

*Global Health*  
*Demand for and Supply of Pharmacy*  
*Expertise*

*A Dialogue*

*Pharmacists & Pharmacy Leadership: Making a*  
*Difference in Global Health*

*Noreen Teoh*  
*November 12, 2004*

# *Transition from “International” to “Global” Public Health*

*WHO’s “Health for All by the Year 2000”*

*(Alma Ata Declaration, 1978)*

Emphasis on Primary Health Care

Primary Health Care was to include at least:

- Education concerning prevailing health problems and the methods of preventing and controlling them;
- Promotion of food supply and proper nutrition;
- An adequate supply of safe water and basic sanitation;
- Maternal and child health care, including family planning;
- Immunization against the major infectious diseases;
- Prevention and control of locally endemic diseases;
- Appropriate treatment of common diseases and injuries; and,
- Provision of essential drugs.

# *Transition from “International” to “Global” Public Health*

*UNICEF’s World Summit for Children (1990)*

*Goals for the Year 2000*

*Emphasis on “GOBI”*

- Growth monitoring
- Oral rehydration
- Breastfeeding
- Immunizations

# *Transition from “International” to “Global” Public Health*

*World Bank*

*World Development Report, 1993 on*

*“Investing in Health – World Development Indicators”*

*UNAIDS (Joint United Nations Program on AIDS) (1996)*

*UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO,  
World Bank*

# *Transition from “International” to “Global” Public Health*

## **WHO**

Macroeconomics & Health (2001)

The “3 x 5” Initiative (2003)

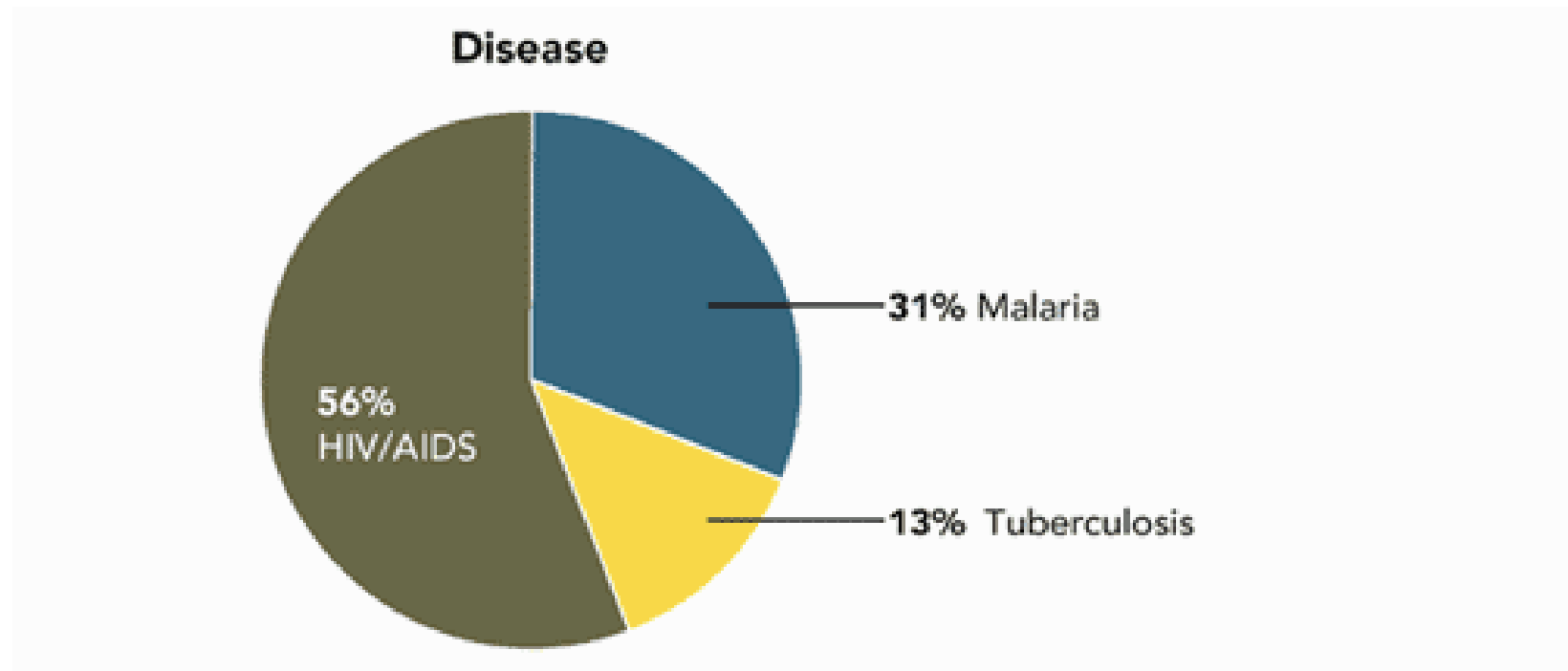
**The Global Fund for AIDS, TB & Malaria (2000)**

**US Government (2003)**

The President’s Emergency Plan for AIDS Relief (PEPFAR)

# *Transition from “International” to “Global” Public Health*

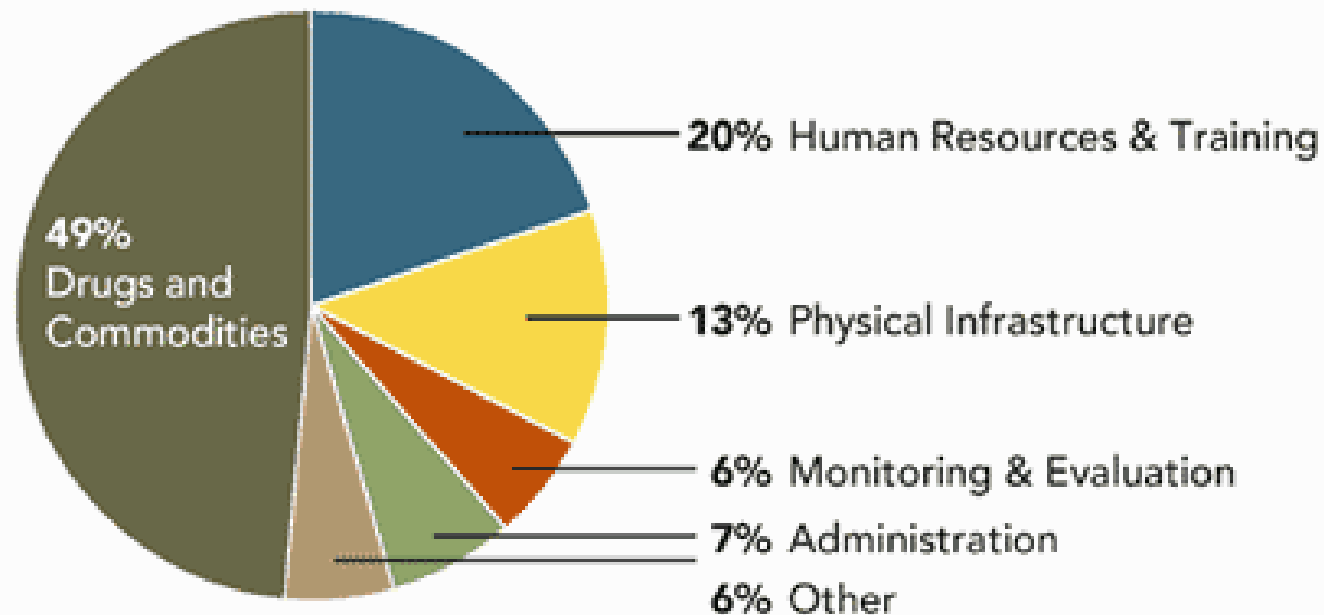
*Global Fund for AIDS, TB & Malaria – distribution of funding since 2001, after  
4 rounds*



# *Transition from “International” to “Global” Public Health*

*Global Fund for AIDS, TB & Malaria – distribution of funding since 2001, after  
4 rounds*

## **Expenditure target**



# *Transition from “International” to “Global” Public Health*

**New players, new funding**

**Bill & Melinda Gates Foundation (1994)**

**Clinton AIDS Foundation**

**Private-Public Partnerships**

# *Transition from “International” to “Global” Public Health*

## **New trends**

Examples of recent emphasis on treatment aspects of health care, involving vaccines and pharmaceuticals:

- Malaria Vaccine Initiative (MVI)
- Global Alliance for Vaccines & Immunizations (GAVI)
- International AIDS Vaccine Initiative (IAVI)
- Aeras Global TB Vaccine Initiative
- International Partnership for Microbicides (IPM)
- Drugs for Neglected Diseases Initiative (DNDi/MSF)
- One World Health
- BIO Ventures for Global Health
- Medicines for Malaria Venture (MMV)

# *Transition from “International” to “Global” Public Health*

- Pharmaceutical Industry participation
- Company sponsored HIV/AIDS programs

# Drug Management Cycle

Four basic functions:

- Selection
- Procurement
- Distribution
- Use

Management Sciences for Health (MSH), 1997. *Managing drug supply. The selection, procurement, distribution and use of pharmaceuticals*. Second edition

# *Supply of Human Resources for Health in Selected Countries*

*(Density per 100,000 population) (2004)*

*www.who.int/GlobalAtlas*

Country	Nurses	Physicians	Pharmacists
USA	773	549	69
UK	497	166	59
S. Korea	342	181	108
Romania	403	189	7
Brazil	52	206	38
S. Africa	388	69	24
Botswana	241	29	8
Burkina Faso	26	4	0.5

# *Supply of Human Resources for Health in Resource-poor countries*

*“Without substantial improvements in workforce, newly mobilized funds and commodities will not deliver on their promise”*

*- Narasimhan V. et al.*

*Lancet 2004. 363: 1469-72*

# *Supply of US Healthcare Professionals in Development work*

## **Survey of “US health professionals in international health work” (1984)**

Survey of 1, 257 potential employers of US health professionals overseas

1,400 physicians

1,500 nurses

900 administrators

Church-related agencies (2,200), PVOs (1, 700) and universities (1,000) were the largest employers

*(Baker, TD et al. United States health professionals in international health work. Am J Public Health. 1984 May; 74(5):438-41).*

# *US Participation in WHO Collaborating Centers*

<b>Type of Institution</b>	<b>Number of Collaborating Centers</b>
<b>CDC</b>	<b>38</b>
<b>Public Health Schools</b>	<b>15</b>
<b>Nursing Schools</b>	<b>13</b>
<b>Medical Schools</b>	<b>12</b>
<b>Medical Centers / Hospitals</b>	<b>9</b>
<b>NIH</b>	<b>7</b>
<b>FDA, other federal agencies</b>	<b>7</b>
<b>Schools of Veterinary Medicine</b>	<b>6</b>
<b>Dental Schools</b>	<b>2</b>
<b>Pharmacy Schools</b>	<b>1*</b>
<b>Miscellaneous institutions</b>	<b>14</b>
<b>TOTAL</b>	<b>124</b>

\* College of Pharmacy, University of Illinois at Chicago – WHO Collaborating Center for Traditional Medicine

# *Supply of US Pharmacy Expertise in Development Work*

## *WHO*

- *WHO Expert Committees*
- *WHO staff*

## *USAID*

- *MSH*
- *PACE Center*
- *USP*

## *PVOs*

# *Supply of US Pharmacy Expertise in Development Work*

*Survey of Global Health Council's Career Connection applicants (2002)*

*- Of 172 applicants, there was 1 applicant with a pharmacy degree*

*Education and training of medical, public health and pharmacy students*

*– exposure to international health*

*(Results from unpublished study, MSH)*

# *Supply of US Pharmacy Expertise in Development Work*

*“In many countries, pharmacists are underutilized and unrecognized providers of health services. Public health professionals, managers and policy makers have yet to incorporate this untapped resource. From a global development perspective, the leadership of the US pharmacy profession can help initiate the needed wider view.”*

*- Dialogue brochure*

# *Helping to Prepare Pharmacists for Tomorrow's World*

*Think globally, act locally*

*Some thoughts:*

- *Faculty immersion programs on global health priorities*
- *Provision of a global context in various pharmacy courses*
- *Pharmacy electives*
- *Joint courses with other disciplines*
- *Joint Pharm.D. – MPH degrees*
- *Linking North-South institutions*
- *Participate – virtually and actually!*