Too many chefs in Africa

– secondary publication

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ABSTRACT

Available interventions could prevent six out of ten million deaths in children younger than five years of age every year. The health sector and donor agencies bear responsibility for not using these interventions. The UN's Millennium Development Goals are a step in the right direction towards a focused approach. The poor and illiterates are most seriously affected by a low quality of care. The hospital sector suffered unreasonably in the 1980's and now has to fight a vicious circle of mistrust, low quality, collapsed administrative and professional institutions and lack of financing. New and old interventions should be evaluated constantly to maximise efficiency.

Child mortality fell rapidly in the 1980's concomitantly to the introduction of childhood measles vaccination but this momentum has lost since the beginning of the 1990's where the fall in child mortality has diminished. With vaccination coverage of less than 50% in some developing countries (DC) it has not been possible to decrease child mortality through this intervention. Very little has happened in terms of mortality from pneumonia among children in DC and a fall in neonatal mortality has been completely absent.

MILLENNIUM GOALS

By 2000 the UN agreed on eight development goals for 2015: *The Millennium Development Goals*. Three of these goals are directly aimed at health issues: reduction in child mortality, improved maternal health and reduction in prevalence of several diseases such as HIV and malaria. The high ambitions expressed by the goals has initiated several large-scaled global health initiatives such as *Global Fund to fight AIDS, TB and Malaria, Roll Back Malaria, and The Global Alliance for Vaccines and Immunization*.

FORESIGHT IN A SMALL MIND

There are available and well documented interventions that could prevent six of the ten million deaths among children under five that occur every year. However, political, religious and methodological research issues impede the process to reach at least some of the goals in some DC. The goals are meant as moral incentive and have been developed over more than a decade. Their fulfilment requires a long-term commitment with overall solutions and an obligation to establish the foundation for the necessary continuous funding. The goals have put a focus on capacity building and poverty reduction as crucial for process.

UNCERTAIN NUMBERS

The central parameter for child health in the 2015 goals is the reduction in under-five mortality and one of the most important sources to monitor this is the repeated demographic health surveys (DHS). However, it has been argued that the number of children participating in the surveys is too small to capture the changes in child mortality that is expected by 2015. With the uncertainty of mortality figures from the DHS it will not be possible to detect a fall in mortality with five year intervals [1].

Yet, uncertain data like this forms basis for donations to the health sector, and DC that are not able to demonstrate a reduction in child mortality will experience that donations are withheld or are blocked completely. Nevertheless, data from longitudinal demographic health surveillance research sites in DC follow child populations that are large enough to capture even smaller changes in child mortality [2].

On the contrary, donors have excluded long-term involvement with rapid diminishing resources for development aid, demands for short-term goals and lacking support of valid mortality data [3]. In an editorial in The Lancet 2004 it is concluded that biomedical research has failed to tackle the massive health problems in DC [4].

ABSTINENCE AND RELUCTANCE

The 2015 goals are a political manifest and should be seen in that context. There are urgent health problems that are not mentioned in the *millennium goals*. The significance of persistently low quality of care in DC health sectors as well as the poor dissemination of existing well proven health interventions like child immunizations are examples of this. A decline in maternal mortality is bound up with reproductive health, anti-conception and legal abortion but there is religious impediments that dictate non-evidence based interventions like sexual abstinence instead. Likewise there are health problems where available knowledge is deliberately not used: increasing birth spacing to 36 months or more can reduce under-five mortality by 35%. Ten years after the introduction of impregnated bed nets only 5% of under-five year old children sleep under a bed net in malaria areas.

INCREASING WORRIES

Many DC do not stand a chance of achieving the 2015 goals before 2015. The most worrying is that the countries farthest from the goals are those with the biggest chance of not achieving them. Many agree that the largest hindering to achieve the millennium goals is the health care system itself and the World Bank has pointed out that poverty and child mortality levels are increasing in some African countries [5, 6]. Donors are only just realising that an important bottleneck in health development is the weak and fragmented health care systems in DC that have lost the confidence of the population and are unable to deliver even the simplest services with a reasonable level of quality and coverage. Hospitals in DC suffered during the boost into public health campaigns in the early 1980's and now have to fight a vicious circle of low quality of care, lack of motivation and mistrust of the population. Donors on the other hand prioritise disease oriented vertical programmes with no intention of building capacity in the existing health care system. In WHO's *High Level Forum on Achieving the Health Millennium Goals* it has been pointed out that a major challenge now is to increase donor cooperation [7].

THE BITTEREST PILL OF THEM ALL: WE DON'T KNOW ENOUGH

The *Bellagio*-group on child mortality showed in a 2003 paper in The Lancet that there is a need for investments in how to translate rational knowledge into action but nothing has happened since then [8]. Research in pneumonia and diarrhoea among children, two diseases that are responsible for 50% of child deaths in DC, only constitute 1% of research funds in childhood diseases in DC.

In spite of the fact that interventions promoting simple hand washing reduces diarrhoea incidence at virtually no cost it is still large-scale water supply and sewerage projects that steal scanty funding for DC. We lack knowledge on why some good health information spreads rapidly while other (too simple?) information is left unused. Less than 3% of funding from National Institute of Health (NIH) and Gates Foundation goes to research in the dissemination of interventions. The past four years not a single US dollar has been given to better coverage of proven effective childhood vaccines like

Key points

We can potentially prevent six million out of ten million deaths among children under five years of age

We are not using the effective preventive measures we have to lower child mortality

We use ineffective and non-documented interventions

We lack knowledge on how to spread knowledge in developing countries

The health care system in developing countries deliver low quality care and this affects all social groups but is most significant among the poorest

There are too many and uncoordinated health programmes in developing countries

There is a need for long-term investments at all levels of the health sectors if the 2015 Millennium Health goals are to be reached

Most poor countries have no chance of reaching the 2015 goals while they are the countries in most need of reaching the same goals

the measles vaccine. There are however large areas of Africa where the coverage of this vaccine is less than 1%. By increasing coverage of existing interventions to 99% we would be able to lower under-five child mortality by 30-50%.

UNEXPECTED OBSERVATIONS

At the epidemiological level it is not uncommon to see that child mortality varies by up to 50% within geographically small areas and homogenously poor populations. At the individual level it is surprising that some poor mothers can bring all of their children through childhood without losing any of them, while her equally poor neighbour has lost more than half of her eight births. In Guiné-Bissau in the period 1998-2002 7% of mothers who lost a child were responsible for 34% of all child deaths in the same period. Some mothers lose more children, while others never lose a child. Death is not a random event and is highly determined by socio-economic conditions, but there are other factors that can weaken or re-enforce the effect of poverty. Two such factors would be social capacity and favouritism and if these factors are not taken into account when interventions are created we run the risk that the intervention does not reach those in most need of it: the poorest population groups. Health research is also about accepting the validity of unexpected observations. Such observations often arise within longitudinal studies of population groups over longer time spans (typically more than 10-15 years). Among others the Danish Bandim health research site in Guiné-Bissau has come up with such results.

A POOR CHOICE

Poverty and poor health condition fix people in a helpless situation: even if one intervention prevents a child from dying of malaria, the next year the child could die from measles because there are no vaccination campaigns in poorest and most rural areas. Discrimination by sex, ethnic belonging and religion further boost the vulnerability of the poor.

The poorest children in Indonesia have a four times higher risk of dying before they reach five years of age compared with children of the richest families in the same country. It is estimated that in 2000 99% of all under-five child deaths in the world took place in poor areas. The World Bank *Reaching the Poor* programme last year published a case report from 12 DC on health and disease in which they demonstrated that the richest 20% of these populations receive more of public health budgets than the poorest 20% [9].

SOME ARE DEADER THAN OTHERS

The poor are badly off, but other vulnerable groups like illiterates, rural populations, anemic or malnourished children, low birth weight children and very young mothers associated with poverty are also independent risk factors.

There are fundamental problems in the health care system in DC and these problems have consequences to all population groups regardless of social status although with varying impact. The child mortality problem in DC is not solved by an exclusive focus on the ultra poor. Their less poor fellow citizens are also exposed to low quality of care and violation of simple human rights in access to preventive and curative care. The richest population groups in Guiné-Bissau still have child mortality 30 times higher than an average Scandinavian level. Quality of preventive health care and care in DC is elementary different from what should be expected from professional well trained health care workers. If we fail to acknowledge the significance of this we are definitely facing serious problems in reaching the 2015 goals.

NO LABORATORY MODEL

In today's Western medicine it is impossible to introduce a pink child plaster without placebo controlled double blind studies, but in Africa it is possible to turn entire health care systems upside down without the least bit of evidence or scientific background. Child vaccines produced and tested under the past reality of European and American epidemics were introduced, without further testing in DC, with completely different patterns of disease transmission and morbidity burden with high incidences of diarrhoea and malaria as dummies in the game. Only now after 20-25 years of use the first studies on long term effects of child immunizations in DC have demonstrated that some of the vaccines in a best case scenario are useless and in a worst case scenario are detrimental to health [10]. User fees were tested in small hierarchal Muslim societies and thereafter introduced on a large scale as a principle all over Africa and has, like the decentralisation process, completely paralyzed the entire health system and only increased inequity in access to health care.

SHOOT FIRST – THEN ASK

This absence of a scientific base in public health in DC directly opposes a knowledge based development in the field and the responsibility for this rests on the shoulders of donor organisations, WHO, NGOs and national governments. The will and power to coordinate knowledge based development and constant learning by experience is simply not present. Decision makers should realize that every new health programme introduced kills one or more existing health programme or activity because resource allocation to health in DC is extremely limited.

One year they prioritise primary health care with free medicine, next year it is malaria prevention that is popular and then it is control of diarrhoeal diseases with oral rehydration that is important or a cholera epidemic calls for desperate health measures, then it is polio eradication campaigns because the vaccines were donated, vitamin-A in campaigns, every needs impregnated bed nets, two drug malaria treatment last year and now HIV treatment. The health care sector is forced to focus on the priorities of the donor organisations this year, while there is no national incentive to try and monitor efficacy and long-term consequences of these radical yearly changes. As a result we see a falling coverage of measles vaccination because health workers get the idea that this activity is no longer an important health activity.

TOO MANY CHEFS IN AFRICA

There are too many chefs in Africa: NGO's, WHO, UNICEF, UNDP, UNFPA, The World Bank, vertical disease programmes, relief organ-

isations, religious health programmes and hospitals, unregulated private clinics and national health authorities.

The national authorities have no available professional counsellors to help prioritise and coordinate the many offers from donors in relation to national health plans and future needs. The result is a fragmented and anarchistic health sector where simple diseases and trivial infections turn into a catastrophic social event that forces entire families to spend most of their savings and time on a substandard health product.

A KYOTO AGREEMENT ON HEALTH

The WHO is weakened economically and influentially these years. We need a strong international professional health institution that is the advocate for users of health care and capable of generating better knowledge on how to use sound evidence. The international board of health should create and govern a Kyoto agreement on health rights ensuring the foundation on which we can reach the 2015 health goals. (Box 1)

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