td></td>
<td>345.4</td>
<td>−2.8</td>
</tr>
<tr>
<td>Pasta</td>
<td></td>
<td>62.9</td>
<td>35.0</td>
</tr>
<tr>
<td>Noodles</td>
<td></td>
<td>7.4</td>
<td>44.5</td>
</tr>
<tr>
<td>Oils and fats</td>
<td></td>
<td>343.6</td>
<td>14.9</td>
</tr>
<tr>
<td>Meal replacement</td>
<td></td>
<td>0.6</td>
<td>9.6</td>
</tr>
<tr>
<td>Spreads</td>
<td></td>
<td>28.8</td>
<td>23.9</td>
</tr>
</tbody>
</table>

Source: Euromonitor 2011 [17].
*In thousand tonnes, except for ice cream, which is million litres.
doi:10.1371/journal.pmed.1001253.t001
## Table 2. Packaged Food Company Shares in South Africa, 2009.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Location of Company Headquarters</th>
<th>Contribution to Total Packaged Food sales (%)</th>
<th>Examples of Product Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tiger Brands Ltd</td>
<td>South Africa</td>
<td>17.2</td>
<td>Milling and baking, groceries, confectionery, beverages, value added meat products, fruit and vegetables, products for the food services sector</td>
</tr>
<tr>
<td>2</td>
<td>Unilever Group</td>
<td>UK/Netherlands</td>
<td>4.9</td>
<td>Spices, sauces, dressings, margarine, teas, syrup and food solutions</td>
</tr>
<tr>
<td>3</td>
<td>Parmalat Group</td>
<td>Italy</td>
<td>4.8</td>
<td>Dairy products including milk, yoghurt, ice cream and cheese, fruit juices</td>
</tr>
<tr>
<td>4</td>
<td>Nestle SA</td>
<td>Switzerland</td>
<td>4.6</td>
<td>Baby foods, drinks, breakfast cereals, chocolate, confectionery, coffee, dairy products, ice cream</td>
</tr>
<tr>
<td>5</td>
<td>Clover Ltd</td>
<td>South Africa</td>
<td>4.6</td>
<td>Dairy products, desserts, beverages such as fruit juices, nectars and ice teas</td>
</tr>
<tr>
<td>6</td>
<td>Dairybelle (Pty) Ltd</td>
<td>South Africa</td>
<td>4</td>
<td>Dairy products, fruit juices</td>
</tr>
<tr>
<td>7</td>
<td>Pioneer Food Group Ltd</td>
<td>South Africa</td>
<td>3.7</td>
<td>Baking aids, tea/coffee, breakfast cereals, biscuits, condiments, juices and acidic drinks, dried fruits, eggs</td>
</tr>
<tr>
<td>8</td>
<td>Cadbury Plc (bought by Kraft in 2011)</td>
<td>UK/US</td>
<td>2.8</td>
<td>Chocolate, candy, gum, biscuits, coffee, other grocery</td>
</tr>
<tr>
<td>9</td>
<td>AVI Ltd</td>
<td>South Africa</td>
<td>2.8</td>
<td>Coffee, tea, biscuits, potato chips, frozen fish and seafood products</td>
</tr>
<tr>
<td>10</td>
<td>PepsiCo Inc</td>
<td>US</td>
<td>2.4</td>
<td>Drinks, savoury snacks</td>
</tr>
</tbody>
</table>

*Euromonitor does not collect data on the informal sector (defined as sales that are not taxed).
doi:10.1371/journal.pmed.1001253.t002
Rapid growth of supermarkets in South Africa

- Supermarkets now share at least 50-60% of food sales in South Africa, with most growth occurring after 1994.
- Nearly two-thirds of households in a rural area in South Africa are now buying their food at supermarkets.
- Healthier foods typically cost between 10% and 60% more when compared on a weight basis (R per 100g) and between 30% and 110% more when compared based on the cost of food energy (R per 100 kJ).

### Number of households in two rural areas in Transkei, Eastern Cape going to supermarkets

<table>
<thead>
<tr>
<th></th>
<th>Xume</th>
<th>Luzie</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of total</td>
<td>78.4%</td>
<td>50.0%</td>
<td>64.8%</td>
</tr>
</tbody>
</table>


### Growth in Supermarket Food Sales

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent increase: 1999-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>0%</td>
</tr>
<tr>
<td>U.S.</td>
<td>10%</td>
</tr>
<tr>
<td>South Africa</td>
<td>40%</td>
</tr>
</tbody>
</table>

Structural Determinants of ‘Overnutrition’ Globally
The Global Food Industry

Sectors:  Food growers
         Food and beverage processors
         Food distributors
         Food service providers
         Food retail outlets
But also includes commodity traders, fertilizer and pesticide makers, restaurant supply companies.
Leading Food and Beverage Companies Worldwide, 2001

- Nestle
- Unilever
- Cargill
- Kraft
- Conagra
- PepsiCo
- Tyson Foods
- Coca-Cola
- Diageo PLC
- Mars, Inc.
- Danone Group

Sources: Global Supermarket, Department of Foreign Affairs and Trade, Austrade, Australia; selected company income statements.

Economic Research Service, USDA
Food firms: Size and orientation

Number of countries

Number of food categories

Note: Dollar amounts are values of packaged food sales only, in billions.
Source: Euromonitor, 2003
From a Nestlé press release:
Vevey, February 21, 2008

“Popularly positioned products (PPPs). Products aimed at lower income consumers in the developing world, will continue to grow strongly in 2008 and beyond. Nestlé PPPs, which mostly consist of dairy products, Nescafé and Maggi culinary products, grew by over 25% to reach around CHF 6 billion in sales in 2007. The overall market for such products in Asia, Africa and Latin America is estimated at over CHF 80 billion.”
Liberalisation and growth of TNCs

• **Growth of FDI in food industry** – bilateral investment treaties increased from 181 to 2495 between 1980 and 2005 *(UNCTAD 2000, 2006)*

• **TNCs now control** seeds, fertilisers, pesticides, production, processing, manufacturing and selling of foods

• In 1980s TNCs expanded into manufacture of **processed foods** eg snacks, soft drinks, dairy
FDI and supermarkets

- From 1990 FDI penetrated supermarkets: FDI from US-based supermarkets increased from $4bn to $13bn between 1990 and 1999
- In LA supermarkets increased share of retail market from 10-20% in 1990 to 50-60% in 2000
- Between 1990 and 2001 foreign sales of world’s largest 100 TNCs increased from $88.8bn to $257.7 bn
The global food system is causing a public health disaster

The UN rapporteur on the right to food says governments in rich and poor countries must bring in tough measures to combat the unhealthy products being marketed.

More than 1.3 billion people around the world are overweight or obese.

Photograph: Finbarr O'Reilly/Reuters

Olivier de Schutter
UN Special Rapporteur on the Right to Food
March 2012

Felicity Lawrence, The Guardian, 9 March 2012
Health Policy Trends and their Impact on the Health System
WHO/UNICEF Alma Ata Conference (1978)

Alma Ata, the capital of Kazakhstan, now called Almaty
Site of the 1978 WHO/UNICEF conference
‘Health for All by the Year 2000’
Evidence base for PHC (1)

Pre Alma Ata:

- Work of McKeown and McKinley demonstrated importance of socioeconomic and environmental factors
Figure 2. Age-adjusted death rates for respiratory tuberculosis: England and Wales. Reprinted from McKeown (1979) with permission from Princeton University Press.
HAS
DEATH
(IN A RAGE)

Been invited by the Commissioners of Common Sewers to take up his abode in Lambeth? or, from what other villainous cause proceeds the frightful Mortality by which we are surrounded?

In this Pest-House of the Metropolis, and disgrace to the Nation, the main thoroughfares are still without Common Sewers, although the Inhabitants have paid exorbitant Rates from time immemorial!!!

"O Heaven! that such companions them'dst unfold,
"And put in every honest hand, a whip,
"To lash the rascals naked through the world."

Unless something be speedily done to allay the growing discontent of the people, retributive justice in her salutary vengeance will commence her operations with the Lamp-Iron and the Halter.

SALUS POPULI.

Lambeth, August, 1832.

J. W. PEEL, Printer, 9, New Cut, Lambeth.

Figure 3.3 An 1832 broadside on sanitary conditions. (By courtesy of the Wellcome Trustees.)
Evidence base for PHC (2)

- Newell – “Health by People” (1975) described:
  - several community-based projects and the role of community level workers
  - large-scale programmes and country experiences of CPHC, especially China

Influenced thinking and planning for Alma Ata Conference (1978)
Primary Health Care is more than health services

The concept of PHC had strong sociopolitical implications. It explicitly outlined a strategy which would respond more equitably, appropriately and effectively to basic health care needs and ALSO address the underlying social, economic and political causes (determinants) of poor health.
‘It can be seen that the proper application of primary health care with have far-reaching consequences, not only throughout the health sector but also for other social and economic sectors at community level. Moreover, it will greatly influence community organisation in general. Resistance to such change is only to be expected’

Alma Ata Declaration, 1978
‘Comprehensive’ PHC

Primary Health Care:
‘Addresses the main health problems in the community, providing promotive, preventative, curative, and rehabilitative services accordingly’.

Alma Ata Declaration, 1978
<table>
<thead>
<tr>
<th>Primarily Individually Focussed</th>
<th>Primarily Population Focussed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitative approach</td>
<td>Preventive approach</td>
</tr>
<tr>
<td>Curative approach</td>
<td>Promotive approach</td>
</tr>
</tbody>
</table>
Promotive approach

Addresses basic social, economic and political causes of ill-health through advocacy and lobbying government and policymakers, for example, to ban smoking in public places, as well as intersectoral interventions directed at households or communities to improve water supply, sanitation, housing etc.
# STRATEGIES FOR HEALTH DEVELOPMENT

**Comprehensive Primary Health Care for some common diseases: a framework for priority interventions**

<table>
<thead>
<tr>
<th>DISEASE/HEALTH PROBLEM</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Rehabilitative</strong></td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Nutrition rehabilitation</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Nutrition rehabilitation</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Nutrition rehabilitation</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>Weight loss Graded exercise Stress control</td>
</tr>
</tbody>
</table>
A Split in the PHC Movement

In 1980s, a focus on cost-effective technologies and a neglect of social and environmental determinants and processes led to substitution of “selective” for “comprehensive” primary health care (PHC) – e.g. UNICEF “Child Survival and Development Revolution”
Selective Primary Health Care

“Child Survival and Development Revolution”
(Dominant approach 1980s to early 1990s)

Growth Monitoring
Oral Rehydration Therapy
Breast Feeding
Immunisation

Family Planning
Food Supplements
Female Education
**EXAMPLE: Comprehensive management of diarrhoea**

<table>
<thead>
<tr>
<th>REHABILITATIVE</th>
<th>CURATIVE</th>
<th>PREVENTIVE</th>
<th>PROMOTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRITION REHABILITATION</td>
<td>O.R.T.</td>
<td>EDUCATION FOR PERSONAL &amp; FOOD HYGIENE</td>
<td>WATER</td>
</tr>
<tr>
<td></td>
<td>NUTRITION SUPPORT</td>
<td></td>
<td>SANITATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HOUSEHOLD FOOD SECURITY</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>
The Demise of PHC

• Rise of PHC coincided with global debt crisis and conservative macroeconomic policies

• Imposition of Structural Adjustment policies in 80s and 90s undermined many countries’ capacity to support health systems development as fiscal stringency, user charges etc were introduced

• In late 1980s ‘health sector reform’, based on market principles, was promoted
Selective PHC has continuities with aspects of Health Sector ‘Reform’ as promoted in the 1990s
Health sector ‘reform’: Quest for efficiency

Cost-effectiveness analysis has focused only on certain easily measurable interventions and proposed limited ‘packages’ of mainly personal preventive and personal curative care - reminiscent of selective PHC.
CEA does not evaluate the effectiveness of ‘broader’ interventions that may result in health improvement through numerous direct and indirect mechanisms

“[C]ost-effectiveness analyses have shown improved water supply and sanitation to be costly ways of improving people’s health. …. encouraging people to wash their hands and making soap available have reduced the incidence of diarrhoeal disease by 32% to 43%... (Commission on Macroeconomics and Health, 2001/02)
Health sector ‘reform’

Quest for efficiency cont.-

The move from equity and comprehensiveness to technical efficiency and selectiveness leads to:

- A return to vertical programmes;
- Fragmentation of health services
- **Neglect of SDH**, erosion of intersectoral work and community health infrastructures
Access to water and hygienic sanitation

• Only 44 percent of rural SSA ie 60 percent of SSA population, has access to adequate water supplies and good sanitation in 2004

• Over the period 1990 – 2004, the number of people without access to drinking water increased by 23% and those without sanitation increased by over 30%
The changing donor funding architecture and the emergence of Global Health ‘Partnerships’ have reinforced ‘selective’, technocratic and vertical approaches and fragmented health systems
Categories and Purposes of GHIs

1. Product (drug or vaccine) development (33)
2. Increase access to health products (26)
3. Health service strengthening (9)
4. Public education & advocacy (8)

5. Global Coordinating mechanisms including funding vehicles (11)

Eg The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), Global Alliance for Vaccines and Immunization (GAVI Alliance), Roll Back Malaria Global Partnership (RBM), Stop TB Partnership (Stop TB)

Brugha 2007
Total annual resources available for AIDS 1986–2005

Notes:  
[1] 1986-2000 figures are for international funds only  
[2] Domestic funds are included from 2001 onwards

AIDS and Aid may both disrupt health systems...

In 2000, Tanzania was preparing 2,400 quarterly reports on separate aid-funded projects and hosted 1,000 donor visit meetings a year.

Labonte, 2005, presentation to Nuffield Trust
Supplies Logistics System in Kenya (as of January 2007)

**Commodity Type**
- Contraceptives and RH equipment
- Condoms for STI/HIV/AIDS prevention
- STI Drugs
- Essential Drugs
- Vaccines and Vitamin A
- TB/Leprosy
- Blood Safety Reagents (inc. HIV tests)
- Malaria
- Anti-Retro Virals (ARVs)
- MOH Equipment
- Laboratory supplies

**Organization Key**
- Government
- World Bank Loan
- Bilateral Donor
- Multilateral Donor
- Private/NGO

**Source of funds for commodities**
- US AID
- KfW
- DFID
- WHO
- UNFPA
- UNICEF
- Government of Kenya
- Japanese Private Company
- PSCMC (Crown Agents, GTZ, JSI and KEMSA)
- MSF

**Procurement Agent/Body**
- USAID
- KfW
- DFID
- WHO
- UNFPA
- UNICEF
- GTZ
- CDC
- CDC
- PSCMC (Crown Agents, GTZ, JSI and KEMSA)
- MSF

**Point of first warehousing**
- KEMSA Central Warehouse
- KEPI Cold Store
- NPHLS store

**Organization responsible for delivery to district levels**
- NLTP (TB/Leprosy drugs)
- KEMSA and KEMSA Regional Depots (Logistics Management Unit and customer service)
- Private Drug Source
- KEPI (vaccines and vitamin A)
- Provincial and District Hospital Laboratory Staff

**Mainly District level staff: DPHO, DPHN, DTLP, DASCO, DPHO, etc or staff from the Health Centres, Dispensaries come up and collect from the District level**

**Organization responsible for delivery to sub-district levels**

**Built and produced by Steve Kinzett, RHSC/PATH - please communicate any inaccuracies to skinzett@path.org or telephone +32 (0) 2 210 0221**
Challenges: Sustainability eg Ethiopia

HIV/AIDS especially ART is donor dependent—HIV Spending (in Birr) by Source of Funds: Donor Vs Government (source HAPCO documents till 2005)

Banteyerga, 2007
In summary: health status is stagnant or improving very gradually and public health systems in Africa are weak, poorly staffed and fragmented

... reversing previous gains in PHC implementation
Stagnation in coverage of key interventions

DTP3 Coverage

Diarrhoea (ORT with cont'd feeding)

Vitamin A Coverage, 2 doses (Africa)

Pneumonia Care Seeking Behaviour
Use of basic maternal and child health services by lowest and highest economic quintiles, 50+ countries.

Reprinted, with permission of the publisher, from Gwatkin, Wagstaff & Yazbeck (2005).
US$ 7.8 billion committed to countries
Source: GAVI Alliance data as at 31 May 2012

- Health system strengthening (HSS): US$ 677.4 million (8.7%)
- New and underused vaccine support (NVS): US$ 6,502.6 million (83.8%)
- Vaccine introduction grant: US$ 46.6 million (0.6%)
- Operational support: US$ 37.9 million (0.5%)
- Civil society organisations (CSOs): US$ 23.1 million (0.3%)
- Immunisation services support (ISS): US$ 358 million (4.6%)
- Injection safety support (INS): US$ 113.5 million (1.5%)
Future deaths averted through GAVI support (2000-2011)

- Polio*: 40,000
- Pneumococcal: 38,000
- Rotavirus: 2,000
- Pertussis: 433,000
- Hib: 697,000
- Measles: 860,000
- Yellow fever: 140,000
- Hepatitis B: 3,696,000

Over 5.5 million lives saved

$1,418 per life saved
Strategic goal 2B:
DTP3 coverage

Coverage percentage (%)

Year

2010 2011 2012 2013 2014 2015
Baseline

76% 74% 78% 79% 80% 81% 82%

Baseline Year

60 65 70 75 80 85 90
Worrying Trends:
“Health systems that focus disproportionately on narrow specialized curative care…”

“Health systems where a command and control to disease control focused on short-term results fragments service delivery…”

“Health systems where laissez-faire approach has allowed unregulated commercialization of health to flourish…”
Key actions to revitalise CPHC
Priority Actions Needed (1)

• Develop comprehensive approaches that address social determinants of (ill) health through healthy public policies and intersectoral action
Obesity management

- Promote weight loss
- Long-term weight maintenance
- Long-term prevention of weight gain
- Encourage active lifestyle
- Improve quality of life
Role of family in prevention and management of childhood obesity

- Encourage children to play
  - Limit time spent watching TV
- Avoid using food as a reward
Interventions Required at the Policy Level

- Review local government policies and regulations wrt to vending eg in and around schools and advertising, especially to kids
- Invest in school and community infrastructure for sport and recreation and improved personal safety (eg more street lights, bicycling lanes, policing)
- Advocate for pricing incentives to healthy foods and taxes on unhealthy foods
- Review trade policy, especially wrt food trade
- EDUCATE AND MOBILISE COMMUNITIES AND CIVIL SOCIETY
“The health sector is a defender of health, advocate of health equity, and negotiator for broader societal objectives. It is important therefore that ministers of health, supported by the ministry, are strongly equipped to play such a stewardship role within government” (p 111)
School attendance has increased since 1990, and illiteracy rates have decreased from 33.7% in 1970 to 10.0% in 2008.

Between 1991 and 2008, Brazil’s gross domestic product doubled and its Gini coefficient, although among the highest in the world, decreased by 15% from 0.637 to 0.547. The poverty index decreased from 68% in 1970 to 31% in 2008.

This improvement can be attributed to a combination of social policies, including the social security system, the Bolsa Família conditional cash transfer programme (which, in 2008, distributed R$13 billion [about US$7.2 billion] among 10.5 million families), and increases in the legal minimum wage. Living conditions have also changed substantially.

In 1970, only 33% of households had indoor water, 17% had access to sewerage, and less than half had electricity. By 2007, 93% of households had indoor water, 60% had access to sewerage, and most had access to electricity.
Time trends in the prevalence of stunting according to family income in four Brazilian surveys, 1974/5 to 2006/7. Source: Monteiro et al, Bull WHO (in press)
Priority Actions Needed (2)

- Advocate for improved access and coverage, especially at primary and community levels and strengthen community participation to address environmental and social determinants
How many child deaths could be prevented per year with proven efficacious interventions?

- 63% of child deaths
- More than 6 million deaths
Why should interventions be delivered in community settings?

- Many deaths occur outside health facilities
- Currently the coverage of many effective interventions is low — well under 50% in many cases — and the quality of care is deficient in many communities
- Poor families are less likely to access government health facilities than wealthier families
Task-shifting as an alternative approach

- Task shifting is the name now given to a process of delegation whereby tasks are moved, where appropriate, to less specialized health workers.
Evidence for impact and cost-effectiveness of community health workers

- A trial in Tigray, Ethiopia, of training local coordinators to teach mothers to give prompt home antimalarials showed a 40% reduction in under-5 mortality.

- A meta-analysis of community-based trials of pneumonia case management on mortality suggested an overall reduction of 24% in neonates, infants, and preschool children.

- At present, 29 countries in Africa allow CHWs to administer antibiotics for pneumonia.
RWANDA

Total health personnel in publicly funded facilities has almost doubled in 3 years ...

![Graph showing total staff in 2005 (6961) and 2008 (13133)]
Nearly 60% of the existing health personnel are either nurses or paramedical workers while doctors contributed to less than 7%
RWANDA
Increase in the coverage of family planning services that need to be consolidated

Proportion (%) of married women who use modern contraceptive methods

- Urban
  - DHS 2000
  - DHS 2005
  - IDHS 2007

- Rural
  - DHS 2005
  - IDHS 2007
RWANDA
Massive distribution of ITNs in 2006 has increased the coverage of preventive intervention against malaria...

Proportion of children under five who have slept under a bed net by income quintile (2000-2007)

Infant and Under-five mortality on the decrease over the last years...

Trends in infant and under five mortality according to different surveys (1975-2007)

Factors influencing success of CHW programmes

- Selection
- Training
- Health system factors – esp support & supervision
- Community factors
- Political, macroeconomic and international factors
- Financial and non-financial incentives

Lehmann and Sanders, WHO, 2007,
http://www.who.int/hrh/documents/community_health_workers.pdf
“Liberator or lackey” (David Werner, 1981)

- The early literature emphasises the role of the CHWs as not only (and possibly not even primarily) a health care provider, but also as an advocate for the community and an agent of social change:
  - functioning as a community mouthpiece to fight against inequities and advocate community rights and needs to government structures.

- This view is also reflected in the Alma Ata Declaration which identified CHWs as one of the cornerstones of comprehensive primary health care.
Factors influencing success of CHW programmes

**Political and Community factors**

Large trials in Nepal have demonstrated a **30% reduction in newborn mortality** simply by facilitation of women’s groups involving pregnant women.

‘Women’s groups in Malawi and Nepal are increasing the important capacities within communities, such as the **ability to identify maternal and neonatal health problems and their root causes**; the **ability to mobilise resources necessary** for improving the health of mothers and newborn infants; the **internal and external social networks they can draw on when needed**; and the **development of strong local leaders** who have the motivation and drive to improve maternal and neonatal health in the community.’

‘A large proportion of this effect is thought to be due to community mobilisation bringing about changes in socioenvironmental risk factors by developing the capacities of communities, the choices they make, and their ultimate empowerment.’

Democratic Republic of Congo

• The main difference in equity of access is the rural-urban division of the population.
• The war has affected rural areas more than urban areas.
• Gender inequities have been sidelined rather than dealt with.

Lynn Lusi
founder of Heal Africa
1950-2012
Democratic Republic of Congo

• Barriers to equitable access are related to:
  – Policy... support for specific interventions instead of a comprehensive approach (e.g. neglect of importance of Traditional Birth Attendants).
  – Economics... exorbitant cost of health care and transport to access health facilities.
  – Social situation... traditional beliefs about women and maternity.
Democratic Republic of Congo

• Solidarity Safe Motherhood Groups (SMGs) were created and have improved access:
  – Have enabled women from all social classes to access good quality maternity services, pay for them and use ante-natal care much earlier than before.
  – Encourage equity in access to healthcare as there is no discrimination in membership.
  – Have mobilized involvement and support of respected members of the community (e.g. tribal elders and religious leaders).

• Community health insurance program was created under this initiative. Has already led to reduction in maternal deaths.
Priority Actions Needed (3)

Rebuild and Strengthen Civil Society to Create a Global Social Movement for Health
Organisations involved in organising the People’s health Assembly, 2000:

- Asian Community Health Action Network
- Consumers International
- Dag Hammarskjöld Foundation
- Gonoshasthaya Kendra
- Health Action International – Asia Pacific
- International People’s Health Council
- Third World Network
- Women’s Global Network for Reproductive Rights

Website: www.phmovement.org
• In December 2000 about 1500 persons representing groups and networks from over 90 countries participated in the first People's Health Assembly in Savar, Bangladesh.
PEOPLE’S CHARTER FOR HEALTH

A tool for advocacy:

Health as a Human Right

Tackling the broader determinants of health
Economic Challenges
Social and political challenges
Environmental challenges
War, violence, conflict and natural disasters

A people-centred health sector
PEOPLES CHARTER FOR HEALTH

A call for action

- Action at all levels
  Individual, local and global

- And in all sectors.
The Peoples Health Movement (PHM) is a large global civil society network of health activists supportive of the WHO policy of Health for All and organised to combat the economic and political causes of deepening inequalities in health worldwide and revitalise the implementation of WHO’s strategy of Primary Health Care.

www.phmovement.org
Peoples Health Movement

• Organised in geographical and “issues” circles in c 70 countries

• Strongest regions: South and East Asia, Central America
Growing regions: South America, Africa, Europe
Australia
Embryonic regions: Middle East, Central Asia

www.phmovement.org
India’s ‘Right to Health care campaign’

- Jan Swasthya Abhiyan (JSA) or People’s Health Movement launched a ‘Right to Health care campaign’ and NHRC conducted a series of Public hearings on Health rights.
- **Cases of ‘denial of health care’** documented in various regions based on a common proforma.
- **Participatory surveys** of Public health facilities across some states, using a common checklist.
- This information fed into ‘**People’s Health Tribunals**’, involving hundreds of people, PHM activists, health officials and expert panelists.
- Cases and survey findings **collated at state level** for a National inquiry.
Pictorial tool for community data collection
Public hearing at Health centre by People’s organisation involved in monitoring
National Public Hearing on Right to Health Care

- Attended by Central health minister, Chairperson, member and officials of NHRC, apex health officials of 22 states and over 100 JSA delegates
- Led to declaration of a comprehensive National Action Plan on the Right to Health by NHRC and catalysed Rural Health Mission
People's Health Assembly 2
Committed to Health for All
Gonoshasthaya Kendra - CK
Savar, Bangladesh
PHM: The International People’s Health University
IPHU

Capacity Building program
Education and information Short Course for health activists
Over 750 alumni worldwide

- Roving ‘faculty’ - learning, sharing and planning opportunities for people's health activists in developing countries.
- Networking among health activists and young researchers all over the globe
- Globalisation, SDH, CPHC, trade and health, etc

www.iphu.org
PHM: The International People’s Health University

- Cuenca, 2005
- Bhopal, 2007
- Vancouver, 2007
- Atlanta, 2007
- Savar, 2007
- Jaipur, 2008
- Cairo, 2008
- Porto Alegre, September 2008
- Thessaloniki, May 2009
- Bangalore, September 2009
- Havana, November 2009
- Kisumu, May 2010
- Guatemala 2010
- Sri Lanka, September 2010
- Dakar, January 2011
- Cape Town, July 2012
PHM: The Global Health Watch

Research, Analysis and Watching

GHW is a platform of resistance to the neo-liberal dominance of health.

www.ghwatch.org
PHA3 – South Africa

- July 2012 – UWC - Hosted by PHM SA

- Approximately 900 people
- Majority from South Africa and Africa (approx 65%)

- Pre-Assembly activities
  Using existing civil society platforms for mobilisation
  National / Regional consultations

The People’s Health Movement
PHA3 – South Africa

Call to Action

• Continue and expand current activities
• Focus a project on building country circles
• Add two new areas:
  ‘extractive industries’
  ‘nutrition and food sovereignty’
• Renew governance structures – change age profile without losing experience
Conclusions

Main actions required from Public Health Community:

- Challenge ill-considered health sector reforms through research and advocacy
- Develop well-managed comprehensive programmes
- Develop capacity and improve quality through health systems and equity-oriented research, practice-based and problem-oriented training.
- Rapidly (re)train CHWs and equip them with community development skills
- Involve other sectors and communities through focussed intersectoral efforts
- Challenge unfair global macroeconomic regime through social mobilisation
- Strengthen progressive civil society
Conclusions (2)

- Act to address LMI Cs’ **HRH crisis**
- **advocate for increased investment in enhancing capacity of and reorientating southern institutions** (incl. equitable collaboration with northern institutions)
In conclusion

Health and health systems in SSA are in crisis. HIV/AIDS accentuates this.

Research in Public Health can improve effectiveness and equity – if focussed on key social determinants and health systems challenges – and linked to advocacy.

Education should be problem-oriented and practice-based - especially in low-resource environments.

Access to continuing and postgraduate education in Public Health must be greatly increased through resource-based and distance education with flexible arrangements for on-the-job learning.

Capacity of Southern institutions must be enhanced (incl. equitable collaboration/partnerships with Northern institutions).

Advances in health require effective technologies, well-managed services, and community ‘demand’ and social mobilisation.
Participatory Health Systems
Research to improve quality of care and catalyse intersectoral action
The 10/90 Gap

• Only 10% of the global investment in health research is directed at 90% of the global burden of disease

(Global Forum for Health Research)

• But how are these 10% allocated?
  - 514 NIH grants for child survival in 2000-2003
  - <3% addressed how to deliver interventions

(Leroy J et al, AJPH 2007)
AN EXAMPLE OF IMPLEMENTATION RESEARCH: MT. FRERE HEALTH DISTRICT

- Eastern Cape Province, South Africa
- Former apartheid-era homeland
- Estimated Population: 280,000
- Infant Mortality Rate: 99/1000
- Under 5 Mortality Rate: 108/1000
**CASE FATALITY IN RURAL HOSPITALS**

**PRE-INTERVENTION CFRs**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>CFR</th>
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<tbody>
<tr>
<td>Mary Teresa</td>
<td>46%</td>
</tr>
<tr>
<td>Holy Cross</td>
<td>45%</td>
</tr>
<tr>
<td>St. Elizabeth's</td>
<td>36%</td>
</tr>
<tr>
<td>Mt. Ayliff</td>
<td>34%</td>
</tr>
<tr>
<td>St. Patrick's</td>
<td>30%</td>
</tr>
<tr>
<td>Bambisana</td>
<td>28%</td>
</tr>
<tr>
<td>Sipetu</td>
<td>25%</td>
</tr>
<tr>
<td>St Margaret’s</td>
<td>24%</td>
</tr>
<tr>
<td>Taylor Bequest</td>
<td>21%</td>
</tr>
<tr>
<td>Greenville</td>
<td>15%</td>
</tr>
<tr>
<td>Rietvlei</td>
<td>10%</td>
</tr>
</tbody>
</table>
Implementation Cycle

- Policy
- Advocacy
- Evaluation
- Teambuilding
- Situational Assessment
- Implementation and Management
- Planning
- Analysis
- Capacity Development
<table>
<thead>
<tr>
<th>Step 1</th>
<th>Treat/prevent hypoglycaemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Treat/prevent hypothermia</td>
</tr>
<tr>
<td>Step 3</td>
<td>Treat/prevent dehydration</td>
</tr>
<tr>
<td>Step 4</td>
<td>Correct electrolyte imbalance</td>
</tr>
<tr>
<td>Step 5</td>
<td>Treat/prevent infection</td>
</tr>
<tr>
<td>Step 6</td>
<td>Correct micronutrient deficiencies</td>
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<tr>
<td>Step 7</td>
<td>Cautious feeding</td>
</tr>
<tr>
<td>Step 8</td>
<td>Catch-up growth</td>
</tr>
<tr>
<td>Step 9</td>
<td>Stimulation, play and loving care</td>
</tr>
<tr>
<td>Step 10</td>
<td>Preparations for discharge</td>
</tr>
</tbody>
</table>
## SITUATIONAL ANALYSIS

<table>
<thead>
<tr>
<th>Recommended practice</th>
<th>Practice prior to intervention</th>
<th>Perceived barriers to quality care</th>
<th>Programme intervention</th>
<th>Changes reported at follow up visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed every 2 hours during the day and night. Start straight away.</td>
<td>Children were left waiting in the queue in the outpatient department and during admission procedures. In the wards, they were not fed for at least 11 hours at night. Hypoglycaemia not diagnosed</td>
<td>Lack of knowledge about risks of hypoglycaemia. Lack of knowledge about how to prevent it. Shortage of staff especially during the night. No supplies for testing for hypoglycaemia</td>
<td>Training to explain why malnourished children are at increased risk. Training on how to prevent and treat hypoglycaemia. Motivated for more night staff in paediatric wards. Motivated the Department of Health to provide resources (10% glucose and Dextrostix.)</td>
<td>Malnourished children fed straight away and 3 hourly during day and night. The number of night staff was increased. Dextrostix and 10% glucose obtained</td>
</tr>
</tbody>
</table>
Evaluation of Implementation

- **Major improvements:**
  - Separate HEATED wards
  - 3 hourly feedings with appropriate special formulas and modified hospital meals
  - Increased administration of vitamins, micronutrients and broad spectrum antibiotics
  - Improved management of diarrhea & dehydration with decreased use of IV hydration
  - Health education & empowerment of mothers

- **Problems still existed:**
  - Intermittent supply problems for vitamins and micronutrients
  - Power cuts – no heat
  - Poor discharge follow-up
  - Staff shortage, of both doctors and nurses, and resultant low morale and QOC

Ashworth et al, Lancet 2004; 363:1110-1115
Ongoing research indicates leadership and management at all levels are the key reasons for the differences between well and poorly performing hospitals.
Changes in the share of food groups in urban household food acquisitions. Brazil: 1996-2009


Hiper-palatability of UPP is “reinforced” by marketing messages!

The biscuit full of filling.
It is difficult to resist to Bono.
Choose one taste and surrender yourself!

O biscoito cheio de recheio.
É difícil resistir a um Bono. Escolha o sabor e entregue-se!
Sorvete de baunilha, calda com pedaços de morango e amendoim crocante. Simplesmente irresistível.
The marketing of UPP promotes compulsive overeating

It is one after the other!

The name says all.
Non-stop is simply irresistible.
The marketing of UPF targets low income families in emerging economies by using door-to-door vendors recruited in the communities and offering products in smaller packages ("more accessible") and "fortified" with micronutrients ("popularly positioned products")
Financial Times, April 8, 2011
‘Brazil’s unwanted growth’
Nestle to Sail Amazon Rivers to Reach Emerging-Market Consumers
Selling of ‘popular’ UPF in urban buses in Rio de Janeiro
<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
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<tbody>
<tr>
<td>BISCOITO BONIO</td>
<td>R$ 2,00</td>
</tr>
<tr>
<td>JALAP</td>
<td>R$ 1,00</td>
</tr>
<tr>
<td>NESTLE SIMBA</td>
<td>R$ 1,20</td>
</tr>
<tr>
<td>PASSATEMPO</td>
<td>R$ 3,50</td>
</tr>
<tr>
<td>MINI WAFER</td>
<td>R$ 1,00</td>
</tr>
<tr>
<td>CHOKKITS</td>
<td>R$ 1,10</td>
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<tr>
<td>NESCAU BALL</td>
<td>R$ 1,20</td>
</tr>
<tr>
<td>CHARGE</td>
<td>R$ 1,00</td>
</tr>
<tr>
<td>PRESTO</td>
<td>R$ 1,10</td>
</tr>
<tr>
<td>CRUNCH</td>
<td>R$ 1,20</td>
</tr>
<tr>
<td>CLASSIC DUO</td>
<td>R$ 1,50</td>
</tr>
<tr>
<td>SULFLAK</td>
<td>R$ 1,20</td>
</tr>
</tbody>
</table>
• “..drawing the poorest countries into the global economy is the surest way to address their fundamental aspirations”

(G8 Communiqué, Genoa, July 22, 2001)

• BUT... many developing countries have destroyed domestic economic sectors, such as textiles and clothing in Zambia (Jeter 2002) and poultry in Ghana (Atarah 2005), by lowering trade barriers and accepting the resulting social dislocations as the price of global integration
• In addition industrialized countries apply much higher tariffs (tariff peaks)..... For example, the EU tariff on raw cocoa exported from Ghana is just 0.5 percent, but the tariff rises to 30.6 percent on chocolate imported from the same country (Elliott 2004b). Although 90% of cocoa beans are grown in developing countries, they account for just four percent of the value of global chocolate production (IMF, 2002).
Effects of globalisation on food security

• Trade liberalisation has increased and decreased food availability: in China per capita food supplies increased while in Malawi they decreased (FAO 2006)
• Despite trade reform food prices have increased, as a result of food commodity speculation, climate change and diversion of food for biofuels
• Liberalisation has led to increased imports of high energy foods eg oil and processed foods (soft drinks sales increased in US by 1.4% pa and China 8.8%)
Trade agreements and agricultural trade

- Agreement on Agriculture 1994 –
- Agreement on Application of Sanitary and Phytosanitary Measures –
- Technical Barriers to Trade Agreement –
- TRIPs –
World Agricultural Trade

• Increase from US $243bn in 1980-84 to US$ 467bn in 2000-01

• Food imports (1970-2001) - into developing countries increased by 115%
“… trade policy that actively encourages the unfettered production, trade, and consumption of foods high in fats and sugars to the detriment of fruit and vegetable production is contradictory to health policy …” (p 10)
..and growth of poverty

• According to the World Bank, in sub-Saharan Africa 313 million people, or almost half the population, live below a standardized poverty line of $1/day or less (Chen and Ravallion 2004).

• Sub-Saharan Africa is the only region of the world in which the number of people living in extreme poverty has increased – indeed, almost doubling between 1981 and 2001.
Why should a Japanese cow enjoy a higher income than an African citizen?

Japan annual dairy subsidy, per cow
EU annual dairy subsidy, per cow
Per capita annual income, sub-Saharan Africa
Per capita cost of package of essential health interventions
Per capita annual health expenditure, 63 low income countries
I'M HUNGRY!

STOP TALKING POLITICS!
The emergence of Selective PHC

Primary health care that tries to deal with such a wide range of needs is not practical. Most governments won't support it. It gives too much control to the people.

It simply costs too much.

International panel of experts on nutrition:

What we need is a more limited form of primary health care that appeals to national leaders, the medical establishment, and big business.

One with just a few simple, low-cost health measures... that target those at highest risk... and GOBI.
QUESTIONING THE SOLUTION

The Politics of Primary Health Care and Child Survival

with an in-depth critique of Oral Rehydration Therapy

David Werner and David Sanders
with Jason Werner, Steve Bath and Bill Rodriguez

http://www.healthwrights.org/books/QTSonline.htm
Primary Health Care includes addressing social determinants

Werner, Sanders et al ‘Questioning the Solution’, HealthWrights, 1997
Health sector ‘reform’: Components and strategies

I. Actions to improve the performance of the civil service;

II. decentralisation;

III. actions to improve the functioning of national ministries of health;

IV. universal delivery of a core set of essential services;

V. broadening health financing options;

VI. working with the private sector and

VII. adopting sector wide approaches to aid rational planning.

Cassells, 1996
Cost-effectiveness research inevitably reinforces selective PHC...

- “An important limitation on .... CE analysis .... is that .... interventions with important health consequences also affect income or welfare in other ways. Chemotherapy for T.B. has no value beyond the DALYs gained from cure ....”

- “.... improved water supply and sanitation create amenity and time-saving benefits .... (but) the cost per DALY gained may be too high to justify investment on health grounds alone, but consumer willingness to pay .... means that costs to the health system can be low”

World Bank, WDR 1993, pp 64-5
... and results in a “package” approach

Public Health package:

• Immunisations
• School-based health services
• Information and selected services for family planning and nutrition
• Programs to reduce tobacco and alcohol consumption
• Actions to improve the household environment
... and results in a “package” approach

Clinical package

• Pregnancy-related services
• Family planning services
• Tuberculosis control, mainly through drug therapy
• Control of STDs
• Care for the common serious illnesses of young children - IMCI
Why is PHC important today?

- Widening inequities in health post 1990s could be due in part to ‘unfinished health agenda’ of PHC implementation.
- Increasing recognition of importance of health to economic development, and PHC as most equitable means to achieving it.
- Commission on Social Determinants of Health increasing recognition of broader health system responsibilities.
- Global diffusion of rights-based approaches to health and development.
Basic logic: what good does it do to treat people's illnesses ........

...and then send them back to the conditions that made them sick?
• Global Right to Health Campaign developed. Now operates in about 20 countries
• International Peoples Health University (IPHU) established. 16 courses for health activists on political economy of health and Primary Health Care so far completed
• Global Health Watch 2 launched
• World Health Assembly 2009 successfully lobbied by PHM to strengthen resolutions on revitalisation of PHC and on Social Determinants of Health
Definitions

- **Food**: any substance intended to be, or reasonably expected to be, ingested by humans, which provides nutrients needed to maintain life.
Strategic goal 2C: Equity in immunisation coverage

Percentage of countries meeting the minimum equity benchmark (%)

Year
2010
2011
2012
2013
2014
2015
Baseline
51%
51%
62%

Graph showing the increase in the percentage of countries meeting the minimum equity benchmark from 2010 to 2015, with a target of 62% by 2015.
## Indicators of the overall diet by fifths of the UPP share. Canada 2001

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>GOAL</th>
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<tbody>
<tr>
<td>Protein</td>
<td>14.9</td>
<td>14.1</td>
<td>13.8</td>
<td>13.4</td>
<td>11.6*</td>
<td>10-15</td>
</tr>
<tr>
<td>(% of calories)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Fiber</td>
<td>11.2</td>
<td>10.1</td>
<td>9.7</td>
<td>9.1</td>
<td>8.0*</td>
<td>&gt; 12.5</td>
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<tr>
<td>(g/1,000 kcal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free sugars</td>
<td>9.2*</td>
<td>11.6</td>
<td>12.0</td>
<td>13.5</td>
<td>15.1*</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>(% of calories)</td>
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<tr>
<td>Sodium</td>
<td>1.1</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6*</td>
<td>&lt; 1</td>
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<tr>
<td>(mg/1,000 kcal)</td>
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<td></td>
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<tr>
<td>Energy density</td>
<td>1.8</td>
<td>2.0</td>
<td>2.1</td>
<td>2.1</td>
<td>2.3*</td>
<td>&lt; 1.25</td>
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<tr>
<td>(kcal/g)</td>
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<td></td>
<td></td>
<td></td>
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<td>(WCRF report)</td>
</tr>
</tbody>
</table>

Source: Moubarach et al 2012 (submitted). * p < .001 for linear trend