THE CHANGING PARADIGM OF BREAST CANCER CARE AFTER THE UNITED NATIONS SUMMIT

•Union for International Cancer Control

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•2nd International Congress of Breast Disease Centers

EC :Disclosures

- *Leadership Position (no honoraria)* SLACOM, ASCO, UICC
- *Consultant or Advisory Role* : Bayer; Schering Pharma
- *Honoraria :* Bayer; Bristol-Myers Squibb ; Fresenius
- *Research Funding: Paid to Institution*: Poniard Pharmaceuticals ; Daiichi Sankyo Pharma ; Breast Cancer Research Foundation (BCRF)
- **I have not relevant disclosures to make related with this presentation**

Outline

- Global Health
- Economical considerations
- Putting cancer in the global political agenda
- The future after the UN Summit
- Breast health in this new enviroment

GLOBAL HEALTH

Introduction to UICC

Founded in 1933 and based in Geneva, Switzerland, the Union for International Cancer Control (UICC) exists to unite the global health community in the fight against cancer. With over 470 members spanning 125 countries, these leading cancer orgnanisations, with UICC, are tackling the growing cancer crisis on a global scale.

The organisation aims to save millions of lives by focusing the world's attention on what needs to be done by taking the lead in:

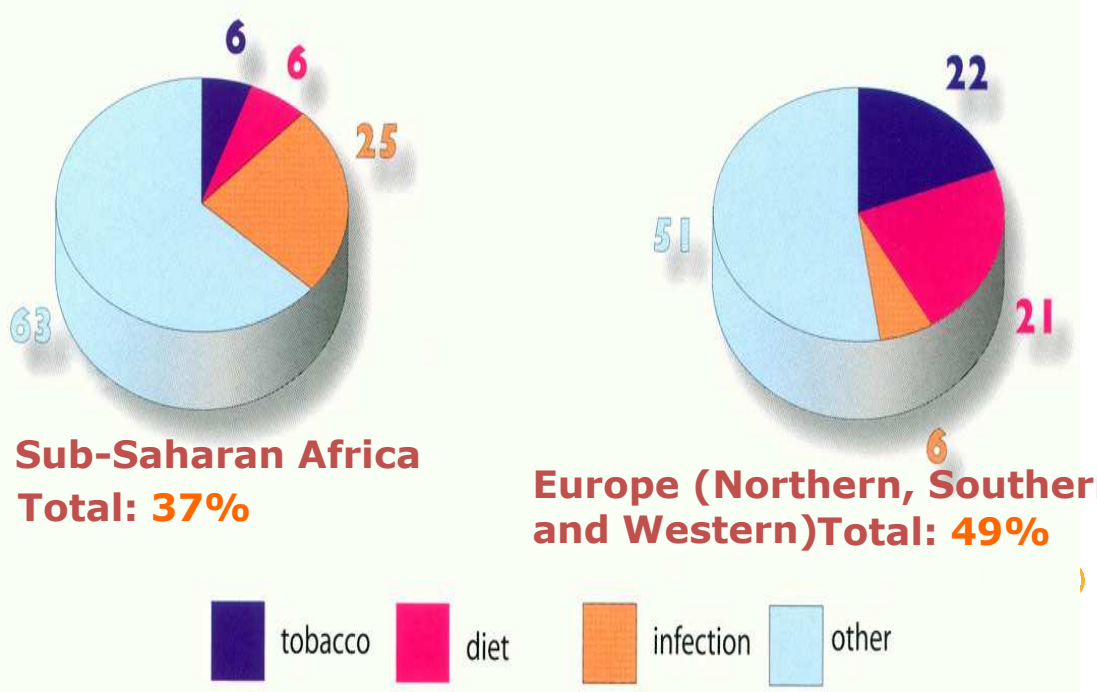
✓ **Uniting the cancer control community** Through global events such as World Cancer Day, World Cancer Leaders' Summit and the World Cancer Congress.

✓ **Putting cancer on the global health agenda -** campaigning and pressing governments to support the fight against cancer by implementing better health policies.

✓ **Coordinating high-impact global programmes -** when there is an identified need for an international approach to tackling issues, UICC takes the lead, working with partners across all continents.

Key Challenges

43% of cancer deaths are due to **tobacco,** diet and infection



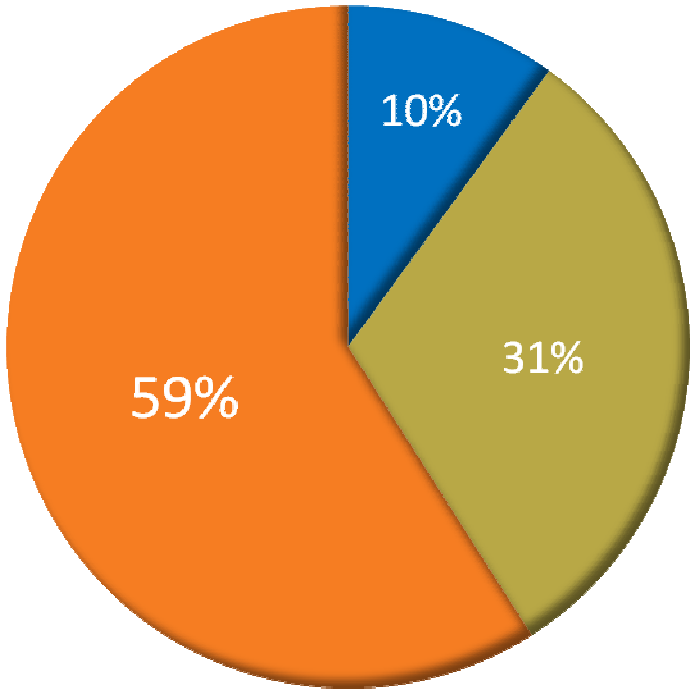
NCDs (defined by WHO)

Diabetes
Cardiovascular disease
Cancer
Chronic Respiratory Disease

Key Risk Factors

Tobacco Use
Unhealthy diet Breast cancer risk increased
Physical Inactivity Breast cancer risk increased
Harmful Use of Alcohol

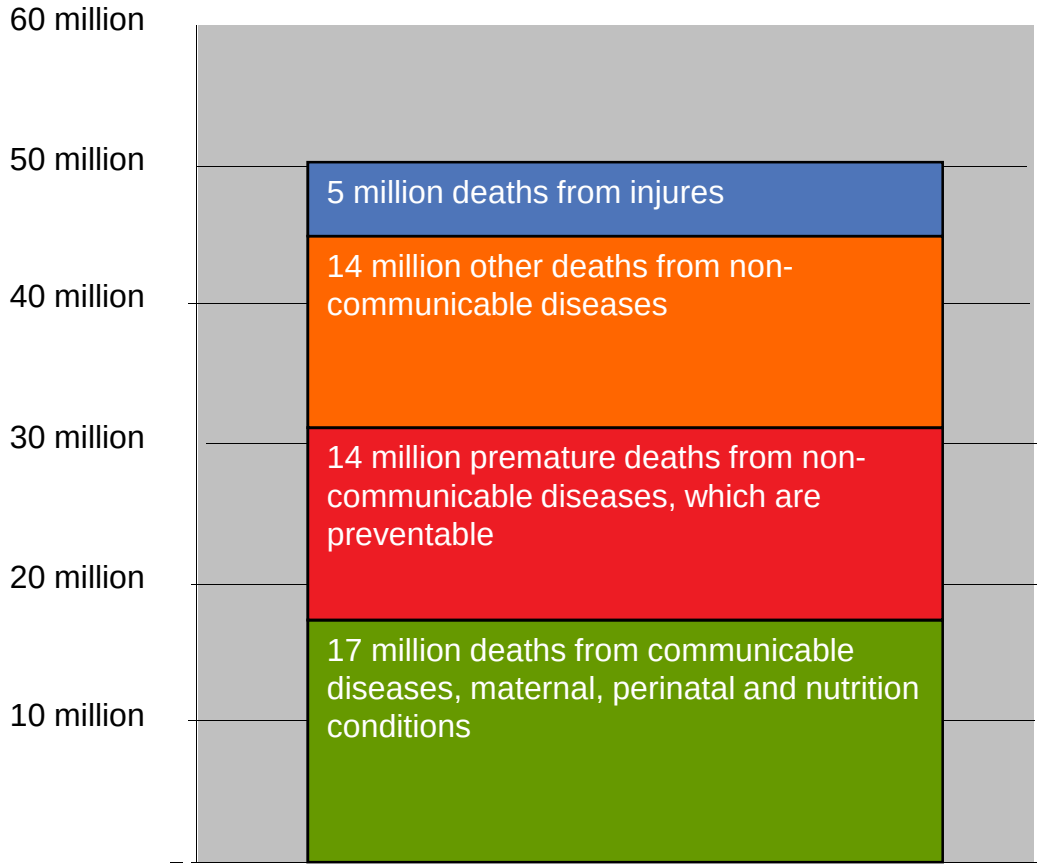
59% of global deaths are due to NCDs



Group III - Injuries
Group II – Deaths from noncommunicable diseases
Group I – Communicable diseases, maternal, perinatal and nutritional conditions

Source: Union for International Cancer Control
THE GLOBAL BURDEN OF DISEASE 2004 UPDATE

14 million preventable deaths each year



Estimated deaths in developing countries (2004)

35 million deaths each year

Current situation

Consider two girls, one born in sub-Saharan Africa and the other in the United States.

The African child is twenty-five times more likely to die in the first five years of life; if she lives to child-bearing age, she is a two hundred times more likely to die in labor.

Overall, she will die thirty years earlier than the American child

Ref. United Nations Children's Fund [UNICEF],

The Gap

The global health gap between rich and poor is vast: “in one year alone, fourteen million of the poorest people in the world died [prematurely], while only four million would have died if this population had the same death rate as the global rich.”

Ref. Davidson R.; Gwatkin & Michel Guillot, World Bank. The Burden of Disease Among the Global Poor.19–20 (2000)).

Consecuences

The world's distribution of the "good" of human health remains fundamentally unfair, causing enormous physical and mental suffering by those who experience the compounding disadvantages of poverty and ill health.

Ref. L. Gostin, Keynote adress. Hanoi,Viet Nam, October 28–29, 2009

Rights

Article 1 of the Universal Declaration of Human Rights “all human beings are born free and equal in dignity and rights” ...

Article 25 “Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care…”.

Global health objectives

To promote equal access to proper care across borders

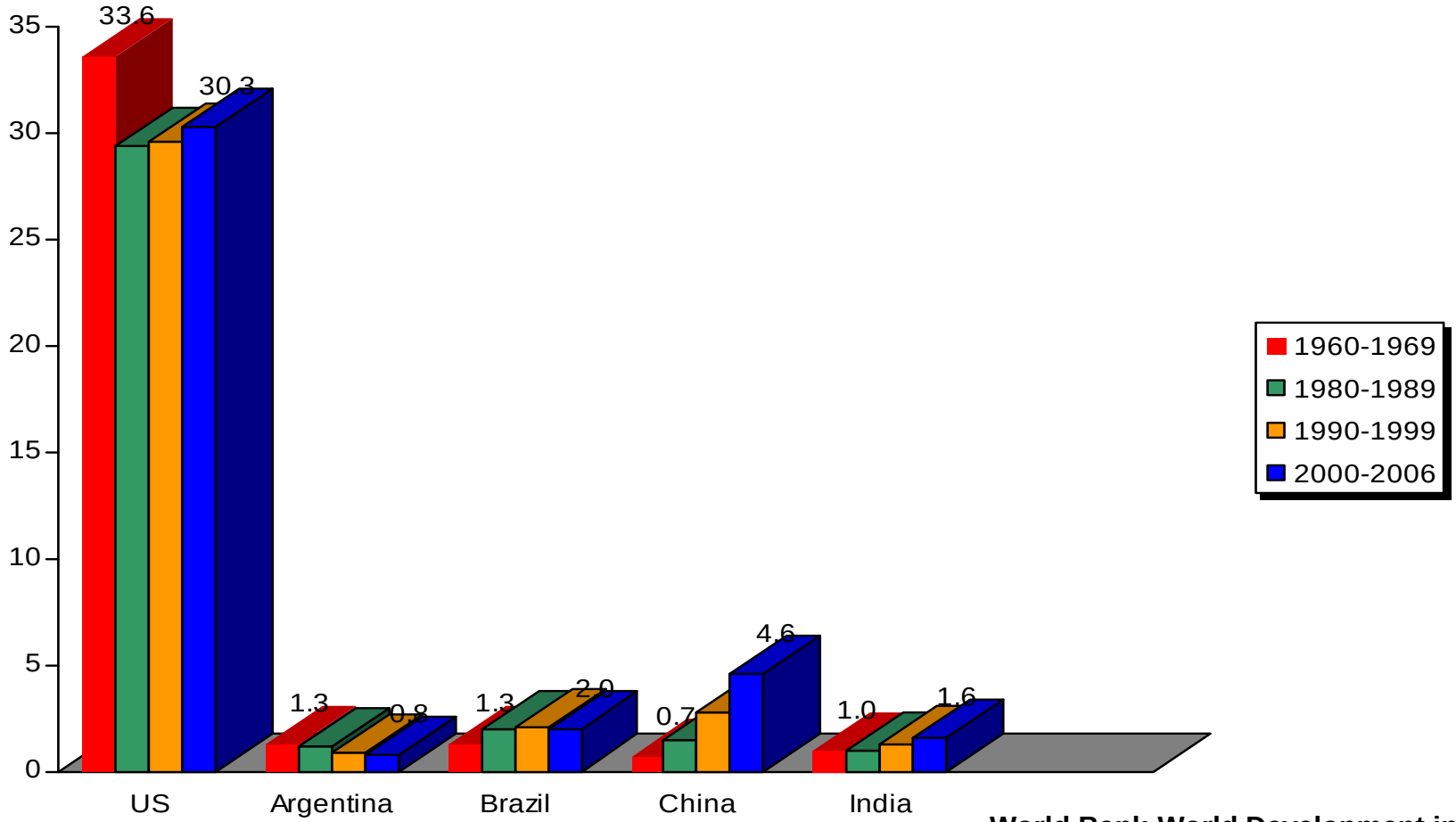
To diminish cancer incidence and to increase curability

Global Health Objectives (selected)

- To improve primary and secondary prevention
- To diminish cancer incidence and to increase curability or control
- To promote equal access to proper care across borders

ECONOMICAL CONSIDERATIONS

Percent of World GDP in 2000 US$ terms



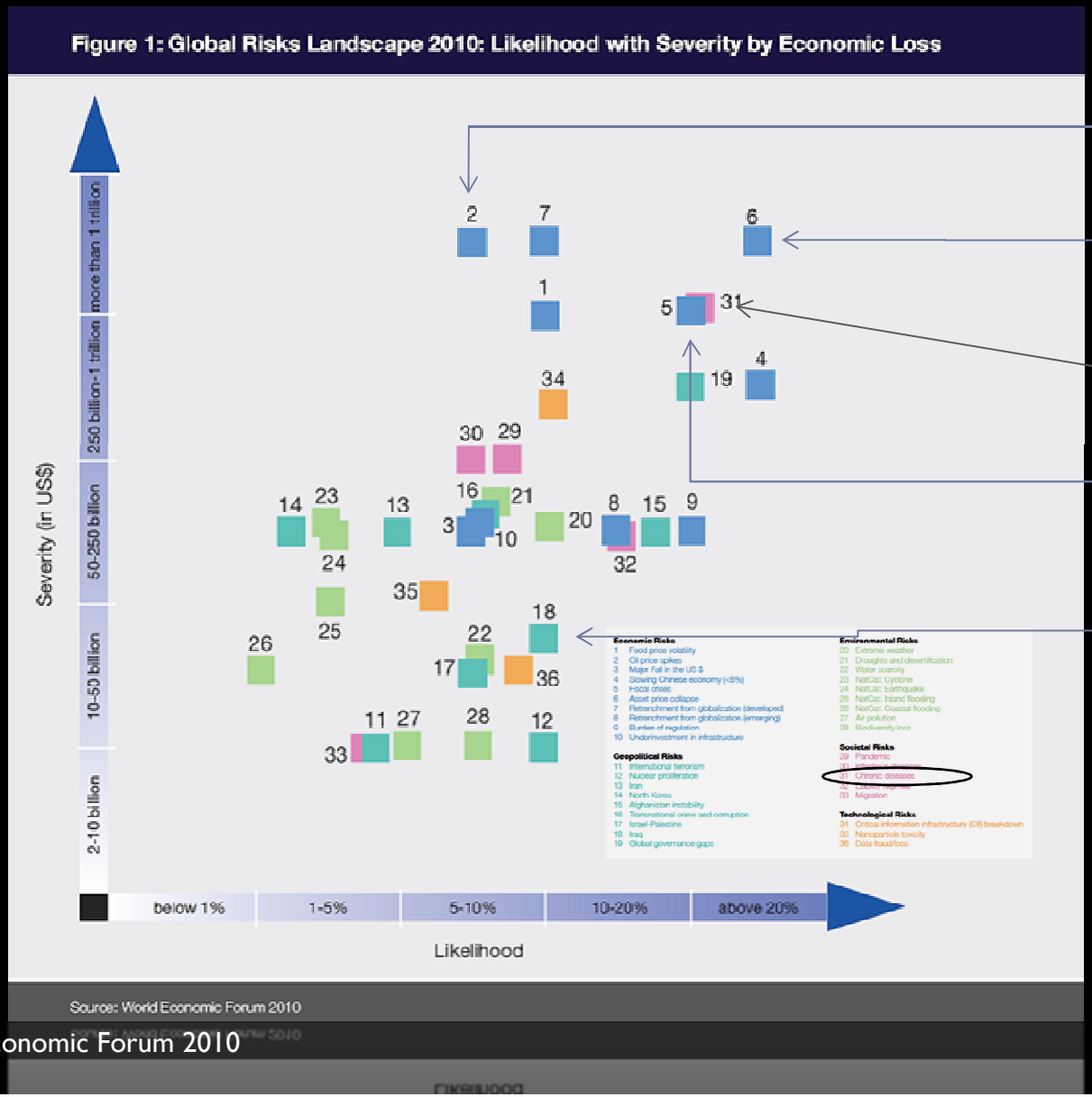
World Bank-World Development indicators

The Gap

The global health gap between rich and poor is vast: “in one year alone, fourteen million of the poorest people in the world died [prematurely], while only four million would have died if this population had the same death rate as the global rich.”

DAVIDSON R. GWATKIN & MICHEL GUILLOT, WORLD BANK, THE BURDEN OF DISEASE AMONG THE GLOBAL POOR 19–20 (2000).

NCDs - One of the Top 4 Global Risks



Oil price spikes

Asset price collapse

NCDs

Fiscal crisis

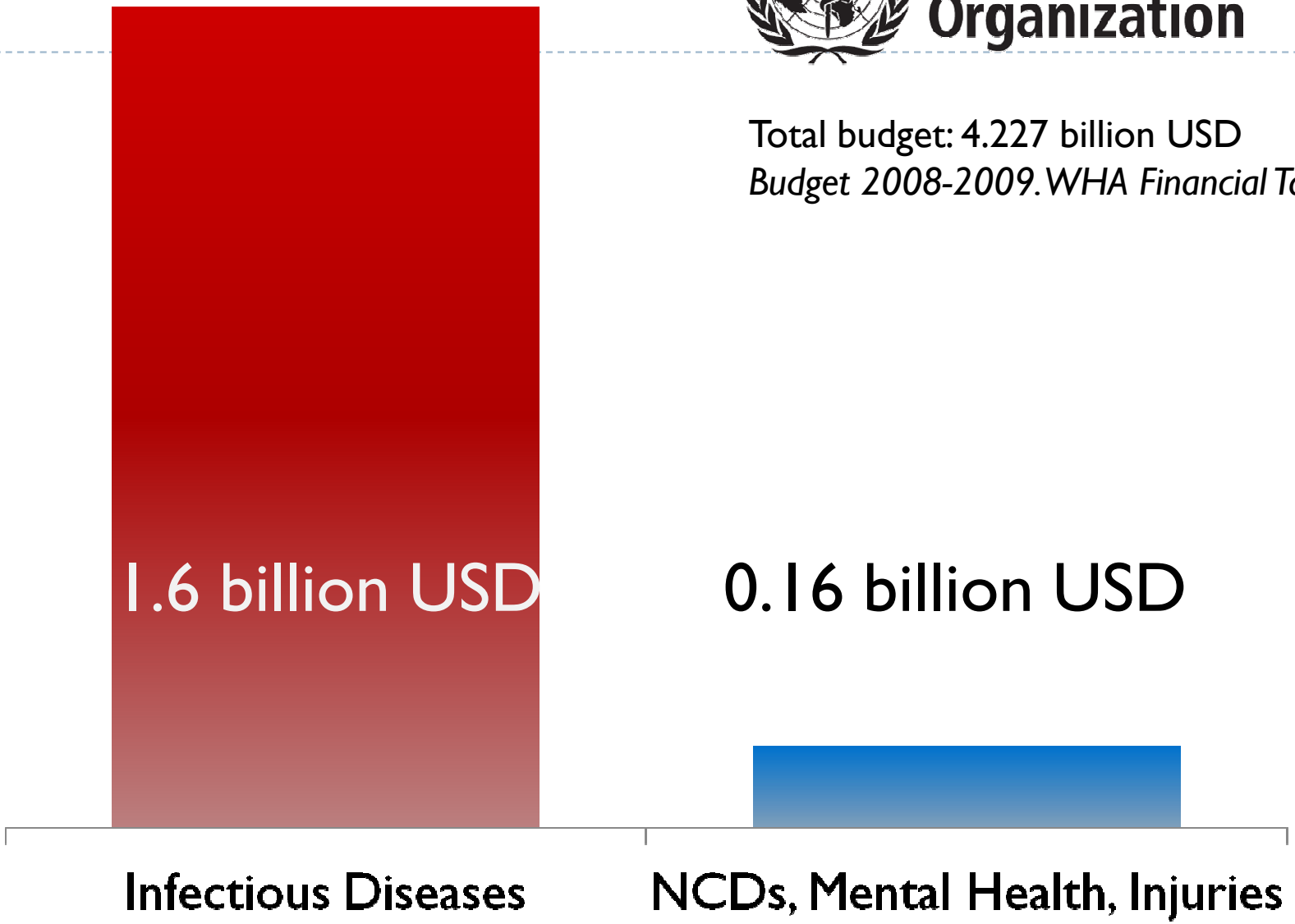
Iraq

Source: World Economic Forum 2010

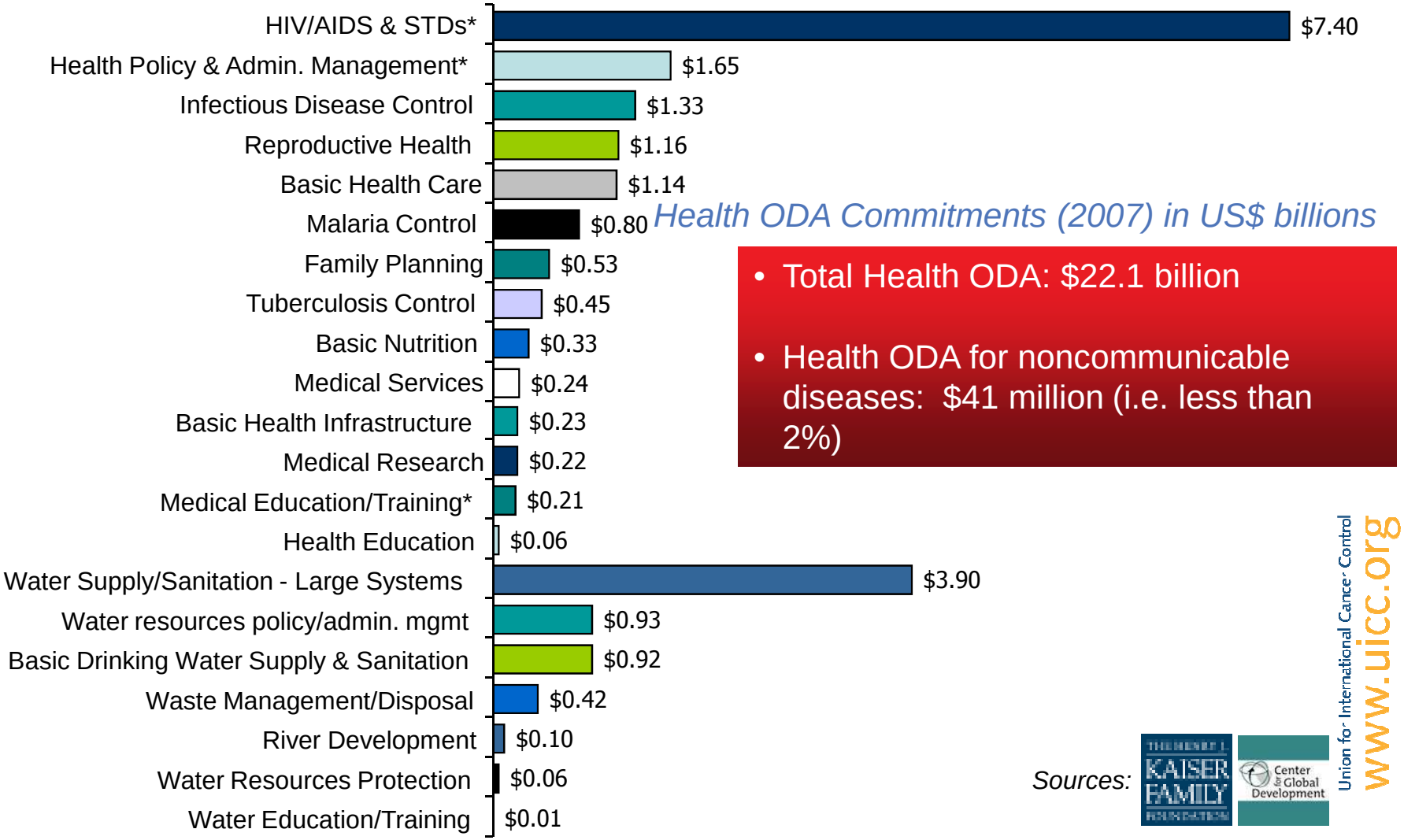
World Health Organization

Total budget: 4.227 billion USD

Budget 2008-2009. WHA Financial Tables



NCDs receive less than 2% of ODA for health.



Health ODA Commitments (2007) in US$ billions

- Total Health ODA: $22.1 billion
- Health ODA for noncommunicable diseases: $41 million (i.e. less than 2%)

Sources:

The Costs of Cancer

- **The financial costs of cancer treatment are a burden to people diagnosed with cancer, their families, and society as a whole. Cancer treatment accounted for an estimated $72.1 billion in 2004—just under 5 percent of U.S. spending for all medical treatment.**
- **Worldwide each year $700 billion are the expenses related only for cancer care. This amount is the same that the US Government allocate for the Bank rescue during the last economical crisis.**

The World Economic Forum (WEF) Report

- **Released September 18th, 2011**
- **First study to identify the total global costs of non-communicable diseases (NCDs)**
- **Non-communicable diseases have been established as a clear threat not only to human health, but also to development and economic growth**
- **63% of all deaths, these diseases are currently the world's main killer.**

Ref: http://www.weforum.org

The World Economic Forum (WEF) Report (cont)

- Eighty percent of these deaths now occur in low- and middle-income countries
- Half of those who die of chronic non-communicable diseases are in the prime of their productive years,
- The disability imposed and the lives lost are also endangering industry competitiveness across borders.
- Estimated world costs of $47 trillion by 2030

Ref: http://www.weforum.org

"In terms of global macroeconomic impact, our analysis shows that noncommunicable diseases pose a significant economic and financial risk both to advanced and developing economies."

Klaus Schwab, Founder and Executive Chairman of the World Economic Forum

But, not only in " poor countries"

- **Poverty Raises Mortality Risk With Non-Hodgkin Lymphoma**
- **Socioeconomic status and treatment are the key reasons that blacks tend to have a higher risk of death from the disease than whites.**
- **Census data show that 46.6 million Americans were uninsured in 2005**

Ref.Centers on Budget and Policy priorities, 2006
Ref. Cancer , Dec 1, 2008

Developed and developing?

- The economical considerations alone are insufficient to measure cancer control
- Some “developing countries” have a good cancer control structure (eg. Uruguay, Costa Rica))
- Some “rich countries” are doing poorly in cancer control (ex. Saudi Arabia)
- In many rich countries , underserved or minority groups are outside of the health care systems.

PUTTING CANCER and NCD´S IN THE GLOBAL POLITICAL AGENDA: A UICC PRIORITY

uicc
global cancer control

or International
Control

NCD´s "A public health emergency in slow motion"

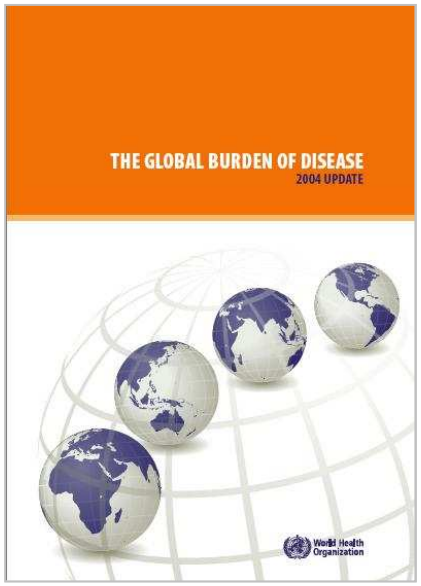
Ban Ki-moon,
UN Secretary General

Union for International Cancer Control
www.uicc.org

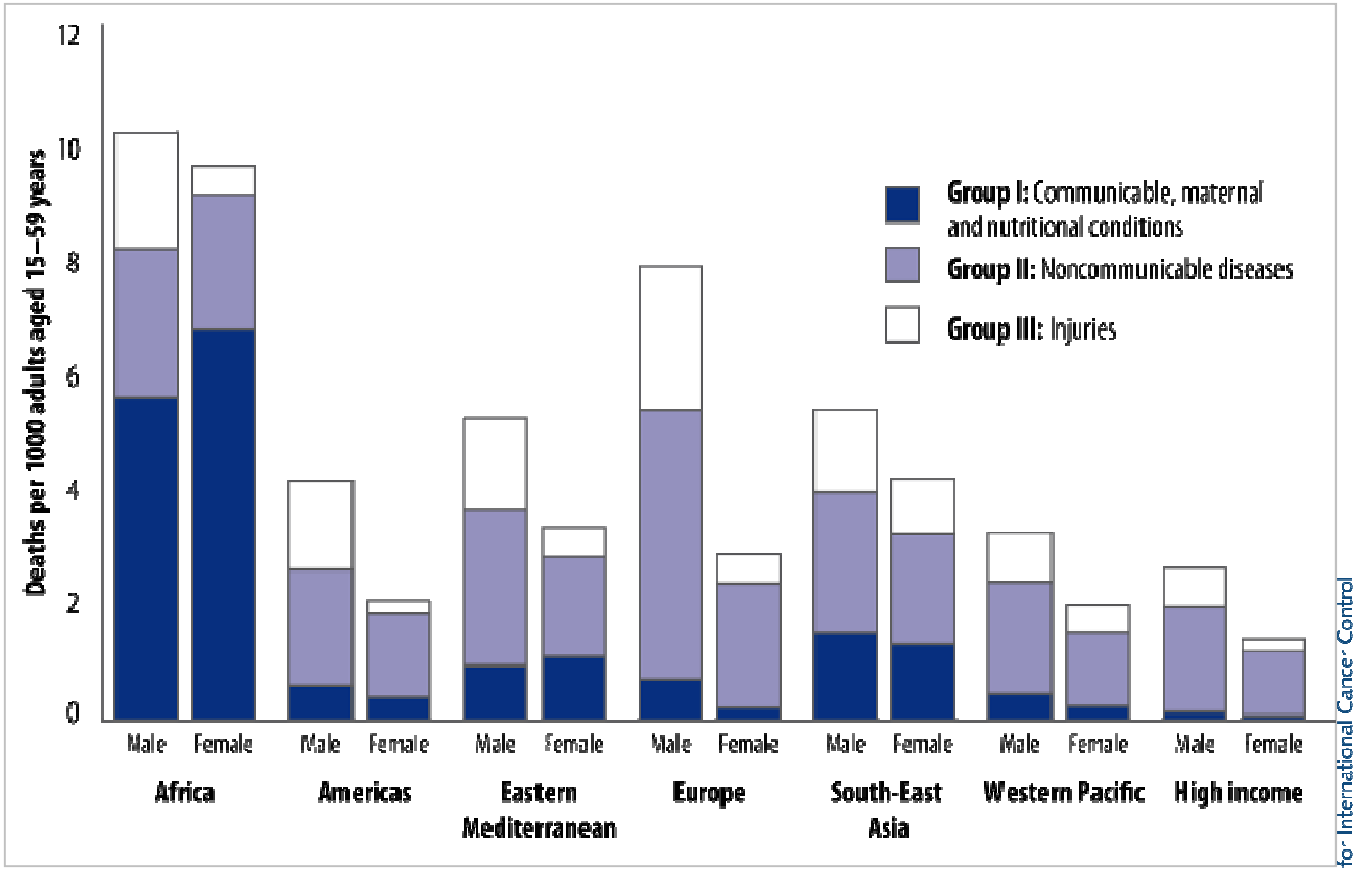
Intervene now with preventive, cost-effective measures

Noncommunicable Diseases and Conditions

Adult mortality rates (2004)



Launched October 2008



Noncommunicable Diseases (2006-2015)

	2005		2006-2015 (cumulative)		
Geographical regions (WHO classification)	Total deaths (millions)	NCD deaths (millions)	NCD deaths (millions)	Trend: Death from infectious disease	Trend: Death from NCD
Africa	10.8	2.5	28	+6%	+27%
Americas	6.2	4.8	53	-8%	+17%
Eastern Mediterranean	4.3	2.2	25	-10%	+25%
Europe	9.8	8.5	88	+7%	+4%
South-East Asia	14.7	8.0	89	-16%	+21%
Western Pacific	12.4	9.7	105	+1	+20%
	58.2	**35.7**	**388**	**-3%**	**+17%**

(WHO, Chronic Disease Report, 2005)

WHO projects that over the next 10 years, the largest increase in deaths from cardiovascular disease, cancer, respiratory disease and diabetes will occur in developing countries.

1. *Decides* to convene a high-level meeting of the General Assembly in September 2011, with the participation of Heads of State and Government, on the prevention and control of non-communicable diseases;

2. *Also decides* to hold consultations on the scope, modalities, format and organization of the high-level meeting of the General Assembly on the prevention and control of non-communicable diseases, with a view to concluding consultations, preferably before the end of 2010;

3. *Encourages* Member States to include in their discussions at the high-level plenary meeting of the sixty-fifth session of the General Assembly on the review of the Millennium Development Goals, to be held in September 2010, the rising incidence and the socio-economic impact of the high prevalence of non-communicable diseases worldwide;

4. *Requests* the Secretary-General to submit a report to the General Assembly at its sixty-fifth session, in collaboration with Member States, the World Health Organization and the relevant funds, programmes and specialized agencies of the United Nations system, on the global status of non-communicable diseases, with a particular focus on the developmental challenges faced by developing countries.

86th plenary meeting
13 May 2010

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global cancer control

Union for International Cancer Control

United Nations A/66/L.1

General Assembly

Distr.: Limited
16 September 2011

Original: English

Sixty-sixth session
Agenda item 117
Follow-up to the outcome of the Millennium Summit

Draft resolution submitted by the President of the General Assembly

Political declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases

The General Assembly,

Adopts the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases annexed to the present resolution.

Annex

Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases

We, Heads of State and Government and representatives of States and Governments, assembled at the United Nations from 19 to 20 September 2011, to address the prevention and control of non-communicable diseases worldwide, with a particular focus on developmental and other challenges and social and economic impacts, particularly for developing countries,

1. Acknowledge that the global burden and threat of non-communicable diseases constitutes one of the major challenges for development in the twenty-first century, which undermines social and economic development throughout the world, and threatens the achievement of internationally agreed development goals;

2. Recognize that non-communicable diseases are a threat to the economies of many Member States, and may lead to increasing inequalities between countries and populations;

3. Recognize the primary role and responsibility of Governments in responding to the challenge of non-communicable diseases and the essential need for the efforts

11-49777 (E) 150911

Please recycle

The Political Declaration of the UN adopted at the High-level Meeting on the prevention and control of non-communicable diseases on 20th September 2011

Union for International Cancer Control
www.uicc.org

UICC Role post-UN-HLM

Global Monitoring and Evaluation

Securing support from UN Member States for our post-UN-HLM priorities will be key. UICC priorities over the next five years will include:

- **2012 -** Development of a set of indicators in 2012 capable of application across regional and country settings for achieving the 11 World Cancer Declaration targets by 2020 (parallel to supporting WHO and UN Member States to develop appropriate targets and indicators for monitoring progress against the Political Declaration on NCDs)

- **2014** – provide input into the review of progress towards the UN Political Declaration on NCDs

- **2015 –** Interim report on progress towards the 11 World Cancer Declaration Targets – with a focus on what is being done in the regions

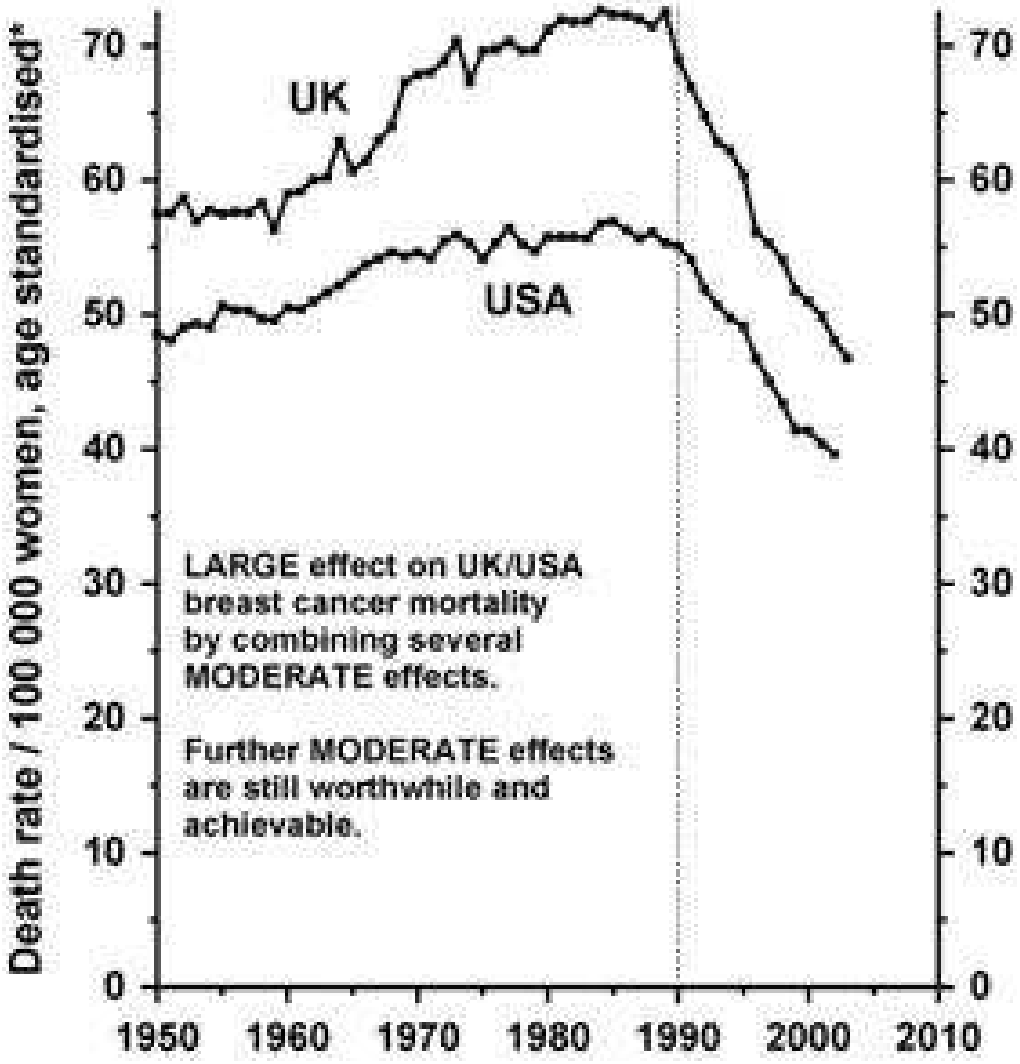
- **2020 –** Report on global progress towards the 11 World Cancer Declaration Targets

The future after the UN Summit

- The UN High-Level Summit on Non-Communicable Diseases (NCDs) was held in New York, September 19-20, 2010.
- After months of exacting negotiations in New York, UN Member States finally came to consensus on a Political Declaration, a major milestone in the history of cancer control.
- World leaders have recognized the magnitude and impact of the cancer and NCD burden.

Breast Health in this new environment

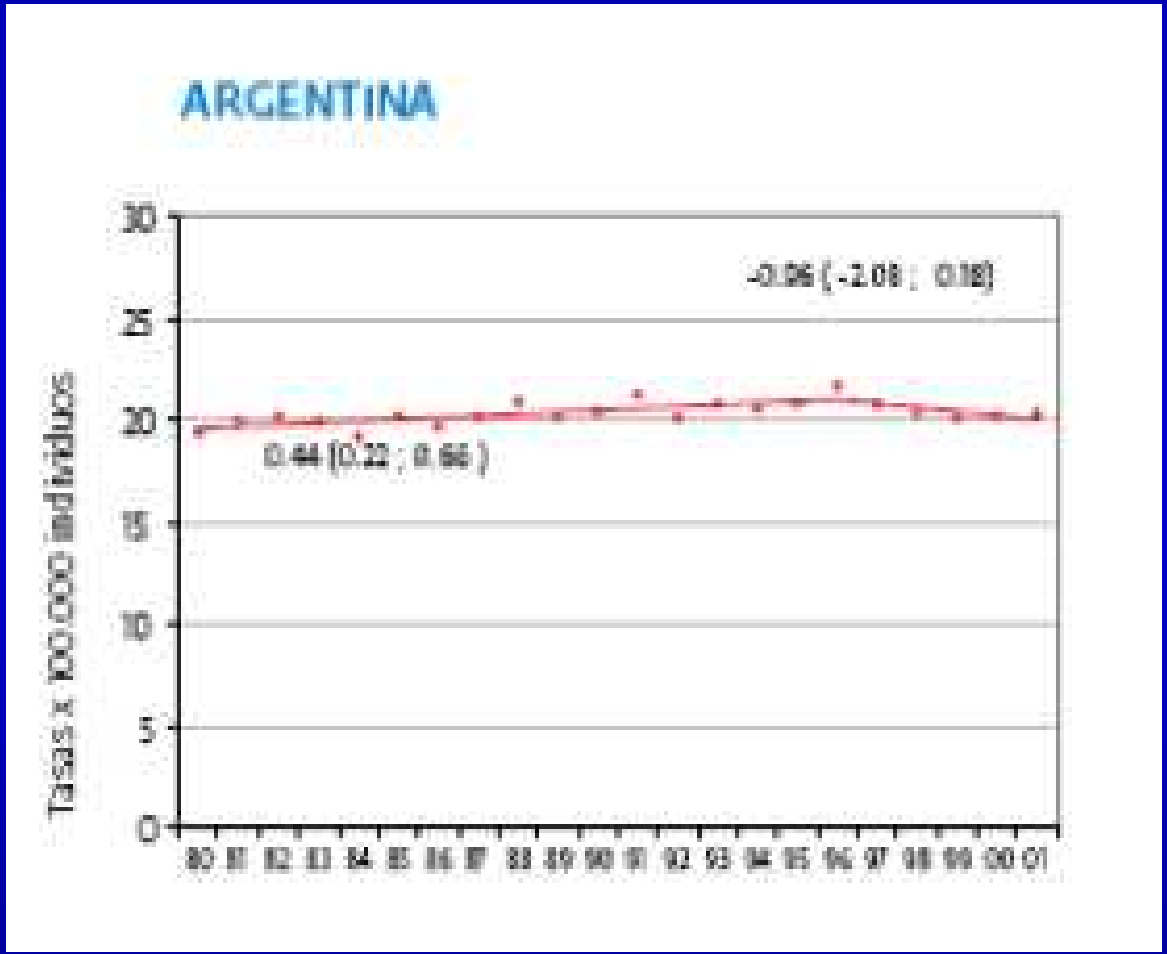
UK/USA, 1950–2003/2: recent decrease in breast cancer mortality at ages 35–69



*Mean of annual rates in the seven component 5-year age groups

Source: WHO mortality & UN population estimates

Breast cancer Mortality in Argentina, 1980-2001: (D.Loria et al.)

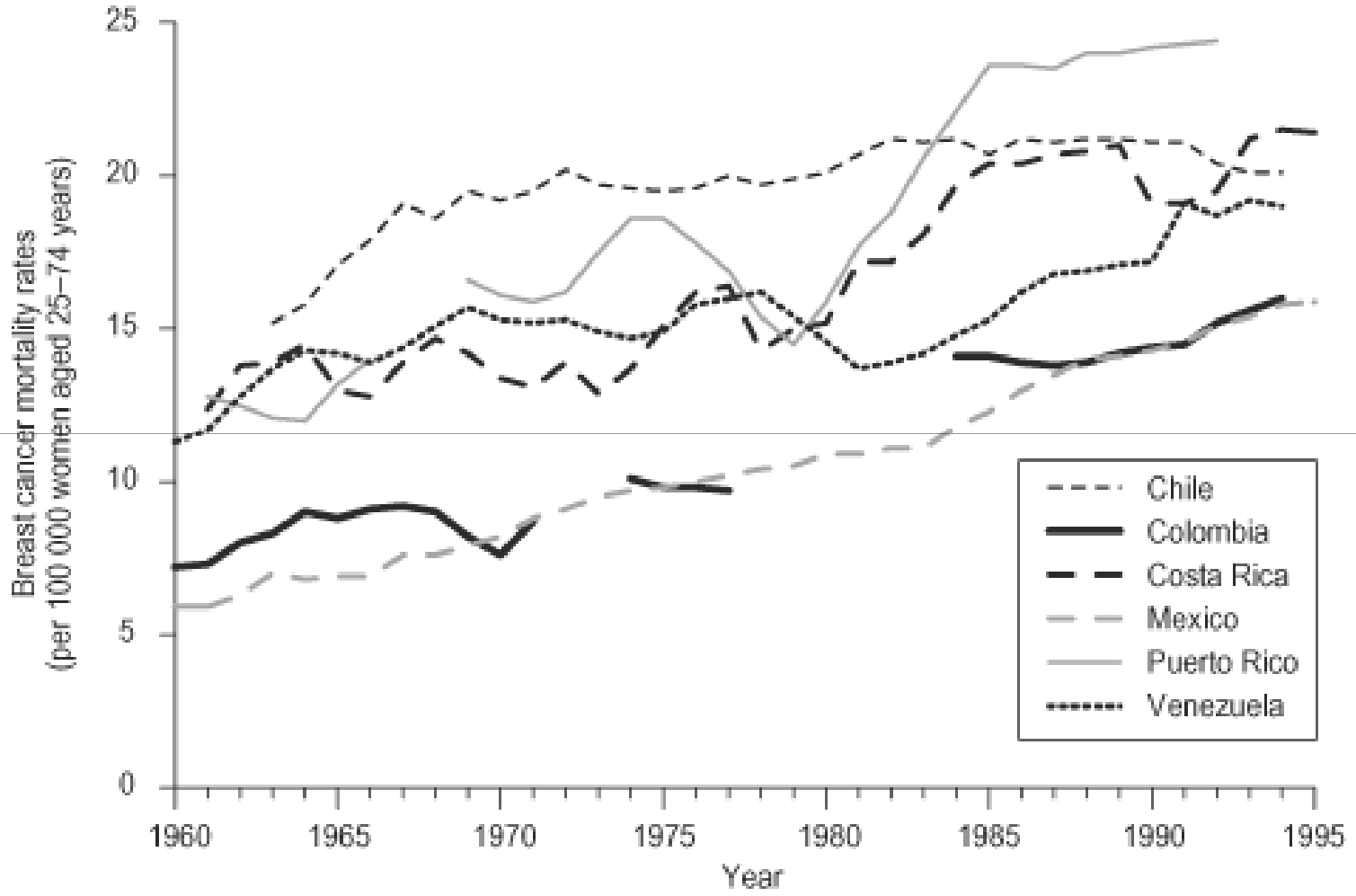


But in Brazil is rising

Tabela 2 - Coeficientes de mortalidade ajustados por câncer de mama para o Brasil, Estado de São Paulo, Município de São Paulo, Baixada Santista e Santos, 1980-1979.

	Brasil	Estado	Capital	Baixada Santista	Santos
1980	12,80	17,35	22,05	22,13	22,73
1981	12,84	18,64	23,69	21,94	25,73
1982	12,89	19,16	24,52	22,83	28,06
1983	12,78	19,09	24,55	27,95	33,11
1984	12,76	18,17	24,07	20,67	26,53
1985	13,14	18,65	23,68	21,68	25,73
1986	13,28	19,07	24,58	24,99	28,08
1987	13,94	19,54	25,79	25,88	32,37
1988	13,68	19,15	25,35	26,62	32,85
1989	14,17	19,34	23,26	25,91	33,03
1990	14,51	20,79	25,75	27,24	35,88
1991	14,31	19,29	25,32	22,91	32,23
1992	14,66	20,29	24,82	21,22	24,05
1993	15,51	21,16	26,39	31,41	38,49
1994	16,25	22,32	28,45	19,72	23,43
1995	16,01	22,36	27,31	24,46	27,48
1996	14,94	21,87	27,82	30,18	36,58
1997	15,82	22,24	30,03	29,60	37,11
1998	16,46	22,93	29,52	27,53	36,44
1999	16,49	23,91	30,20	34,39	40,92

FIGURE 2. Three-year moving average age-standardized cancer mortality rates in women aged 25 to 74 in low breast cancer mortality countries of the Americas, plus Puerto Rico, 1960–1994



Note: Some lines have breaks or are incomplete due to missing data.

Breast cancer in China

- For many years, breast cancer incidence was low in China. Recent data combining the results of a statistical study and data on lifestyle changes in Chinese women, predicts that there would be more than 100 breast cancer cases per 100,000 women aged 55-69 by 2021, compared with the rate of 10-60 per 100,000 cases now.

Ref. Linos ,J Natl Cancer Inst Volume100, Issue19Pp. 1352-1360,2008

New challenges

China is on the cusp of a breast cancer epidemic. Although some risk factors associated with economic development are largely unavoidable, the substantial predicted increase in new cases of breast cancer calls for urgent incorporation of this disease in future health care infrastructure planning.

Ref. Linos ,J Natl Cancer Inst Volume100, Issue19Pp. 1352-1360,2008

One example in BC screening

- Level 1: mammography each 6 month (high risk pt.)
- Level 2: mammography each year after 40
- Level 3: mammography each 1-2 years after 50
- *Level 4 : Awareness, Education, BSE and CE*

Access to Radiotherapy

Radiotherapy Units

Country	Inhabitants (mill)/RT units
Uruguay	0,23
Argentina	0,42
Venezuela	0,52
Chile	0,68
México	0,82
Brasil	0,89
Bolivia	1,18
Paraguay	1,29
Colombia	1,35
Ecuador	1,55

Country	Inhabitants (mill)/RT units
EEUU	0,15
Francia	0,30
Croacia	0,64
China	2,12
Arabia Saudita	2,83
Iran	3,8
India	5,53
Zimbawe	5,81
Uganda	13,6
Etiopía	70

Modif.by Guercovich A & Cazap E, based on: Directory of Radiotherapy Centres (DIRAC-IAEA/WHO Nov 1999)

Considerations on Rt

- Distribution of Rt equipment is very irregular worldwide
- Quality control is highly variable
- Even in countries with good technology equipment, availability of technicians, physicists or radiation oncologists is scarce

Question?

- **Is it possible to apply conservative surgery at a global scale?**

Answer

- **NO**

THE KEY NEXT STEPS

There are low cost interventions to prevent and treat NCDs

	Disease/risk factor	Intervention	Cost of implementation	Health impact	Cost-effectiveness
Risk factors	Tobacco use	Excise tax on tobacco products	Low	Large	Very cost-effective
		Smoke-free workplaces	Low	Modest	Quite cost-effective
		Packaging, labelling and awareness countermeasures	Low	Modest	Very cost-effective
		Comprehensive ad bans	Low	Modest	Very cost-effective
	Harmful use of alcohol	Excise tax on alcoholic beverages	Low	Modest	Very cost-effective
	Unhealthy diet and physical inactivity	Reduce salt intake	Low	Large	Very cost-effective
		Food taxes (fat) and subsidies (fruit and vegetables)	Low	Modest	Very cost-effective
		Intensive counselling	Very high	Large	Quite cost-effective
Non-communicable Diseases	Diabetes	Glycaemia control	High	Large	Quite cost-effective
	Cardiovascular diseases	Hypertension drug treatment	Low	Large	Very cost-effective
	Cancer	Treatment of 1st stage breast cancer	Low	Modest	Very cost-effective
		Cervical cancer screening (PAP smear) and treatment	Low	Modest	Very cost-effective
	Respiratory disorders	Inhaled corticoid-steroids for asthma	Low	Small	Quite cost-effective

Recommendations for worldwide cancer control by the US Institute of Medicine

(selected)

- Develop or update cancer-control plans in each country every 3 to 5 years
- Ratify and implement the Framework Convention on Tobacco Control in each country
- Develop resource-level-appropriate guidelines for the clinical and public-health management of major cancers
- Create government-supported cancer centres of excellence; improve cancer centres by twinning arrangements; and expand treatment and psychosocial services for children with highly curable cancers
- Remove barriers to essential pain-control medications and the provision of palliative care
- Enhance cancer surveillance and monitoring
- Increase involvement in these efforts by international organisations, bilateral aid agencies, advocacy organisations, national institutions, and the academic community

Conclusions

- All the necessary scientific knowledge to worldwide control breast cancer exists today; useful and efficient methods for secondary prevention and adequate treatment modalities, specially for early stages of the disease, but, regrettably, all this resources are only available to less than 10-15% of the world population.
- Closing the gap between knowledge and action can decrease the incidence of breast cancer, for this is critical to actively plan for global education and awareness, promote basic , translational and clinical research, implementation proper breast cancer care according to the available resources, and consider new educational tools and screening approaches in countries of limited resources.

UICC Role post-UN-HLM

Ensuring that commitments are met, and action is taken

In the coming months, UICC will be working with NCD Alliance partners to secure strong targets and appropriate indicators for commitments in the Political Declaration, with a particular focus on the cancer specific areas of:

Palliative care
HBV and HPV vaccination
Breast and Cervical Cancer Screening

As a global membership organisation, that includes hospitals and treatments centres in low and middle-income countries, UICC is uniquely placed to bring real-life case studies from national and community projects into these discussions.

Our members in this region have been active in supporting the NGO voice in the lead up to the Summit. We will now work together to ensure that we get the national commitments necessary for impact.

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The role of Senological Societies

- The cancer and health problem usually exceeds the capacity of a Minister of Health (MoH)
- It is critical to connect MoH with Ministries of Economy and Development. It is highly recommended to create different Committees at governmental levels to work in an integrated approach , not only with medical groups but also with governmental bodies, private sector, academy, Universities, NGO's and patient organizations.

Main actions in development

- Improvement of cancer registries (IARC)
- Breast cancer plans at national level (several countries)
- Pathology improvement (many cooperative efforts)
- Improvement of Radiotherapy (IAEA)
- Training of breast surgeons globally
- Education and screening are a key factor

The new paradigm

- We need to change our strategy from a “diagnosis and treatment” vision to a true Global Breast control strategy based in awareness, education, primary and secondary prevention, early diagnosis, proper and adequate care according to resources, palliative care, survivorship and rehabilitation.

Summary

- Cancer is a global health problem
- The current knowledge only applies to 8% of the world's population
- Civil society commitment together with the scientific society expertise alone are insufficient to address the issues we face
- It is urgent to have a strategy with global political support
- The UN Summit on NCDs offers us the chance to agree the size of the problem and the way in which we can address it collectively

Summary , (cont)

- Global cancer and NCD´s control can be properly addressed if all participants understand that cancer is a problem of human development and that a horizontal strategy is mandatory. The cancer solution will be inevitably linked to environment, science, economics, trade, regulations, together with proper research (epidemiologic, basic, translational clinical and public) and scientific knowledge. In this scenario political will and international laws are a crucial component of this equation.

Conclusions

- Cooperation is a vital component of global cancer control
- We need to work in a coordinated fashion from top to down and from down to top
- International cooperation is the key together with the indispensable local and regional leadership
- UICC and all our member organizations around the world are working tireless in this endeavor.

"The inferior doctor treats actual sickness. The mediocre doctor attends to impending sickness; the superior doctor prevents sickness"
Chinese proverb

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Fondation québécoise du cancer

McGill UNIVERSITY

Université de Montréal

worldcancercongress.org

Thank you very much for your attention