

Primary Health Care Jan. 2017

Gunnar Holmgren, Infectious diseases clinic, Jönköping, Sweden Jan. 2017

Contents

- Page 1 Health in an unjust world, Historical perspective of main health challenges
- Page 2 Historical dev. of Primary Health Care strategy, Watershed initiative, Success stories: China, Cuba, Kerala
- Page 4 Alma Ata WHO/UNICEF conference on PHC and declaration 1978
- Page 5 Universal Health Coverage, UNICEF's selective PHC
- Page 6 World Bank's Investing in Health 1993, Problems and strategies, Lost DALY's
- Page 8 Global Burden of Disease, Cost-effectiveness of Health Interventions,
- Page 9 Child improvement since 1960
- Page 10 Challenges of urbanisation,
- Page 11 What about the future? Millennium Development Goals
- Page 12 For further reading, Breaking news 2014 on child health improvement
- Page 13 UNICEF's report from 2012 on details of MDG 4 Child Health
- Page 15 Value of people's movements studied in Nepal. Focus on Maternal and Neonatal Health Care, MDG 2013
- Page 16 Challenges in Health and Development after 2015, Traps, Value of people's movements.
- Page 17 Ebola outbreak, Road Map to control of Ebola outbreak in West Africa
- Page 19 Breaking news of impact of Alcohol Abuse
- Page 20 Breaking News of impact of tobacco use
- Page 21 Overview of MDG 2014
- Page 23 Breaking News Sustainable Development Goals from 2016-2030
- Page 23 UNDP's role in SDG
- Page 24 New Ebola outbreak in Sierra Leone with second generation virus where vaccine is not effective.
- Page 24, 25 Outbreak of Zika virus in South America especially spread by *Aedes aegypti* mosquitoes.
- Page 25,26 Air pollution and its global impact
- Page 28, Arsenic in Bangladesh
- Page 28,29 Human Resources and Investing in action
- Page 29,30 Breaking News Universal Health Coverage: Lancet
- Page 31,32 Breaking News The Unifying effect of health
- Page 32,33 Breaking News The Possible Impossibility of Universal Health Coverage: Richard Horton, Lancet

Health in an Unjust World

It may be argued that it is not backwardness, indolence or faulty governance that accounts for most of the poverty of the poorest nations. It is location. Of the world's 42 highly indebted poor countries 39 lie in the tropics or deserts and the other three are landlocked and isolated. They suffer problems of disease, ecology, life-expectancy and stabilized poverty that rich nations in temperate zones cannot recognize (Jeffrey Sachs). Most of the poorest African countries are landlocked.

The majority of countries in tropical Sub-Saharan Africa (SSA) have a reduction of their potential income by between 1-1.3% per year due to one disease alone i.e. malaria and that over a 15 year period this loss of income amounts to almost 20% of their potential earnings. Put in another way probably 20% of their poverty is due to malaria, let alone the other scourges of this tropical zone. Africa's GDP would probably be \$US 100 billion higher if malaria had been tackled 30 years ago (c.f. SSA's total debt 300 billion in 2001). In Sub-Saharan Africa 12% of GDP is lost each year due to the effects of HIV / AIDS.

Historical Perspective The commonest preventable or treatable causes of death in the world (1995, WHO)

Diarrhoeal diseases	3.1 million/year
Pneumonia	4.4 million
Tuberculosis	3.1 million

Tobacco related diseases (1998)	4 million
Malaria (new figures from Hyderabad conference, 1997)	3 million
Measles	>1 million
AIDS (2007)	3 million
Maternal mortality	0.53 million
Neonatal tetanus	0.5 million
Whooping cough	355 000

NB Of these causes only malaria today is a “tropical disease”. Since 1995 much has changed for the better but maternal mortality and neonatal mortality have hardly changed. During this period the epidemiological transition has meant that for many poor countries there is an increasing problem of the non-communicable diseases (NCD) especially amongst the wealthy in these poor countries but even amongst the poor. Thus these countries may have the double burden of the existing communicable diseases and now rising even the NCD, many of which are related to unhealthy life style.

UNICEF have estimated 2011 that around 6.9 million children died that year of diseases most of which could have been easily and cheaply prevented or treated (down from 12.5 million in 1990). In almost 40% of these deaths the real cause is starvation.

Historical Development of the Primary Health Care Strategy

Preventive medicine started with the work of Edward Jenner who in 1796 vaccinated the first person in the world as a planned preventive health strategy. This was a 14-year old boy named James Phipps who was vaccinated with cowpox in order to protect him against smallpox. Jenner predicted that vaccination would one day lead to the elimination of this disease but it took until 1977 to achieve this goal. The last naturally infected person developing smallpox was in Somalia and thereafter smallpox is medical history. However this is the only such achievement ever reached although hopes are high that polio will follow and maybe in the coming decade even measles.

Watershed health initiative

In the 1960s and 1970s debate about the direction of health care led to the convening of a major conference in 1978 by WHO and UNICEF in Alma Ata, in the former Soviet Union. This was a major turning point in thinking about health strategy and recognized for the first time on a global scale that health was mainly determined by factors outside the province of the health professions. In order to achieve progress, communities and all development sectors would need to harness their combined resources. Much of the thinking was influenced by the early successes of Primary Health Care (PHC) in a number of, what were then, poor countries such as Sri Lanka, Kerala state in India, Cuba, China and Costa Rica. Of course today many of these are not poor any longer.

Success stories in improving health with three different approaches to Primary Health Care

China

The example of China's "barefoot doctors" attracted widespread acclaim. But the main reason for China's improved health was the total commitment to health as an integral part of social equity. Health is everybody's right and responsibility. In 1980 there were 2 million barefoot doctors. They arrived on the scene in the 1960's. Prior to this there were a number of vertical programmes. As part

of Mao's cultural revolution one third of all China's health professionals were sent to the countryside. They spent 10 years there and they started training auxiliaries. These were multi-purpose health workers with a horizontal approach to health problems. However after a while they became more curative-orientated. Most preventive work was still done by vertical programmes. The continuing education of barefoot doctors meant that soon many were clinical officers and some went on to full medical training. The role of barefoot doctors in meeting serious illness was as a "connector" in referring patients to hospitals. There was built up good communications and the system provided full medical coverage with every region having health centres with 20-30 beds, then country hospitals with 100-300 beds and all main specialties present, then secondary and tertiary hospitals. There was decentralised planning, and administration. However there were 15-20 times as many traditional practitioners as medical doctors. There was poor evaluation and monitoring of their activities. There was no uniform Health Information System. The Chinese slogan was prominent: "Do today what can be done today and improve on it tomorrow" The major principles of the system were that politics and health were inextricably linked. Health is an integral part of national development, self-reliance fostered by total participation of the community in the health system. Health workers were selected, maintained and controlled by their own community. There was universal access to all levels of health care services. The use of traditional medicines was integrated into the system. Today the status of government hospitals has deteriorated as private hospitals are taking over in many of the big cities. These cater mainly to the newly rich.

Cuba

The revolution came in 1959 when Batista was overthrown. There was the idea of creating "the New Man." Cuba's political commitment to "Health for all" was clear and unequivocal. But this system had its drawbacks. It was very doctor-centred and virtually all medical decisions were made by doctors. It was far too costly to be adopted by others and was mainly paid for by the Soviet Union. It made health into a form of social control. Even self-medication for the simplest health problems was discouraged. There were relatively uniform wages in the community with differences between the highest and lowest paid being 1:3 or 1:4. There was a dramatic decrease in diarrhoeal diseases, TB, malaria, tetanus, polio, diphtheria, and by 1982 the Infant Mortality Rate had fallen to 25 with a life expectancy of 72 years. The birth rate was the same as in the US. In 1959 60% had access to health care; by 1982 this was over 90% within 1 hour's distance from a health centre. There was a highly centralized health system based upon doctors. There were no auxiliaries. Polyclinics were manned by specialists. In 1971 30% of all students in university were medical students. There were no official traditional healers or TBAs and no acknowledged herbal medicines or alternative treatments. 100% of deliveries were at hospitals. All diarrhoea cases were treated with i.v. fluids in hospital if they had been sick more than two days. There was no health education given about the value of oral rehydration therapy. Every doctor serves 3 years in a rural centre after graduating. Community health workers were not even allowed to dispense aspirin without a doctor prescribing. All doses of insulin were given by a doctor who might have to travel to a dispensary from the polyclinic. Health education seemed to be anti-educational. All newborn babies were separated from their mothers for 12 hours after the delivery. It was a highly cost-ineffective service and only possible because of the massive budget support from the Soviet Union. However in practice there was plenty of self-prescribing by people despite being discouraged by the system. All the thinking in the system was strongly influenced by Russia. There was a denial of decision-making by the people. The health system turned out to be a far-reaching insidious mechanism of social control. The term "Poder popular" (people's power) was more a dream than reality. The state controlled people far more than the people controlled the state.

Kerala (State in South-West India)

This was based on the domino theory of development. Political change → wealth distribution → death rates fall → birth rates fall. There was a communist government for 3 years only from 1957-1959 but the communist party had a strong role among the rural poor labourers who had demanded agrarian reform, better education and health. There was less focus on university education since only 0.02% of the population enjoyed its benefits. There was better access to health services. The state ensured higher wages for farm labourers. Kerala focussed attention early on improving education for girls. This was associated with a fertility decline. In 1961 the female literacy rate was 39%; by 1982 it was 64.5%. The all-India average was then 24.8%. The state has the highest female age for marriage in India. There was free education at primary level from the first 3 decades of the 1900's; there was free middle school education from 1956; free secondary education from the early 1960's. People in Kerala were better educated, healthier, lived longer, enjoyed higher wages, more secure jobs, and satisfying personal lives, they had fewer children than any other part of India. Kerala seems to hold the best example worth emulating of the three that is reproducible elsewhere. The four pillars of the health improvement are:

- a. Fair distribution of wealth in the state
- b. Good education of women and girls
- c. Excellent access to cover basic medical needs for all
- d. Sound public health policy that covers the entire state.

1. Alma Ata and WHO/UNICEFs declaration 1978 with the subsequent slogan "Health for all by the year 2000"

Convened by WHO and the United Nations Children's Fund (Unicef), the Alma Ata conference drew representatives from 134 countries, 67 international organisations, and many non-governmental organisations. (China was notably absent.)

Three main pillars were identified:

- a. Equity.* Health should be available to all regardless of race, colour, creed, social status, caste, wealth and station.
- b. Community Participation.* The communities themselves should be actively involved in formulating health policy for their area.
- c. Inter-sectoral collaboration.* Health is far too important to be left to the health professionals and most of the factors that determine health are outside the formal health sector's jurisdiction.

Beyond this the conference declared that individuals have the final responsibility for their own health and many of the factors that promote health have to do with the life-style of the individual.

The methods to achieve improvement in health should be:

- A**ppropriate to that particular community with its specific problems.
- A**ffordable by that community
- A**ceptable to the local culture.
- A**vailable to all in the community, even the poorest and marginalized

Consider how difficult these 4 principals can be when applied to our biggest current health problem i.e. HIV/ AIDS.

In the implementation of the programme 8 key elements were identified:

Education

Local disease control

Expanded programme of immunization

Maternal Child Health programmes and Family Planning

Essential Drugs

Nutrition and Food Supplies

Treatment of minor diseases

Safe Water and Sanitation

Some countries have added three elements that were missing at Alma Ata: **D**ental Health, **M**ental Health and **R**ehabilitation.

Unfortunately just as many low-income-countries were about to launch this PHC programme, the **debt crisis** hit them and most had to reduce their health budgets as described elsewhere. Today there is a strong surge in launching a new global strategy, needed to reinforce community focused primary health care in developing countries. This will require cooperation between ministries, universities, non-governmental organisations, and donors working on health to overcome severe resource constraints, including insufficient numbers of doctors, pharmacists, and other health personnel. Four international organisations-the World Organization of Family Doctors; Global Health through Education, Training and Service; the Network: Towards Unity for Health; and the European Forum for Primary Care have therefore set up the **15 by 2015** campaign to foster a better balance between vertical and horizontal aid. This campaign calls for major international donors to assign 15% of their vertical budgets by 2015 to strengthening horizontal primary health-care systems so that all diseases can be prevented and treated in a systematic way.

Within a few years after Alma Ata a number of international health agencies including UNICEF suggested narrowing down the broad sweep of the Alma Ata declaration with more focus on vertical programmes. Alma Ata highlighted the limitations of top-down, single issue programmes. Primary health care and the horizontal integration of health programmes is integral to attainment of the millennium development goals. The latest new initiative in the direction of Alma Ata has come from the United Nations: Universal Health Coverage.

Universal Health Coverage

On the 12th Dec. 2012 the United Nations General Assembly voted overwhelmingly for a resolution for Universal Health Coverage. Even the USA voted for this resolution. This obligates countries to realize a goal of every human being having access to an essential package of quality health services, without the risk of financial hardship from out-of-pocket expenses.

Everyone has the right to the best standard of health possible. Ensuring good health and wellbeing goes much further than providing health services, but Universal Health Coverage is a key step towards breaking the cycle of poverty and ill health and realising our health rights.

Health Poverty Action supports the UN resolution which is a victory for everyone who believes in Health For All.

It is also vital that Universal Health Coverage is included in the new framework for development which will replace the Millennium Development Goals when they expire in 2015.

2. UNICEF's Selective Primary Health Care approach 1983 with the launching of UNICEF's new focus: Child Survival and Development Revolution.

This concentrated on certain areas that were said to be more achievable and cost-effective in improving health, especially in children, than the broad Alma Ata approach. They were launched just when the debt crisis struck many poorer countries.

Growth monitoring

Oral rehydration therapy

Breast feeding promotion

Immunization

To this GOBI strategy were later added

Female literacy

Family planning

Food supplementation

In the 1994 version of the UNICEF document "State of the world's Children" it is postulated that certain countries are unable to achieve a reasonable level of health because of a downward **PPE spiral of three negative influences:**

Poverty

Population overgrowth

Environmental degradation

In order to combat this downward spiral they propose a triple upward spiral of three positive elements:

Education especially of girls

Family Planning

Health interventions with special Nutrition supplementation.

They hoped that the reinforcing effect of these three would counteract the downward PPE spiral.

Over the last decade it has become obvious that the main constraint to achieving the goals of Alma Ata has been weakness in health financing. Thus the World Bank became a major player in trying to identify the problem areas and suggesting solutions.

3. The World Bank's assessment on economic and other factors that influence health. (from World Development Report 1993: "Investing in health")

They introduced a relatively new tool to help identify the main problems of ill-health.

Disability adjusted life years (**DALYs**) are used as instruments to measure the global burden of disease. These measure the combined loss of full health, weighting mortality, morbidity and disability into one estimate. Using these tools they identified certain areas where little had been achieved over the last decades in resolving major problems. These include increasing problems of tobacco consumption, malaria, trauma and other non-communicable diseases.

Lost DALYs in the world in 1990 (millions per year)

<i>Infectious diseases</i>	total	495
Respiratory infections		123
Diarrhoeal diseases		99
Tuberculosis		46
Malaria		36
Measles		34
HIV/ AIDS		30
Ascaris infestation		10
Schistosomiasis		5
<i>Heart and circulatory diseases</i>		256
<i>Trauma</i>		162
<i>Malnutrition</i>		101
<i>Perinatal complications</i>		99
<i>Malignant neoplasms</i>		79
<i>Complications of pregnancy/delivery</i>		30

Overall they identified weaknesses in the present health strategies in the world.

The health system problems

The allocation of resources is to cost-ineffective interventions.

There are inequalities in expenditure on affluent populations and tertiary hospitals.

There are inefficiencies in the use of drugs and other resources.

Some countries have exploding costs related to increasing numbers of doctors, new technologies and the fee-for-service payment system.

Proposed solutions

Enable households to improve health through:

- pursuing economic growth
- expanding schooling for girls
- promoting the rights and status of women
- improving government spending on health
- reducing spending on tertiary facilities and cost-ineffective care
- increasing spending on public health interventions
- ensuring delivery of essential clinical services
- improving health management, health planning and decentralization.

Promoting diversity and competition :

- encourage social and private insurance
- encourage competition for supply of services
- increase availability of information on provider performance.

Major preventable risk factors for disease in the world in 2000

Risk factors	% of total disease burden
Under nutrition	15%
Over nutrition	13%
Unsafe sex	6%
Tobacco	4%

	8
Alcohol	4%
Unsafe water, sanitation and hygiene	4%
Indoor smoke from solid fuel	3%

4. Global Burden of Disease

In 1992 a major initiative was launched by the World Bank, in collaboration with the World Health Organization, to try to study the impact that various diseases had on global health. This study involved more than 100 scientists from more than 20 countries over 4.5 years. The results were published in 1996/7 in landmark articles in Science and the Lancet as well as several massive tomes containing the details of results. The study aimed to discover what were the main causes of death and ill-health in 1990 and more specifically to see the impact of 483 conditions which affect health. These were divided into three groups:

Group 1: communicable diseases, maternal causes, conditions arising in the perinatal period and nutritional deficiencies.

Group 2: non-communicable diseases.

Group 3: all injuries whether intentional or unintentional.

During the study the measure of ill-health that has already been mentioned, DALY's was developed to try to put death, morbidity and disability on a similar scale so as to estimate the comparative impact of various conditions on health. The figures above in the section about the World Bank come from these studies

It was estimated that 50.5 million people died during 1990 and for 13.8 million of these medical certificates of the cause of death were available. These were not accepted on face value but studied in more detail in order to remove miscodings and mistakes. For the other 70% of deaths, studies were undertaken to estimate as far as was possible the likely causes of death.

The 11 top causes of death globally in order were estimated to be:

Ischaemic heart disease, cerebrovascular disease, lower respiratory tract infections, diarrhoeal diseases, perinatal diseases, chronic obstructive pulmonary disease, tuberculosis (HIV positive excluded), measles, road-traffic accidents, trachea, bronchus and lung cancers, and malaria. For more details see the section about the World Bank.

Yet despite many gloomy assessments of the global health situation, there are many areas where interventions have been very successful.

Cost-effectiveness of Health Interventions

Here follow some figures from a study in Guinea (1998) carried out by the World Bank showing the cost-effectiveness of some interventions. *Any intervention with a cost-effectiveness of US\$100 per life year saved (LYS) or less is very cost-effective.*

1. Health centre treatment of childhood pneumonia	\$3 / life year saved (LYS)
2. Rehydration therapy for diarrhoea	\$7 / LYS
3. IMCI treatment of pneumonia, malaria, diarrhoea	\$8 / LYS
4. Short-course treatment of tuberculosis	\$12 / LYS
5. Treatment of childhood malaria	\$13 / LYS

6. Childhood vaccination	\$25/LYS
7. Impregnated bed-nets for malaria	\$43/LYS
8. Family planning, prenatal and delivery care at RHC	\$109/LYS
9. Outreach programme to provide prenatal and delivery care	\$283/LYS

A minimum package of health services costs \$13/capita and would address 69% of the major causes of premature mortality.

As can be seen from the above figures, child health is cheaper and easier to improve than maternal health. The following presentation of trends in child health gives hope:

The health of children has improved globally

The overall Child Mortality Rate (under-5-mortality rate) for the world has gone down from 195/1000 live born in 1960 to 51/1000 in 2011, the biggest improvement in the world's history. The number of child deaths has gone down from 12.5 million 1990 to 6.9 million 2011.

However the gap between that group of countries who have the best child health and those with the worst has increased significantly with a 9-factor difference in 1970 and a 26-factor difference in 2005 (and a 29-factor difference in Sub-Saharan Africa).

Some examples of improved children's health

	Under-5 mortality rate			Maternal mortality ratio 2008
	1960	1990	2009	
Ethiopia	269	210	104	470
Guatemala	206	77	40	110
China	225	46	19	38
Sweden	20	7	3	5

Average life expectancy at birth has increased from less than 50 to more than 65 years since 1950 i.e. more than 15 years has been added to each human life in the last two generations.

Examples of improvement in dealing with specific diseases

Measles. In 1980 75 million became sick with measles and 2.5 million died.

In 1992 25 million became sick with measles and 1 million died.

In 2002 352 000 died from measles after launching the special measles initiative for Africa in 2001

In 2008 164 000 died.

In 2010 this figure was 139 300

In 2014 114 900 died

Diarrhoeal diseases

In 1980 4 million died.

In 1992 3 million died

Polio

In 1980 400 000 children were affected by paralytic polio.

In 1992 140 000 were affected.

In 2004 1300 were affected and 3 of the world's 6 regions are polio free

In 2011 620 were affected.

During the last 15 years **no single case of paralytic polio has been recorded from any of the Americas**. It was hoped that by the year 2012 it would have been wiped out completely globally. This has not been fulfilled and if it is not achieved, within a decade 250,000 will be paralyzed a year. **In 2015 the WHO announced that Africa as a continent is now free from Polio** after a massive vaccination campaign but it is a fragile achievement because of the conflicts especially in Nigeria and Somalia, the last two countries in Africa to have reported Polio in 2014. In fact Global Polio eradication is the largest-ever internationally-coordinated public health effort in history. It is spearheaded by national governments, WHO, Rotary International, the US Centers for Disease Control and Prevention (CDC) and UNICEF, and is supported by key partners including the Bill and Melinda Gates Foundation. Underpinning the effort is a global network of more than 20 million volunteers worldwide who have collectively immunized nearly 3 billion children over the past 20 years. Some feel that the lop-sided focus on Polio eradication has led to less funding for much more cost-effective, broader scope health measures with many more benefits.

Whooping cough

In 1980 700 000 died.

In 2011 295 000 died

Neonatal tetanus

In 1980 1.1 million newborns died.

In 2004 128 000 died

HIV/AIDS.

The spread of HIV / AIDS has been halted or reversed in many parts of Sub-Saharan Africa and the number on treatment has increased from 14% in 2005 to 53% in 2009. However Sub-Saharan Africa is still the worst affected region in the world and will be so for the foreseeable future. In this region the two main risk factors seem to be riches and lack of social cohesion as often seen in urban settings.

Challenges of Urbanisation

Since 2007 urban populations have exceeded rural. Urban populations contribute more than 60% of greenhouse gases, 75% of energy consumption. They are more vulnerable to the effects of climate change. There is a tendency to a less healthy life-style with use of unsuitable processed food, sedentary behaviour, more smoking and higher alcohol and substance abuse. There is more obesity. Poverty is now more pronounced in urban slums than in rural areas. In Embakasi slum in Nairobi the Child mortality ratio is 254/1000 whereas in the rest of Nairobi it is 62/1000. One third of urban dwellers, 1 billion, live in slums, informal dwellings or side-walk tents. 90% of urban slums are in developing countries.

There are 3 main threats in slums:

1. Infectious diseases exacerbated by poor living conditions. 32% of those living in developing cities lack access to improved sanitation and 170 million do not even have access to the simplest latrine. 70% of urban dwellers in least developed countries use solid fuel for household heating and cooking. In 2004 exposure to indoor air pollution caused 2 million deaths from pneumonia, cancers and chronic lung diseases.
2. Non-communicable diseases will increase rapidly with the more common unhealthy life style of urban areas. This will lead to a rise in heart disease, cancers and diabetes.
3. Accidents, injuries, road accidents, violence and crime are more pronounced in urban slums.

Health gains must be placed into the context of overall development.

Amartya Sen 1999:

Development is the desired change from a life with many sufferings and few choices to a life with satisfied basic needs and many choices, made available through the sustainable use of natural resources. By making sure that all girls get education such that they can help themselves a whole culture can be changed.

What about the future?

In September 2000 World Leaders approved the Millenium Declaration at the United Nations. This included the following goals, three of which are directly health-related.

5. Millenium Development Goals (most targets in relation to 1990)

Goal 1 Eradicate extreme poverty and hunger. *Target 1:* Halve between 1990 and 2015 proportion of absolute poor (income <\$1.25/day PPP). *Target 2:* Halve between 1990 and 2015 the proportion of hungry people.

Goal 2 Achieve universal primary education. *Target 3:* Ensure that by 2015 all able to complete primary schooling.

Goal 3 Promote gender equality and empower women. *Target 4:* Eliminate gender disparity in primary and secondary education by 2005 and at all education levels by 2015.

Goal 4 Reduce Child Mortality. *Target 5:* Reduce under-5 mortality by 2/3 by 2015

Goal 5 Improve Maternal Health. *Target 6:* Reduce Maternal Mortality Ratio by 3/4 before 2015

Goal 6 Combat HIV/AIDS, malaria and other diseases. *Target 7:* have halted by 2015 and begun to reverse the spread of HIV/AIDS. *Target 8:* Have halted and by 2015 begun to reverse the incidence of malaria and other major diseases.

Goal 7 Ensure environmental sustainability. *Target 9:* Integrate principles of sustainable development into country policies and reverse loss of environmental resources. *Target 10:* Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation.

Goal 8 Develop a global partnership for development

For the first time ever an International Health Declaration seemed, when launched, to have a chance of succeeding in many of the goals and targets, provided the momentum of enthusiastic involvement of economists, health planners, politicians and NGOs was maintained. The goal least likely to succeed was the ambitious goal for improved maternal health where almost no change for the better had occurred in least developed countries up to 2005.

The figures for 2005 when at last released showed that the Global MMR has declined by less than 1% per year (a decline of 5.5% is needed to attain the MDG target). In Sub-Saharan Africa the decline had been 0.1% annually and with the confidence intervals quoted it is doubtful if any decline had occurred. 14 countries have an MMR more than 1000/100 000 and 13 of these are in Sub-Saharan Africa. Afghanistan is the remaining country. The latest figures are more optimistic but there are still doubts about validity since estimations are notoriously unreliable from many of the poorest countries with the highest MMR.

Sub-Saharan Africa is the region most lagging behind. Here 32% are still malnourished. Of the 34 countries with Child Mortality Ratios >100/1000, 33 are in SSA (Afghanistan is the other). In SSA the number of TB cases is higher in 2008 than in 1990. 330 million in SSA do not have access to

improved water supplies and 565 million to improved sanitation.

The remaining challenges in this region are still enormous but achievable with good funding and well implemented health programmes.

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Breaking news:

16 SEPTEMBER 2014 | NEW YORK - New data released today by the United Nations show that under-five mortality rates have dropped by 49% between 1990 and 2013. The average annual reduction has accelerated – in some countries it has even tripled – but overall progress is still short of meeting the global target of a two-thirds decrease in under-five mortality by 2015.

New estimates in "Levels and Trends in Child Mortality 2014" show that in 2013, 6.3 million children under five died from mostly preventable causes, around 200 000 fewer than in 2012, but still equal to nearly 17 000 child deaths each day.

"There has been dramatic and accelerating progress in reducing mortality among children, and the data prove that success is possible even for poorly resourced countries," said Mickey Chopra, head UNICEF's of global health programmes. "There is now a gathering momentum from countries in every part of the world to make sure proven, cost-effective interventions are applied where they will save the most lives."

In 2013, 2.8 million babies died within the first month of life, which represents about 44% of all under-five deaths. About two-thirds of these deaths occurred in just 10 countries. While the number

of neo-natal deaths have declined, progress has been slower than for the overall under-five mortality rate.

In June this year, WHO, UNICEF and partners issued the first-ever global plan to end preventable newborn deaths and stillbirths by 2035. **The Every Newborn Action Plan** calls for all countries to take steps to provide basic, cost-effective health services – in particular around the time of childbirth, as well as for small and sick babies – and to improve the quality of care.

"The global community is poised to end preventable maternal, newborn and child deaths within a generation."

Dr Flavia Bustreo, WHO Assistant Director-General

"The global community is poised to end preventable maternal, newborn and child deaths within a generation," said Dr Flavia Bustreo, Assistant Director General at WHO. "We know what to do and we know how to do it. The challenge now is to move from plan to action – we are pleased to see countries like India beginning to lead the way."

Among the report's other major findings:

Eight of the 60 countries identified as 'high mortality countries' – with at least 40 under-five deaths for every 1000 live births – have already reached or surpassed the MDG target (67% reduction). The countries are Malawi (72%), Bangladesh (71%), Liberia (71%), Tanzania (69%), Ethiopia (69%), Timor-Leste (68%), Niger (68%) and Eritrea (67%).

Eastern Asia, Latin America and the Caribbean and Northern Africa, have already reduced the under-five mortality rate by more than two-thirds since 1990.

Two countries, India (21%) and Nigeria (13%), together account for more than one-third of deaths among children below 5 years of age.

While Sub-Saharan Africa has cut under-five mortality rates by 48% since 1990, it still has the world's highest rate – 92 deaths per 1000 live births – nearly 15 times the average in high-income countries.

Children born in Angola, which has the highest under-five mortality rate in the world (167 deaths per 1000 live births), are 84 times more likely to die before the age of five than children born in Luxembourg, with the lowest rate (2). Within countries, relative wealth, education, and location are key – a child's risk of dying increases if she or he is born in a remote rural area, into a poor household or to a mother with no education.

The leading causes of under-five deaths are pre-term birth complications (17%); pneumonia (15%); complications during labour and delivery (11%); diarrhoea (9%); and malaria (7%). Under-nutrition contributes to nearly half of all under-five deaths.

"For continued progress, it is essential to invest more in health systems that deliver high-quality, affordable services to all women and children who need them," said Olusoji Adeyi, Director of Health, Nutrition and Population at the World Bank Group.

The report notes that major improvements in child survival are in part due to affordable, evidence-based interventions against the leading infectious diseases, such as immunization, insecticide-treated mosquito nets, rehydration treatment for diarrhoea, nutritional supplements and therapeutic foods. The major causes of neonatal mortality – pre-term birth complications (35%) or problems during delivery or birth (24%) – require health interventions closely linked with protecting maternal health.

UNICEF's report from 2012 on progress in MDG 4

In the last decade alone, progress on reducing child deaths has accelerated, with the annual rate of decline in the global under-five mortality rate rising from 1.8% in 1990-2000 to 3.2% in 2000-2011.

Between 1990 and 2011, nine low-income countries — Bangladesh, Cambodia, Ethiopia, Liberia, Madagascar, Malawi, Nepal, Niger and Rwanda — reduced their under-five mortality rate by 60% or more.

Nineteen middle-income countries, among them Brazil, China, Mexico and Turkey, and 10 high-income countries, including Estonia, Oman, Portugal and Saudi Arabia, are also making great progress, reducing under-five mortality by two-thirds or more over the same period.

On average, around 19,000 children die daily from preventable causes.

More than four-fifths of all under-five deaths in 2011 occurred in sub-Saharan Africa and South Asia. Given the prospect that these regions, especially sub-Saharan Africa, will account for the bulk of the world's births in the next years, we must give new impetus to the global momentum to reduce under-five deaths.

Pneumonia is the leading killer of children under 5, causing 18% of all child deaths worldwide — a loss of roughly 1.3 million lives in 2011. Most of these deaths occur in sub-Saharan Africa and South Asia.

Diarrhoea is still a major killer of children under 5, although its toll has dropped by a third over the past decade, from 1.2 million deaths in 2000 to 0.7 million in 2011. Diarrhoeal diseases now cause about 11% of child deaths worldwide. Nine-tenths of these deaths occur in sub-Saharan Africa and South Asia. Deaths are largely preventable through optimal breastfeeding practices (non-breastfed children are 11 times more likely to die of diarrhoeal disease than exclusively breastfed children), adequate nutrition, vaccinations (including for rotavirus), handwashing with soap, and safe drinking water and basic sanitation, among other measures. Open defecation, which is still practised by around 1.1 billion people worldwide, remains a major contributing factor to diarrhoeal disease.

Effective treatment of diarrhoeal disease rests on three key interventions: administration of oral rehydration salt (ORS) solutions to prevent life-threatening dehydration; continued feeding; and zinc supplementation. ORS is the 'gold standard' for rehydration therapy; a formulation developed in the early 2000s (low-osmolarity ORS) has improved overall outcomes. Continued feeding supports fluid absorption and nutritional status. Zinc, a recently added component of standard diarrhoeal treatments, reduces the duration and severity of illness.

These inexpensive life-saving treatments remain inaccessible for the vast majority of children in the poorest countries, and those in the poorest groups within countries. Even more worrisome is the lack of any real progress in expanding treatment coverage since 2000. Globally, less than 1/3 of children with diarrhoea receive ORS. Zinc use is also low.

Malaria is among the biggest killers of children under 5, accounting for 7% of child deaths worldwide — a loss of roughly 0.5 million lives in 2011. Nearly all of these deaths occur in sub-Saharan Africa. Nevertheless, the last decade has seen substantial gains in combating malaria transmission and reducing deaths. Global financing for malaria control has risen substantially over the past decade, thanks in large part to efforts by the Global Fund to Fight AIDS, Malaria and Tuberculosis; the US President's Malaria Initiative; and the World Bank Malaria Booster Program.

The proportion of children U-5 in Africa sleeping under ITNs has risen from 2% in 2000 to 38% in 2010, with some countries attaining levels of over 60%

About 40% of all under-five deaths are neonatal, occurring during the first 28 days of life; in 2011 this amounted to 3 million deaths worldwide. The heaviest burdens are in South Asia and sub-Saharan Africa, which have both the highest neonatal mortality rates among regions and the largest numbers of annual births.

The majority of neonatal deaths result from complications in preterm birth (<37 completed weeks of gestation) or from complications during birth.

An estimated 287,000 maternal deaths occurred in 2010. The lifetime risk of maternal mortality (the probability that a woman will die from complications of pregnancy and childbirth over her lifetime), is 1 in 39 in sub-Saharan Africa, compared with a lifetime risk of 1 in 4,700 in wealthy countries.

Radio report 13-09-02

Globally 1 million children under 5 die because of absence of breast-feeding and its replacement by bottle feeding.

Costello et al and Nepal study of Neonatal deaths and MMR - Lancet

Summary Background Neonatal deaths in developing countries make the largest contribution to global mortality in children younger than 5 years. 90% of deliveries in the poorest quintile of households happen at home. We postulated that a community-based participatory intervention could significantly reduce neonatal mortality rates.

Methods We pair-matched 42 geopolitical clusters in Makwanpur district, Nepal, selected 12 pairs randomly, and randomly assigned one of each pair to intervention or control. In each intervention cluster (average population 7000), a female facilitator convened nine women's group meetings every month. The facilitator supported groups through an action-learning cycle in which they **identified local perinatal problems and formulated strategies to address them**. We monitored birth outcomes in a cohort of 28 931 women, of whom 8% joined the groups. The primary outcome was neonatal mortality rate. Other outcomes included stillbirths and maternal deaths, uptake of antenatal and delivery services, home care practices, infant morbidity, and health-care seeking. Analysis was by intention to treat.

Findings From 2001 to 2003, the **neonatal mortality rate was 26.2 per 1000** (76 deaths per 2899 livebirths) in **intervention clusters** compared with **36.9 per 1000** (119 deaths per 3226 livebirths) in **controls** (adjusted odds ratio 0.70 [95% CI 0.53–0.94]). Stillbirth rates were similar in both groups. The **maternal mortality ratio was 69 per 100000** (two deaths per 2899 livebirths) in **intervention clusters** compared with **341 per 100000** (11 deaths per 3226 livebirths) in **control clusters** (0.22 [0.05–0.90]). Women in intervention clusters were more likely to have antenatal care, institutional delivery, trained birth attendance, and hygienic care than were controls.

These preliminary impressive results are now being tested in several other settings and the first results from India were equally impressive but from Bangladesh less so. Bigger studies are underway.

Are we nearly there yet? MDG Targets (2013 MDG report)

Poverty: 1/2 the prop. of people living in extreme poverty:	1990	2010-12
	46.7%	22% -2010

Hunger: halve the proportion of hungry people	18.6%	12.5% -12
Education: ensure all children can complete primary school	81.9%	91.2% -11
Gender equality: end gender disparities in schools*	0.88	0.97 -11
Child mortality: cut U5MR/ 1,000 live births by two thirds	87	50 -12
Maternal mortality: cut MMR/ 100,000 live births 75%	400	210 -10
HIV and Aids: halt/begin to reverse spread of HIV / AIDS	0.08	0.06 -11
Water: 1/2 prop. of people: no access to safe drinking water	24%	11% -11
Sanitation: 1/2 prop. of people: no access to basic sanitation	51%	36% -11

The challenges in Health and development after 2015

References to: Sachs Jeffrey. The end of poverty. How we can make it happen in our lifetime. 2005 Penguin Books. London.

6 traps are major barriers to improved health and development

1. **Poverty trap** - p. 56 and 57 in Sachs
2. **Debt trap** - p. 59 debt overhang
3. **Demographic trap** - p. 64-66, Fig 1 p. 65
4. **Gender trap** - p. 60, 72
5. **Disease trap** - p. 86 esp malaria and HIV / AIDS in SSA map 11 - p. 196-200
6. **Geographical and climate trap** - p. 86 for Africa, 208; contrast Great Britain 33-35

People's Movements

The breadth of changes can only be realized by coopting the best resources and inspiration of local communities in people's movements. Peoples' movements, can when best, stimulate a tidal wave of determination for initiating and sustaining change. This can be coupled to competent management and skilled clinical, public health and other development and health activists who dedicate themselves wholeheartedly to the needs of the poorest, unite with people's movements in ensuring that health and development benefits reach everyone.

To change radically the desperate plight of the 1 billion poorest and most deprived people in the world there will need to be not just thousands, but tens of thousands of people's movements similar to the ones that in Sweden in the late 1800's transformed the prospects of the utterly destitute and the most deprived. There will need to be not just tens of thousands but millions of

people in these movements who catch the vision of a better, healthier and more equitable future for all mankind.

Breaking News on Ebola Virus Disease (EVD) outbreak

In August 2014, an Emergency Committee was convened by the Director-General of WHO under the International Health Regulations (2005) [IHR 2005], which informed the Director-General's decision on 8 August 2014 to declare the Ebola outbreak a Public Health Emergency of International Concern and issue several Temporary Recommendations to reduce the risk of international spread. As of 27 August 2014, the cumulative number of Ebola cases in the affected countries stands at more than 3000, with over 1400 deaths, making this the largest Ebola outbreak ever recorded, despite significant gaps in reporting in some intense transmission areas. An unprecedented number of health care workers have also been infected and died due to this outbreak.

National authorities in the affected countries have been working with WHO and partners to scale-up control measures. However, the EVD outbreak remains grave and transmission is still increasing in a substantial number of localities, aggravating fragile social, political and economic conditions in the sub-region and posing increasingly serious global health security challenges and risks.

The Ebola response activities to date have generated significant knowledge on the effectiveness and limitations of current approaches, highlighting key areas for course corrections. Clearly, a massively scaled and coordinated international response is needed to support affected and at-risk countries in intensifying response activities and strengthening national capacities. Response activities must be adapted in areas of very intense transmission and particular attention must be given to stopping transmission in capital cities and major ports, thereby facilitating the larger response and relief effort.

This updated and more comprehensive roadmap builds on current, country-specific realities to guide response efforts and align implementation activities across different sectors of government and international partners.

Breaking News on Health impact of Alcohol Abuse

12 May 2014 Worldwide, 3.3 million deaths in 2012 were due to harmful use of alcohol, says a new report launched by WHO today. Alcohol consumption can not only lead to dependence but also increases people's risk of developing more than 200 diseases including liver cirrhosis and some cancers. In addition, harmful drinking can lead to violence and injuries.

The report also finds that harmful use of alcohol makes people more susceptible to infectious diseases such as tuberculosis, HIV and pneumonia.

The "Global status report on alcohol and health 2014" provides country profiles for alcohol consumption in the 194 WHO Member States, the impact on public health and policy responses. "More needs to be done to protect populations from the negative health consequences of alcohol consumption," says Dr Oleg Chestnov, WHO Assistant Director-General for Noncommunicable Diseases and Mental Health. "The report clearly shows that there is no room for complacency when it comes to reducing the harmful use of alcohol."

Some countries are already strengthening measures to protect people. These include increasing taxes on alcohol, limiting the availability of alcohol by raising the age limit, and regulating the marketing of alcoholic beverages.

Report highlights

The report also highlights the need for action by countries including:

- national leadership to develop policies to reduce harmful use of alcohol (66 WHO Member States had written national alcohol policies in 2012);
- national awareness-raising activities (nearly 140 countries reported at least one such activity in the past three years);
- health services to deliver prevention and treatment services, in particular increasing prevention, treatment and care for patients and their families, and supporting initiatives for screening and brief interventions.

In addition the report shows the need for communities to be engaged in reducing harmful use of alcohol.

On average every person in the world aged 15 years or older drinks 6.2 litres of pure alcohol per year. But as less than half the population (38.3%) actually drinks alcohol, this means that those who do drink consume on average 17 litres of pure alcohol annually.

The report also points to the fact that a higher percentage of deaths among men than among women are from alcohol-related causes - 7.6% of men's deaths and 4% of women's deaths – though there is evidence that women may be more vulnerable to some alcohol-related health conditions compared to men. In addition, the authors note that there is concern over the steady increase in alcohol use among women.

“We found that worldwide about 16% of drinkers engage in heavy episodic drinking - often referred to as ‘binge-drinking’ - which is the most harmful to health,” explains Dr Shekhar Saxena, Director for Mental Health and Substance Abuse at WHO. “Lower-income groups are more affected by the social and health consequences of alcohol. They often lack quality health care and are less protected by functional family or community networks.”

Globally, Europe is the region with the highest consumption of alcohol per capita, with some of its countries having particularly high consumption rates. Trend analysis shows that the consumption level is stable over the last 5 years in the region, as well as in Africa and the Americas, though increases have been reported in the South-East Asia and the Western Pacific regions.

Through a global network, WHO is supporting countries in their development and implementation of policies to reduce the harmful use of alcohol. The need for intensified action was endorsed in the landmark 2011 United Nations General Assembly meeting, which identified alcohol as one of four common risk factors* contributing to the non-communicable diseases (NCDs) epidemic.

Comment: We know from experience in Sweden in the mid and late 1800s the devastating impact on a whole country with alcohol abuse where Sweden was on the verge of collapsing as a functioning country. It was only the enormous changes that were brought about by a wide variety of temperance people's movements with many different backgrounds that Sweden came out of this crisis (see **people's movements** above). Today many organisations working with the wider field of all Substance Abuse are relearning the lessons of those dark days. An example is a Norwegian organization **FORUT** which is already seeing good results from very clear and practical programmes that have been developed with many local People's Movements and NGOs in many countries. The outline shows in the following:

A comprehensive strategy seems to give the best results; a combination of several interventions and activities. The “prevention triangle” may be a good guide to such a comprehensive strategy: with **Mobilization, Education and Regulation**

Control policies: Interventions by governments to reduce the availability of a substance and to

guarantee a safest possible production and distribution system; i.e. alcohol regulations and drug laws to reduce possibilities of children and youth obtaining substances for abuse. Finally something like Sweden's monopoly of Systembolaget may be possible

Education: Training of professionals, education of consumers, parents, youth etc and campaigns to raise awareness, challenge and motivate the public and to create an understanding of the need for control policies.

Mobilization: Make alcohol and drug prevention a part of the agenda for social and political movements, link the issue to other key policy issues and involve leadership and members of NGOs in practical activities.

Independence from vested interests

The multinational alcohol corporations have defined developing societies as their new and promising markets. They are termed "emerging markets" for beer and spirits products, and the younger generations of the Global South are seen as potential customers as their level of education and purchasing power increases.

In order to avoid conflicts of interest, government policies should be formulated without interference by vested interests and with promotion of public health as the primary goal. Simultaneously, civil society organisations should not interact with vested interests in policy formulation or receive funding from the alcohol industry.

Breaking News on Health impact of Tobacco use

NEJM Jan 8 2014 On the basis of current smoking patterns, with a global average of about 50% of young men and 10% of young women becoming smokers and relatively few stopping, **annual tobacco-attributable deaths will rise from about 5 million in 2010 to more than 10 million a few decades hence**, as the young smokers of today reach middle and old age. This increase is due partly to population growth and partly to the fact that, in some large populations, generations in which few people smoked substantial numbers of cigarettes throughout adult life are being succeeded by generations in which many people did so. There were **about 100 million deaths from tobacco in the 20th century**, most in developed countries. If current smoking patterns persist, **tobacco will kill about 1 billion people this century, mostly in low-income-countries.**

Reduce the use of tobacco in the community

This is only possible through the efforts of people's movements promoting a consensus to change the habitual behaviour with focus on young people below the age of 25 and especially below 20 yrs. If their peer groups can be persuaded to promote a smoke free generation the likelihood of their starting to smoke at a later age is very small.

This must be combined with widespread teaching through schools, the mass media, and advertizing against smoking. Films and advertizing advocating smoking should be banned. All public places of gathering should be free from all smoking. Taxation of all tobacco products should be high enough to discourage smoking. Tobacco farming should be, where possible, replaced by much more healthy crops which still give good profits.

Overview of MDG 2014

Fourteen years ago, the Millennium Declaration articulated a bold vision and established concrete targets for improving the existence of many and for saving the lives of those threatened by disease and hunger. There has been important progress

across all goals, with some targets already having been met well ahead of the 2015 deadline. All stakeholders will have to intensify and focus their efforts on the areas where advancement has been too slow and has not reached all.

Several MDG targets have been met:

1. **The world has reduced extreme poverty by half.** In 1990, almost half of the population in developing regions lived on less than \$1.25 a day. This rate dropped to 22 per cent by 2010, reducing the number of people living in extreme poverty by 700 million.
2. **Efforts in the fight against malaria and tuberculosis have shown results.** Between 2000 and 2012, an estimated **3.3 million deaths from malaria were averted** due to the substantial expansion of malaria interventions. About 90 per cent of those averted deaths—3 million—were children under the age of five living in sub-Saharan Africa. The intensive efforts to fight **tuberculosis** have **saved an estimated 22 million lives worldwide since 1995**. If the trends continue, the world will reach the MDG targets on malaria and tuberculosis.
3. Access to an **improved drinking water source** became a reality for **2.3 billion people**. The target of halving the proportion of people without access to an improved drinking water source was achieved in 2010, five years ahead of schedule. In 2012, 89 per cent of the world's population had access to an improved source, up from 76 per cent in 1990. Over 2.3 billion people gained access to an improved source of drinking water between 1990 and 2012.
4. **Disparities in primary school enrolment** between boys and girls are being eliminated in all developing regions. Substantial gains have been made towards reaching gender parity in school enrolment at all levels of education in all developing regions. By 2012, all developing regions have achieved, or were close to achieving, gender parity in primary education. The **political participation of women has continued to increase**. In January 2014, 46 countries boasted having more than 30 per cent female members of parliament in at least one chamber. More women are now holding some of the so-called "hard" ministerial portfolios—such as Defence, Foreign Affairs and the Environment.
5. **Development assistance rebounded**, the trading system stayed favourable for developing countries and their debt burden remained low. Official development assistance stood at **\$134.8 billion in 2013**, the highest level ever recorded, after two years of declining volumes. However, aid is shifting away from the poorest countries. 80 per cent of imports from developing countries entered developed countries duty-free and tariffs remained at an all-time low. The debt burden of developing countries remained stable at about 3 per cent of export revenue. Substantial progress has been made in most areas, but much more effort is needed to reach the set targets.

6. Major trends that **threaten environmental sustainability continue**, but examples of successful global action exist. **Global emissions of carbon dioxide (CO₂)** continued their upward trend and those in **2011 were almost 50 per cent above their 1990 level**. Millions of hectares of forest are lost every year, many species are being driven closer to extinction and renewable water resources are becoming scarcer. At the same time, international action is on the verge of eliminating ozone-depleting substances and the proportion of terrestrial and coastal marine areas under protection has been increasing.

7. **Hunger continues to decline**, but immediate additional efforts are needed to reach the MDG target. The proportion of undernourished people in developing regions has decreased from **24 per cent in 1990–1992 to 14 per cent in 2011–2013**. However, progress has slowed down in the past decade. Meeting the target of halving the percentage of people suffering from hunger by 2015 will require immediate additional effort, especially in countries which have made little headway.

8. **Child mortality has been almost halved**, but more progress is needed. Worldwide, the mortality rate for children under age five dropped almost 50 per cent, from 90 deaths per 1,000 live births in 1990 to 48 in 2012. Preventable diseases are the main causes of under-five deaths and appropriate actions need to be taken to address them.

9. **Much more needs to be done to reduce maternal mortality**. Globally, the **maternal mortality ratio dropped by 45 per cent between 1990 and 2013**, from 380 to 210 deaths per 100,000 live births. Worldwide, almost 300,000 women died in 2013 from causes related to pregnancy and childbirth. Maternal death is mostly preventable and much more needs to be done to provide care to pregnant women.

10. Antiretroviral therapy is saving lives and must be expanded further. **Access to antiretroviral therapy (ART) for HIV-infected people has been increasing dramatically, with a total of 9.5 million people in developing regions receiving treatment in 2012**. ART has saved **6.6 million lives since 1995**. Expanding its coverage can save many more. In addition, knowledge about HIV among youth needs to be improved to stop the spread of the disease.

11. **Over a quarter of the world's population has gained access to improved sanitation since 1990**, yet a billion people still resorted to open defecation. Between 1990 and 2012, almost 2 billion people gained access to an improved sanitation facility. However, in 2012, 2.5 billion people did not use an improved sanitation facility and 1 billion people still resorted to open defecation, which poses a huge risk to communities that are often poor and vulnerable already. Much greater effort and investment will be needed to redress inadequate sanitation in the coming years.

12. **90 per cent of children in developing regions are attending primary school**. The school enrolment rate in primary education in developing regions increased from 83

per cent to 90 per cent between 2000 and 2012. Most of the gains were achieved by 2007, after which progress stagnated. In 2012, 58 million children were out of school. High dropout rates remain a major impediment to universal primary education. An estimated 50 per cent of out-of-school children of primary school age live in conflict-affected areas.

The MDGs show that progress is possible, providing the platform for further action. The MDGs brought together governments, the international community, civil society and the private sector to achieve concrete goals for development and poverty eradication. Much has been accomplished through the concerted and focused efforts of all, saving and improving the lives of many people, but the agenda remains unfinished. The analysis presented in this report points to the importance of intensifying efforts to meet all MDG targets. The post-2015 development agenda is slated to carry on the work of the MDGs and integrate the social, economic and environmental dimensions of sustainable development. Continued progress towards the MDGs in the remaining year is essential to provide a solid foundation for the post-2015 development agenda.

Breaking News on Sustainable Development Goals

(This agenda was adopted by Member States at the Sustainable Development Summit in September 2015).

What are the proposed SDGs?

- 1 End poverty in all its forms everywhere
- 2 End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- 3 Ensure healthy lives and promote wellbeing for all at all ages
- 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- 5 Achieve gender equality and empower all women and girls
- 6 Ensure availability and sustainable management of water and sanitation for all
- 7 Ensure access to affordable, reliable, sustainable and modern energy for all
- 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
- 9 Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation
- 10 Reduce inequality within and among countries
- 11 Make cities and human settlements inclusive, safe, resilient and sustainable
- 12 Ensure sustainable consumption and production patterns

- 13 Take urgent action to combat climate change and its impacts (taking note of agreements made by the UNFCCC forum)
- 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss
- 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- 17 Strengthen the means of implementation and revitalise the global partnership for sustainable development

At the end of 2014, the UN Secretary General presented the synthesis report “The road to dignity by 2030” covering all the processes and reports related to post-2015, including the UN consultations.

What is UNDP's role with the SDGs?

Over the past three years, UNDP and the UN Development Group (UNDG) have been facilitating an unprecedented global conversation. This has connected with a diverse set of stakeholders, including vulnerable groups, women, young people, people with disabilities and the private sector, as well as all levels of the government.

The global conversation in numbers:

- 7.3 million people have ranked their priorities for the future via the MY World survey
- National consultations on the ‘world that people want’ in almost 100 countries
- 11 global thematic consultations via the World We Want website
- More than 4 million World We Want total page views and 7,000 visitors per month
- 6 consultations on means of implementation with more than 30,000 participants
- Innovative and illustrative governance goals piloted in 5 countries; pilot goals on disaster risk reduction in 5 countries
- Over 1 million qualitative contributions aggregated by the project’s People’s Voices Data Mining Tool

The key messages from the two reports ‘A Million Voices’ and ‘Delivering the Post-2015 Development Agenda,’ which summarize the findings from the global conversation, are clear: People want to be a part of delivering this new agenda, and to hold governments and businesses accountable for their promises and commitments. People stressed the importance of participation, inclusion, as well as strengthened capacities and partnerships.

After the eight Millennium Development Goals that have shaped progress in the past 15 years, 17 Sustainable Development Goals (SDGs) were adopted by governments at the UN General Assembly in September, 2015. SDG3 explicitly relates to health—to “Ensure healthy lives and promote well-being for all at all ages”. This goal is translated

into **13 targets: three relate to reproductive and child health; three to communicable diseases, non-communicable diseases, and addiction; two to environmental health; and one to achieving universal health coverage (UHC).**

Breaking news on Ebola in Sierra Leone and hope about new vaccine is in doubt. Jan. 25 2016

After the celebration that the Ebola epidemic in West Africa, especially Liberia, Sierra Leone and Guinea was over there has been a backlash. The vaccine that had been developed with what was said to be 100% effectivity is not relevant to this new strain of the virus

Two new Ebola cases have been confirmed in Sierra Leone, which indicates that the deadly virus is not controlled and is now in its “second generation,” the World Health Organization (WHO) said, adding that there’s currently no vaccine against it. *“It is the second generation... The second one is not controlled,”* Bruce Aylward, WHO’s Special Representative for the Ebola Response.

Outbreak of Zika virus, spread especially by the *Aedis aegypti* mosquito in South America and especially Brazil. Jan. 2016

The Zika virus was first identified in Africa and has now spread to a number of countries in South and Central America and even the USA.

Brazil says the number of babies born with suspected microcephaly or abnormally small heads since October 2015 has now reached nearly 4,000.

In the worst affected area, about 1% of newborns have suspected microcephaly. The Brazilian authorities believe the increase is caused by an outbreak of Zika virus. Just 150 babies were born with microcephaly in 2014. The brain condition can be deadly or cause intellectual disability and developmental delays.

Vigorous control programmes are now underway to bring the mosquito threat under control

Colombia’s Health Minister warns women to avoid becoming pregnant until the mosquito threat is under control.

Zika virus (ZIKV) is a member of the *Flaviviridae* virus family and the *Flavivirus* genus, transmitted by *Aedes* mosquitoes. In humans, it causes a mild illness known as Zika fever, Zika, or Zika disease, which since the 1950s has been known to occur within a narrow equatorial belt from Africa to Asia. In 2014, the virus spread eastward across the Pacific Ocean to French Polynesia, then to Easter Island and in 2015 to Central America, the Caribbean, and South America, where the Zika outbreak has reached pandemic levels.^[1] The illness is similar to a mild form of dengue fever,^[2] is treated by rest, and cannot be prevented by drugs or vaccines. Zika disease is related to yellow fever and West Nile disease, which are caused by other arthropod-borne flaviviruses. A link to microcephaly in newborns of infected mothers is now almost certain. In January 2016, the U.S. Centers for Disease Control and Prevention (CDC) issued travel guidance on affected countries, including the use of enhanced precautions and considering postponing travel, and guidelines for pregnant

women. Other governments or health agencies soon issued similar travel warnings, while Colombia, Ecuador, El Salvador, and Jamaica advised women to postpone getting pregnant until more was known about the risks and the mosquito threat is under control.

More evidence linking the Zika virus to birth defects in babies has been found, scientists in Brazil say. 2016-02-16

The team at the PUC-Parana University discovered the virus in the brains of two babies who only lived for 48 hours.

The mosquito-borne virus is thought to cause microcephaly in babies, who are born with damaged brains and abnormally small heads.

Brazil has about 460 confirmed cases of microcephaly, and is investigating about 3,850 suspected cases.

The virus has spread throughout Latin-America, but Brazil has been hardest hit

Scientists told the BBC that samples taken from the brain tissue of the two babies showed that the Zika virus was still actively present.

The scientists have been following the pregnancies of 10 women in the north-eastern state of Paraiba - the second worst-hit by cases of microcephaly.

One of the researchers who made the possible connection between Zika and brain defects, Dr Adriana Melo, told the BBC that cases she has seen in the north-east of Brazil "are never microcephaly alone" - but include other brain disorders such as dilated ventricles, calcifications and contractures to the joints. The BBC's Julia Carneiro in Rio de Janeiro says that the findings add more evidence to results announced last week by scientists in the US and Slovenia who detected the virus in samples from other babies with microcephaly.

On Saturday Brazil said it was deploying more than 200,000 soldiers across the country to warn people about the risks of the virus.

President Dilma Rousseff has insisted the crisis would not "compromise" the Olympics Brazil is hosting in August.

More than 5.5 million people worldwide are dying prematurely every year as a result of air pollution, according to new research (Feb. 13, 2016).

Most of these deaths are occurring in the rapidly developing economies of China and India.

The main culprit is the emission of small particles from power plants, factories, vehicle exhausts and from the burning of coal and wood.

The data was compiled as part of the **Global Burden of Disease Project**.

Scientists involved in the initiative say the statistics illustrate how far, and how fast, some nations must travel to improve the air their citizens breathe.

"In Beijing or Delhi on a bad air pollution day, the number of fine particles (known as PM2.5) can be higher than 300 micrograms per cubic metre," explained Dan Greenbaum from the Health Effects Institute, in Boston, US.

"The number should be about 25 or 35 micrograms."

Breathing in tiny liquid or solid particles can increase the risk of heart disease, stroke, respiratory complaints and even cancer. And while developed nations have made great strides in addressing this problem these past few decades, the number of citizens dying as a result of poor air quality in developing countries is still climbing.

According to the study, air pollution causes more deaths than other risk factors like malnutrition, obesity, alcohol and drug abuse, and unsafe sex. The Global Burden of Disease Project puts it as the fourth greatest risk behind high blood pressure, dietary risks and smoking.

Elderly factor

In China, there are said to be about 1.6 million deaths a year; in India, it is roughly 1.3 million. This data is from 2013, the most recent year for which it is available.

The key sources of pollution concern are slightly different in each nation, however.

In China, the dominant factor is particle emissions from coal burning.

The project calculates this source alone is responsible for more than 360,000 deaths every year.

And even though China has targets to restrict coal combustion and emissions in the future, it may struggle to bring down the number of deaths because it is acquiring an aging population and these citizens are naturally more susceptible to the illnesses associated with poor air quality.

"So, we think more aggressive policies are urgently needed to reduce the emissions from coal combustion and other sectors," stated project researcher Qiao Ma, a PhD student at Tsinghua University in Beijing.

In India, the problem that draws particular attention is the practice of burning wood, dung, crop residues and other materials for cooking and heating.

This "indoor pollution" causes far more deaths than "outdoor pollution".

And looking at the broad economic trends in India, the research team says the country runs the risk of having even poorer air quality in the future.

Chandra Venkataraman, from the Indian Institute of Technology Bombay, in Mumbai, warned: "Despite proposed emissions control, there is significant growth in the demand for electricity as well as industrial production.

"So, through to 2050, this growth overshadows the emissions controls (in our projections) and will lead to an increase in future air pollutant emissions in 2050 in India."

Cost benefit

Michael Brauer, from the University of British Columbia in Canada, said the statistics should make governments think hard about the scope of their anti-pollution policies.

They ought to spur greater ambition, he added.

"The trick here is to not take the 50 or 60 years that it took in the high income countries, and to really accelerate the process; and that's really where we think these statistics, the data, will come in handy," he told BBC News.

"In the US, we know that for every dollar spent on air pollution improvements, we can get between a \$4-\$30 benefit in terms of reduced health impacts."

The research team was presenting its findings here at the **annual meeting of the American Association for the Advancement of Science**.

Breaking News Beat Diabetes. Lancet April 9th 2016

The theme of this year's World Health Day on April 7—Beat diabetes—adds to a 2011 UN initiative to stem the rise in prevalence of diabetes by 2025, as well as to reduce premature deaths from non-communicable diseases, part of Sustainable Development Goal 3. In today's *Lancet*, the NCD Risk-Factor Collaboration (NCD-RisC) report that in 2014, an estimated 422 million people worldwide were living with diabetes—roughly a four-fold increase over the past 35 years. The NCD-RisC pooled data from 751 studies that measured either fasting plasma glucose or haemoglobin A1c to determine global and regional trends in diabetes prevalence. And, as Etienne Krug highlights in an accompanying Comment, these data "sound the alarm for large-scale, effective action".

The outlook for some regions is promising, with almost no changes in age-adjusted prevalence reported for both men and women in northwestern and southwestern Europe from 1980 to 2014, remaining below 6% for women and 8% for men. By contrast, in 2014, prevalence was higher than 25% in some islands of Polynesia and Micronesia, and as high as 31% and 33% for men and women, respectively, in American Samoa, which are also regions with high rates of obesity. These divergent statistics clearly show that beating diabetes on a global scale cannot be achieved with a one-size-fits-all approach.

Coinciding with World Health Day this year, WHO released its first ever *Global report on diabetes*. It reveals that in 2012, a total of 3.7 million deaths were attributable to higher-than-optimal blood glucose levels. The report calls for multi-sectoral, population-based approaches to help reduce risk factors for diabetes in the general population, and recommends a life-course perspective that instils healthy eating and physical activity from an early age to prevent type 2 diabetes later in life. Importantly, regulation of marketing, trade, and agricultural policies to promote healthier eating is also proposed.

The tide toward prevention is beginning to turn, albeit slowly. Last month, the UK Government announced the roll-out of Healthier You: The NHS Diabetes Prevention Programme, which offers personalised lifestyle and behavioural modification advice to individuals at risk of developing type 2 diabetes. In 2016, 20 000 referrals will be offered across 27 regions, with nationwide coverage and 100 000 annual referrals expected by 2020. According to the US Department of Health and Human Services, a pilot diabetes prevention programme tested in nearly 8000 people has shown that lifestyle counselling that encourages healthy eating and exercise improvements can lead to weight loss and diabetes prevention. Encouragingly, this is the first programme in the USA to prove an economic case for diabetes prevention, with estimated savings of US\$2650 per enrollee over a 15-month period. On this basis, the Obama Administration has proposed that the Diabetes Prevention Program be incorporated into Medicare for beneficiaries with pre-diabetes, as early as 2017. Prevention is of utmost importance, but for the more than 420 million people currently living with diabetes, managing their disease must remain the priority. WHO's report recommends a multidisciplinary approach with patient education, medication, and consistent follow-up. Furthermore, engaging patients in structured education programmes, such as [DAFNE](#), for individuals with type 1 diabetes, improves life expectancy, diabetes-related complications, and hypoglycaemic awareness, and reduces the financial burden of disease management. Given that 80–90% of cases are type 2 diabetes, which is linked to obesity and lifestyle, structured self-management programmes that can be delivered to large numbers of patients are urgently needed. We welcome such programmes, but more intensive efforts are needed. To this end, *The Lancet* and the Chinese University of Hong Kong announce a new Clinical Commission, led by Juliana Chan and Edward Gregg. The Commission will review available scientific evidence, analyse and evaluate existing policies to address diabetes, and devise a strategy and accountability framework for short, medium, and long-term solutions to address the growing unmet needs in diabetes prevention and control.

The massive increase in prevalence of diabetes, in particular type 2, is sobering. The NCD-RisC group estimates that if prevalence continues to rise at the rate of the past 15 years, the probability of halting global diabetes prevalence at 2010 levels by 2025 is less than 1%. Worldwide, the number of adults with diabetes will surpass 700 million. World Health Day 2016 is a prime opportunity for patients, the community, health-care providers, and policy makers to refocus efforts to end the diabetes epidemic. Immediate action is needed to avert this escalating health disaster.

Breaking News: Current arsenic in water, Bangladesh. Lancet April 9th 2016

Arsenic occurs naturally underground in parts of Bangladesh, and its contamination of rural water supplies first came to public attention more than two decades ago. Since then, the Bangladesh Government supported by donor agencies (including UNICEF and the World Bank) have collaborated to mitigate a growing water contamination crisis, with a focus on the installation of thousands of deep tube wells that source water from below shallower levels where traces of arsenic are often found.

A new report by Human Rights Watch released on April 6 highlights how the rural water crisis in Bangladesh is far from being resolved. The report paints a grim picture of villagers scarred with skin lesions, almost certainly caused by arsenic contaminated water; of neglected tube wells not being regularly checked for contamination; an absence of arsenic screening or treatment programmes from local health facilities; and details of a 2013 national survey of drinking water which showed how 12% of rural households—around 20 million people—were consuming water with arsenic concentrations above 50 µg/L, Bangladesh's safe water threshold.

Shockingly, the report also provides evidence of how the positioning of deep tube wells can sometimes represent a political manoeuvre by local government officials keen to garner support in a particular district, rather than the prioritisation of safe water provision to the areas at greatest risk of arsenic contamination.

The report is an urgent wake-up call for all players in Bangladesh's rural water supply, and for other governments and donor agencies focused on water and sanitation, where arsenic contamination may be a public-health threat. For Bangladesh, the report highlights the need for a renewed and sustained arsenic mitigation campaign. This will require an independent body to oversee service implementation by government, especially in its engineering and health departments; for donor agencies, funding needs to be closely monitored and followed through. Until all of Bangladesh's citizens have access to safe water, their right to health will remain scandalously denied.

Human resources for health - Investing in action. Lancet 16 April 2016

A strong workforce is essential for underpinning a resilient health system. In a letter in today's issue, Fouad M Fouad and colleagues highlight the heavy toll of civil war on Syria's health infrastructure and human resources. Such enduring crises lead to loss of vital health workers as a result of death or displacement to neighbouring countries, damage to and overburdening of health facilities, and interruption of health programmes. The exodus of skilled workers is not only challenging the delivery of humanitarian assistance but will also affect Syria's recovery.

Syria is not an isolated example of the human resources crisis. Natural as well as man-made disasters are also having a global impact. Most notably, the 2014 Ebola outbreak had significant repercussions for the health workforce in west Africa. Health workers were disproportionately affected by the epidemic, which exacerbated the pre-existing shortage and high attrition rate, particularly among nursing staff, as well as the poor working conditions and gaps in occupational health and safety. Effective policies are needed to ensure such large-scale losses are not permanent and to build health resilience and health security for the future. Investment plans have been crucial in west Africa, particularly strategies for cultivating a needs-based health workforce.

The human resources for health crisis is not new, nor are the challenges associated with addressing the problem. As dialogue on human resources for health first began to gain momentum, a special issue of *The Lancet* in 2008 identified several crucial factors for successfully scaling up production of health workers and solving health worker migration, and outlined the implications for the

financing of plans for human resources for health. Current needs mirror the early calls for action and the challenges, although evolving over time, remain much the same—the full commitment of all professionals and sectors in all phases of strategic development, sufficient and prolonged investment, and realistic objectives for implementation at local levels.

Substantial and sustained government investment in human resources, including training and education and research, is essential for the development of strong health systems capable of preventing, responding to, and recovering from emergencies. The evidence base for what interventions are successful remains inadequate and the lack of data on the extent and composition of the public health force is hindering progress. Human resources account for about 50% of health expenditure but less than 1% of research funding. The long-term revenue implications considered in isolation have been dissuasive, thus strong and country-specific arguments are needed to convincingly show that such investments will have far-ranging benefits. WHO, the International Labour Organization, and the Organisation for Economic Co-operation and Development have formed an [alliance](#) that aims to show that health workers are an investment not a cost.

Long-term commitment is crucial. While funding is needed for targeted short-term initiatives, these need to be considered in the context of a wider strategy. The current shortage of more than 7·2 million health workers worldwide is projected to increase to 12·9 million by 2035. Simply increasing numbers will not solve this deficit without addressing the broader issues, such as improved data, research and education, and efficient management of personnel. This needs to be done at the local level. A global one-size-fits-all approach cannot work. Strategies need to address the challenges posed by continuous changes in demand, need, and supply of the health workforce and the barriers to progress in individual countries, especially in low-income settings where migration of trained health workers to countries where remuneration and working conditions are better is common. In an attempt to address these challenges, WHO has developed a new [global strategy](#) for human resources for health for consideration by the 69th World Health Assembly in Geneva in May. The draft global strategy defines four core objectives around evidence-based policies, alignment of investments in human resources for health with current and future population needs, capacity of institutions for action, and accountability. The strategy provides general guidance and presents some of the evidence and arguments for investing in human resources at scale and over the long term, but the arguments have to be won country by country, government by government.

Alongside this approach, partnerships with a wide range of government and non-government agencies across sectors will be vital and global initiatives, such as the Global Fund and GAVI, will equally need to increase their investment in human resources for health. Serious commitment across all sectors is now needed. It is time to translate the current global dialogue into global action

Breaking News Lancet 2016-12-11 Universal Health Coverage

Universal Health Coverage (UHC) is defined by WHO and the World Bank as when “all people receive the health services they need without suffering financial hardship when paying for them”. UHC is central to the UN Sustainable Development Goals (SDGs), adopted in September, 2015, with a specified target in SDG 3—ensure healthy lives and promote wellbeing for all at all ages. The SDGs are interconnected but good health underlies them all. UHC has been acknowledged by the World Bank, WHO, the G7, and multiple governments as fundamental for realising the goal of sustainable development. Although some governments were unsupportive of UHC's inclusion in the SDGs (such as the UK), its inclusion created a clear objective, while also sending a strong and important political signal.

On Dec 12, 2016, the third annual International [Day of Universal Health Coverage](#) will be marked, and progress towards UHC discussed and celebrated globally. This year's theme is “health for all”, with a call to “act with ambition”. Several hundred partners, including global organisations such as The Rockefeller Foundation, WHO, the World Bank Group, and Oxfam, are behind the initiative, and all agree that the best way to achieve health for all is through UHC.

Further to consensus on the importance of good health for sustainable development, the UHC movement has also brought agreement about financing health. As Rob Yates, Senior Fellow at Chatham House, reported to *The Lancet*: “The remarkable consensus (given previous battles over the years) is that the countries should publicly finance their health systems if they want to achieve UHC.” Donor coordination to achieve UHC is crucial. That leaders such as Jim Kim of the World Bank and Margaret Chan of WHO are explicitly and repeatedly saying that UHC can only be achieved through public financing, sends the strongest possible message against health-care user fees: they must be abolished, and services must be provided free at the point of delivery. User fees inevitably punish the poor.

The emerging trend is for governments to take responsibility for financing their health systems, and not to pursue alternatives to public finance. Yet some countries remain complacent—including the UK. In not funding its health system adequately, the NHS share of GDP has declined and services are struggling. *The Lancet's NHS Manifesto* published in October drew attention to the pressures that threaten sustainability in the UK. Of particular concern is that the UK spends 30–50% per capita less on health than countries including Germany, Ireland, Australia, and Sweden.

During the past 3 years there have been several countries with notable success, but also local challenges. Georgia has recently successfully switched to a publicly financed health system. In India, the Modi government has been disappointingly inactive in supporting UHC, and has reduced the funding of national health programmes (although regional initiatives are emerging and show great promise). In this week's issue, a World Report describes a network of local Mohalla clinics that are successfully serving populations otherwise deprived of health services.

Increasingly, political leaders seem to be presenting a shared global vision for UHC. It is notable that so many former and current heads of state are active in promoting UHC: including Shinzō Abe, the Prime Minister of Japan, and other leaders of the G7. It would seem that political leaders are collectively more committed to UHC than to previous agendas around strengthening health systems (although this situation could change under President Trump). That UHC brings broad population benefits could in part explain this trend.

Next week, an important step towards the goal of UHC takes place in Geneva. In September, Margaret Chan announced the creation of the International Health Partnership for UHC 2030 (UHC 2030). The purpose of this new partnership is to coordinate efforts to strengthen health systems and deliver UHC, including financial risk protection. On Dec 12–13, UHC 2030 brings countries and agencies together to establish the partnership as a formal global health systems coordination platform. It will also seek commitments from all parties as to next steps in the movement towards UHC. 2017 will be a milestone year for UHC. It promises to be the moment when words are translated into deeds. UHC 2030's role is not only to ensure that this opportunity is seized but also that governments don't renege on their promises and commitments. For many readers of *The Lancet*, 2016 will be viewed as a dark year. As highlighted elsewhere in this issue (p 2971), ongoing civil conflict has led to record numbers of displaced people (around 65 million, just under 1% of the world's population). The aftershocks of democratic political revolutions on both sides of the Atlantic still resonate, with no clear path ahead and few grounds for optimism. Yet, by contrast, 2016 has also seen some striking successes in health: polio eradication has come tantalisingly close, with only 34 cases reported this year in three countries; and 30 million people were successfully

vaccinated against a raging yellow fever outbreak in DR Congo and Angola, a remarkable effort from the many agencies involved.

Breaking News: The Unifying effect of Health Lancet 2016-12-17

In clinical medicine, *The Lancet's* Commission on Hypertension highlighted an action plan to reduce the enormous burden of cardiovascular disease worldwide, a burden that could largely be prevented through non-pharmacological interventions—including improved diet and more physical activity. In 2017, a *Lancet* Commission on Dementia will focus on global efforts to bring together the best science to outline realistic and practical actions to reduce the onset and progression of this most profoundly debilitating and poorly understood disease. This is science in action. The challenge is translation. But sometimes the rationality of science can be thwarted.

A year ago, Zika was a little-known virus, yet it undoubtedly became the public health story of 2016. Zika virus may no longer be a Public Health Emergency of International Concern (as of Nov 18), but it remains a public health threat. And it has left a shadow of sadness and fear among millions of women and families exposed to its unpredictable dangers.

The International AIDS Society returned to its spiritual home of Durban, South Africa. It was in Durban in 2000 that the AIDS response went global. But not all those at risk of acquiring HIV have been treated equally. *The Lancet's* Series on HIV in prison communities sought to break further new ground by throwing light on this highly stigmatised population. Meanwhile, the latest Global Burden of Disease report, published in October, provided a framework for how comprehensive health data can be used in countries to serve as baseline performance measures for stronger and more effective accountability—monitoring, review, and action—within the 2030 Sustainable Development Goal era. 2017 will see *The Lancet* launch two new journals. *The Lancet Planetary Health* will be an open-access, online journal, focusing on the health of human civilizations and the ecosystems on which they depend. Its work, led by Editor-in-Chief Raffaella Bosurgi, will be supported by a *Lancet* Commission on Pollution and Health and a research-driven conference led by the Planetary Health Alliance, to be held in April, 2017. The birth of a new discipline is always a cause for excitement in medicine. We plan for *The Lancet Planetary Health* to become a leading source of reliable science for sustainability and health. *The Lancet Child & Adolescent Health*, led by Editor-in-Chief Jane Goddard, will build on more than a decade of work at *The Lancet* to promote the cause of child and newborn survival, ending stillbirths, early child development, and adolescent health. There can be no future for human civilizations without attention to the future of its 1.8 billion young people. *The Lancet Child & Adolescent Health* will seek to be the trigger for a new social movement for intergenerational equity.

Perhaps the biggest challenge for medicine in 2017 will be making tangible progress towards the goal of Universal Health Coverage (UHC). To that end, WHO will elect a new Director-General in May. His or her task will be to show that WHO can be more than a

talking shop for well meaning health advocates and public health scientists. It is not clear that a new Director-General can succeed. WHO may have been eroded beyond the point of recovery. But to demonstrate WHO's continuing value, his or her first priority must be to foster the political environment to accelerate implementation of UHC in countries. At its best, the health community can offer hope at moments of despair. In 2017, we will discover what a US Presidency led by Donald Trump actually means. Will it be as apocalyptic as some predict? Or will he be a model of business-like pragmatism? As 2016 draws to a close, it is perhaps worth reflecting on the unifying power of health. 2017 is likely to need that kind of optimism more than ever.

Breaking News: The possible impossibility of universal health coverage

Richard Horton Lancet 2017-01-13

Republicans eagerly assembled in the US Congress last week to formulate plans for dismantling President Barack Obama's signature health initiative—the Patient Protection and Affordable Care Act, 2010—which has extended health-care coverage to 20 million citizens. Although “repeal and replace” has now given way to a more pragmatic “repeal and delay”, the new Republican-controlled Congress has the power to torpedo further attempts to deliver universal health coverage for Americans. But if Congress succeeds, the US Government will have struck a deadly blow against the global effort to “achieve universal health coverage, including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all” (Sustainable Development Goal 3.8). Given the commitment of nations, including (paradoxically) the US, to the SDGs and Goal 3.8, delivery of universal health coverage will be the major metric by which the global health community, and WHO and its new Director-General in particular, will be judged in coming years. But is universal health coverage truly deliverable? Putting America's ideological proclivities to one side, are there forces overwhelming countries most in need of health care today, rendering their hope for universal health coverage a cruel illusion?

The most important threat to universal health coverage is rarely discussed in polite global health circles. The issue is seen as politically incorrect, jeopardising human rights, potentially coercive, and, anyway, far too pessimistic. But an unvarnished review of the figures should disavow such qualms. The biggest danger facing universal health coverage is the risk of already weak health systems being unable to offer high-quality health care, free of financial risk, to their rapidly rising populations. Look at projections (from the US Population Reference Bureau) out to 2050, beginning with sub-Saharan Africa. Between 2016 and 2050, sub-Saharan African nations will add 1.2 billion people to their already strained health systems (2016 population, 974 million; 2050 estimated population, 2.13 billion). That is a 118% increase. Nigeria will add 211 million people to its struggling political and social infrastructure (2016, 187 million; 2050, 398 million; a 113% increase). The Democratic Republic of Congo will see a 168% rise in its population (2016, 80 million; 2050, 214 million). A further 19 African countries (with 2016 populations over 10 million) will see their peoples more than double between now and 2050: Benin, Burkina Faso, Cote d'Ivoire, Guinea, Mali, Niger, Senegal, Togo, Burundi, Mozambique, Somalia, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe, Angola, Cameroon, and Chad. It is very hard to see how these increases, taking place over just two generations, can possibly be sustainable.

The population predicament for universal health coverage is not confined to sub-Saharan Africa. In South Asia, between 2016 and 2050, India will see its population grow by 379 million (or 29%) to 1.71 billion people. Pakistan, by 141 million (69%) to 344 million people. And Bangladesh, by 39 million (24%) to 202 million people. In North Africa, Egypt's population will grow by 75 million (81%) to 169 million people. Sudan, by 63 million (149%) to 105 million people. And Algeria, by 22 million (55%) to 63 million people. The Middle East, an existing region of great political instability, is not exempted. Iraq's population will increase by 101% (from 38 million to 77 million people). Afghanistan's population will rise from 33 million to 62 million people (87%). Yemen's population, from 28 million to 47 million people (71%). Resource-rich parts of the world will also see population increases, but in far more sustainable proportions. The Population Reference Bureau estimates a 5% growth in the population of more developed nations between 2016 and 2050—from 1.25 billion to 1.32 billion people. So what can be done? Some might argue that good political and economic stewardship can generate the fiscal space needed to invest in the health sector—especially if financing is targeted to sexual and reproductive health and rights—thereby avoiding a population-driven health system crisis. I am not so sure. Few of these nations give one confidence about the quality of their political leadership. To be sure, we should continue to champion the idea of universal health coverage. But we should be cautious about promising what we cannot deliver.