

ENRECA HEALTH danish research network for international health

GLOBAL HEALTH BEYOND THE MILLENNIUM DEVELOPMENT GOALS

Visions for public health priorities and
the corresponding health research agenda up to 2030

28–29 April 2011
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DAY 1: Welcome

Thursday 28 April 2011 at 9.00 -17.00,
Alexandersalen, University of Copenhagen, Bispetorvet 1-3, Copenhagen.

Ms Mette Holm (*independent journalist and consultant*) welcomed the 135 participants from 12 countries on behalf of the organizers – **ENRECA Health** (*Danish Research Network on International Health, www.enrecahealth.dk*) in partnership with the **Council on Health Research for Development** (*COHRED, cohred.org*), **Global Doctors** (*global-doctors.org*), **the Platform on Human Health** (*humanhealth.dk*), **the Platform for Stability, Democracy & Rights** (*stability-democracy-rights.dk*), and the **World Diabetes Foundation** (*worlddiabetesfoundation.org*). She described the task of the conference as developing the "MDGs 2.0" with respect to global health.

Prof Morten Sodemann (*Vice Chair, Enreca Health*) (view speech) framed the day's debate. The UN established the MDGs to address the spectacular inequities affecting the world's people, and the health-related MDGs are supposed to help ensure everyone's right to health in the poorest countries. Yet a decade on, vast inequities persist. It's time we took stock of the health MDGs and perhaps formulate new ones to reflect the shifting realities of global health, including urbanization and the increase in chronic disease.

Ten years ago, the biggest problem in global health was a perennial lack of resources. A surge in private and public giving has helped address that issue, yet this "age of generosity" has been undercut by poor coordination and a focus on a few high-profile diseases. Too often, donors tie aid to short-term targets when what we need is stronger health systems, better infrastructure and more health workers. Improving public health will require at least a generation of broad measures that address population well-being. Donors need to plan from the start how to strengthen local capabilities so that they can eventually transfer operations to local control. Health research must consider food security, the global economy, gender equity and climate variations. And war, even if the world's attention leaves conflict zones when the camera crews do.

Sodemann said that rapid urbanization makes planning almost impossible, while at the same time creating breeding grounds for health problems. It's become the fashion for donors to ask recipient countries to monitor their health systems, but then donors do little about the weaknesses identified. Meanwhile, researchers won't invest time or money in trying to communicate their results, while politi-

cians don't want to be confused with facts. Longitudinal surveillance sites, which examine health problems of various populations over time, are one excellent way to obtain better results while training health professionals locally (see *indepth-network.org*). The MDGs gave us a common goal, yet although many countries are on track to reach their targets, we never set up an information system that would explain their success.

GLOBAL HEALTH IN A CHANGING WORLD

Dr John Beard (*Director, Department of Ageing and Life Course, Department of Gender and Women's Health, WHO*) (view slides) outlined the major changes that are likely to affect global health in the coming years. Populations are aging, becoming more mobile, and moving to cities. Disease burdens have been shifting dramatically from communicable diseases to chronic diseases. While global prosperity has reached unprecedented levels, so has the gap between rich and poor. Finally, the health sector has seen striking advances in technology.

Beard emphasized, however, that we cannot respond appropriately to these 21st century conditions if we continue to employ 20th century thinking, particularly by compartmentalizing diseases and conditions, the elderly and the young, the rich and the poor. While some of the changes he outlined are often considered limited to developed nations, he presented evidence that showed how aging populations and the shift to chronic diseases apply as well to developing countries, where they lack the resources to address them. Most older people live in low- or middle-income countries, and population aging is in fact speeding up in both the developing and the developed world. He argued that while it is crucial to see old age as not just a challenge but an opportunity, most countries have a relatively small window of time – perhaps 30 years – in which to develop the infrastructure that will enable them to fully realize the human resource potential of older populations.

With respect to chronic, non-communicable diseases, many cost-effective preventive interventions are available (see box below); the challenge is to implement them. In doing so, it's important to recognize gender as a social determinant of health – and it's critical to address gender inequity at every stage of the life course. It is also necessary to address the health needs of older migrants, who tend to fall between

the cracks and are too often left without access to health services.

DISEASE CONTROL PRIORITIES IN DEVELOPING COUNTRIES

Dr Mariam Claeson (*Program Coordinator HIV/AIDS, World Bank*) (view slides) observed that although global population health improved dramatically during the 20th century, great disparities remain between low- and high-income countries. The four greatest challenges for 2030 will be cardiovascular diseases, HIV, emerging pandemics and the persistence of high (though preventable) levels of malaria, TB, diarrhea, and pneumonia.

Countries needn't be rich to be healthy, Claeson said, outlining a variety of best health buys for developing countries, as identified by the Disease Control Priorities Project (see box). While economic growth is not a precondition for improving population health, strong health systems are needed to sustain such improvements. Governments have to keep the soundness of the entire health system in mind when implementing new programs or reforms.

She also stressed the importance of providing equal access to quality health services. Equity needs to be part of health policymaking; otherwise, new interventions can actually exacerbate gaps in equity. Reaching marginalized groups is difficult, requiring that health policymakers find ways to in-

crease access to and demand for services, and to work with civil society. Claeson described how, by targeting risk groups and investing chiefly in prevention, it is estimated that India was able to halve new HIV infections over the past decade. India's example shows the need for more research into social and structural determinants of disease.

While there are strong arguments both for and against extending the MDGs for another generation, Claeson suggested we should perhaps focus on the lowest income quintile and on girls, emphasize health systems first, or let individual countries establish their own goal priorities.

A DANISH POLITICIAN'S PERSPECTIVE ON THE MDGS AND BEYOND

Mr Søren Pind (*Minister for Development Cooperation, Government of Denmark*) (view opening remarks) addressed the conference from his position as Minister of Development. He said that the MDGs have formed a surprisingly effective framework for countries to establish clear priorities in addressing poverty together. He described his government's strategy for development cooperation that he launched a year ago, based on promoting economic and political freedom to enable people to move out of poverty. Pind asserted that health is a global public good, saying that while international mobility has increased the spread of disease, globalization has also increased the spread of techno-

SOME BEST BUYS FOR POPULATION HEALTH IN DEVELOPING COUNTRIES

(John Beard, Mariam Claeson)

CHILD MORTALITY	Keep newborns warm and clean
MALNUTRITION	Promote exclusive breastfeeding for the first six months of life
CARDIOVASCULAR DISEASE	Promote the use of aspirin and other inexpensive drugs to prevent and treat heart attack and stroke
LUNG CANCER	Tax tobacco products, ban tobacco advertising
HIV	Provide voluntary hiv counseling and testing, target prevention efforts to most at risk groups
TB	Treat active tb with short-course chemotherapy
MALARIA	Distribute insecticide-treated nets in malaria-endemic areas
INJURIES	Install speed bumps at dangerous intersections
ALCOHOL ABUSE	Limit access to retail alcohol
LIVER CANCER	Vaccinate the population against hepatitis b
OBESITY	Promote physical activity in the mass media
HYPERTENSION	Reduce salt content in processed foods
DIABETES MELLITUS	Provide counseling and glycemic control
CERVICAL CANCER	Screen for cervical cancer using visual inspection with acetic acid

For a fuller list of best buys, see the presentations by Beard (www.enrecahealth.dk/conference/programme/01._Beard__John__Compatibility_Mode_.pdf, slides 19 and 21) and Claeson (www.enrecahealth.dk/conference/programme/02._Claeson__Mariam_DCPP_2011_Copenhagen_rev__Compatibility_Mode_.pdf, slides 10 through 23), as well as the resources of the Disease Control Priorities Project (dcp2.org).

logical solutions and aid. International cooperation has also clarified the need to address the determinants of poor health in developing countries, including the burgeoning problem of non-communicable diseases.

Pind held up Denmark as a strong advocate of an integrated approach to health and development, including an emphasis on health systems strengthening rather than on specific diseases. While the best way to address development in 2015 and beyond is a complex question, he stressed the need to stay focused on gender equality and on children's and women's health. Politicians may be guilty of hearing only what they want to, and since according to Pind there are too many accountants and not enough scientists contributing to the debate, he challenged health researchers to make a special effort to communicate their results to politicians, thereby promoting the use of evidence in health policymaking.

MDG 4 AND THE EVIDENCE BASE FOR HEALTH INTERVENTIONS

Prof Peter Aaby (*Director, Bandim Health Project*) (view slides) presented a critical look at the vaccinations being used to address MDG 4 and reduce child mortality, based on his work in Bissau since 1978. Nine million children under 5 die around the world each year; two-thirds of these deaths are preventable. WHO and UNICEF promote vaccines and vitamin A supplements as the most effective way to prevent such deaths in low-income countries. In Bissau, however, the introduction of a vaccination program in 1986 accompanied an *increase* in child mortality. Why? Aaby argued that we simply don't know what we are doing.

For instance, the policy of vaccinating children against measles at 9 months relies on a single study from the 1970s – a policy decision based on false assumptions that did not look at actual changes in mortality. Vaccinations at 6 months would have prevented millions of deaths. On the other hand, measles vaccinations appear to have saved many more children than would have otherwise died of measles, indicating that the live vaccine has some unknown beneficial effect. Because it will be discontinued when measles is eradicated, eradication will have the perverse effect of increasing child mortality – just as happened with smallpox eradication and the smallpox vaccine. Conversely, inactivated vaccines appear to have unknown deleterious effects, especially for girls.

Aaby thus urged that vaccine studies examine nonspecific immune effects, disaggregate data by gender, and consider interactions with other vaccines and immune interventions.

TO MDG OR NOT TO MDG? POST-MDG AID AND RESEARCH ARCHITECTURE

Dr Claire Melamed (*Head of the Growth and Equity Programme, Overseas Development Institute*) (view slides)

described how the MDGs have provided a major boost in development aid and created an international framework for development cooperation. They have created incentives for select interventions, which has inevitably siphoned attention away from other interventions. Because the MDGs are based on national and global averages, they also remove some incentive to target hard-to-reach populations.

To guide development of effective goals for after 2015, when the MDGs end, Melamed posed three questions:

1. What outcomes will poor people value most?
A recent poll indicates they are concerned more about violence, poverty, and jobs than about education and health.
2. In what areas can international action be most effective?
3. How can the system be "distorted" to produce even better outcomes?

It's also critical to factor in how the world has been changing demographically since 2000 – populations are more urbanized, and there are fewer low-income countries, with 72% of the poor now living in middle-income countries, notably China and India. Technological advances, price reductions, and changes in thinking have improved the prospects of success dramatically. We understand more clearly the importance of the political dimension. And we are starting to address nonfinancial aspects of poverty, such as well-being.

It is unclear whether we should simply extend the date for the existing MDGs, add new targets, establish a new framework (e.g. one based on global public goods) – or do nothing. Melamed personally advocated moving towards some sort of global welfare state, and she invoked the Millennium Declaration: "We are committed to ... freeing the entire human race from want."

John Beard noted that donors prefer concrete targets, which are just proxies for real development progress: more effective health systems, educational systems, etc. Melamed responded by expressing a wish for targets that encouraged donors to invest in systems, and not just in specific diseases or problems.

SOCIAL DETERMINANTS OF HEALTH: NEW TRENDS, DATA, AND CHALLENGES

Dr Erik Blas (*Senior Strategic Advisor, WHO*) (view slides) observed that the debate about development goals centers on which quantifiable goals can best help us achieve the world we desire. How we approach the debate depends on our political philosophy – communitarian, utilitarian, libertarian, or egalitarian. The egalitarian perspective gives rise to concerns about social determinants and the distribution of health. Blas said that the burden of disease in the WHO European Region provides a window to the future.

Relative to other causes, infectious and parasitic diseases and maternal and perinatal conditions are responsible for a comparatively small disease burden. Yet their distribution is extremely inequitable; that is why what still needs to be done to achieve the health MDGs – which focus on these conditions – constitute an equity agenda. (By contrast, injuries cause a large disease burden with large inequities, and non-communicable diseases cause a large burden with growing inequities.) He used under-5 mortality data to show that while economic development and health program interventions may reduce overall mortality, inequity among population groups and geographic regions will persist.

Blas broke down the involvement of social determinants by kind – e.g. gender, social status, and social norms were critical determinants in the 13 public health conditions examined. For each of five levels of inequity, from societal to individual, he provided three promising entry points for addressing the underlying determinants. While health policymakers are comfortable with health sector responses, they hesitate to act outside the sector, which is where social determinants usually must be addressed, for instance by improving sanitation or redistributing resources. Paradoxically, the greatest resistance to addressing the social determinants of health is found not among politicians but within the health sector itself. Moreover, effective action typically takes at least 5 or 10 years to implement – longer than most governments or donor commitments last.

Social determinants are supplanting biological agents as the most common causes of – and solutions to – the global disease burden. Not only is more research on social determinants needed, but since pilots usually provide a poor model for large-scale initiatives, Blas suggested an intermediate phase that would study the scale-up process itself. He also challenged researchers to be more critical and to participate more actively in public debate; otherwise, research findings will rarely reach politicians' ears.

As noted, the unfinished agenda of the health-related MDGs is primarily an equity agenda. It will be critical to continue addressing communicable diseases and better maternal and child health after 2015 with both biological and social means. However, we now need to shift our focus to the growing burden of non-communicable diseases and injuries – more of a social determinant agenda. That calls for a new type of public health program, anchored in the health sector but looking upstream to influence the social structures and policies that determine the level and distribution of health.

HEALTH CARE INNOVATIONS FROM THE DEVELOPING WORLD: SOME DIABETES CASE STUDIES

Dr Anil Kapur (*Managing Director, World Diabetes Foundation*) (*view slides*) began by questioning the way most people divide the world into developed and developing countries, donors and recipients. We live in an intercon-

nected world, and what might seem to be disadvantages in developing contexts – the lack of resources and specialized training – can actually promote innovations in health, using materials at hand as well as existing family and community networks. Two examples of reverse (or “trickle-up”) innovation are the handheld electrocardiograph and the portable ultrasound that were originally developed in India, and which General Electric is now selling in the US, where they're finding new uses.

Kapur said that it's important to remember that non-communicable diseases such as diabetes are also an enormous problem in the developing world – where they therefore provide an opportunity for innovation. The large number of risk factors and comorbidities associated with diabetes make it an excellent candidate for integrating prevention and care, and to link communicable diseases, non-communicable diseases, nutrition, and maternal and child health. The World Diabetes Foundation is doing this by building capacity and setting up programs that address real needs at the primary care level, for instance by establishing clinics with simple equipment in refugee camps, and micro-clinics that use peer educators and existing social networks to promote self-care and healthy behaviors. Mobile diabetes units are also bringing a broad variety of laboratory tests and care to the doorsteps of people with diabetes who never had access before. He stressed that with chronic conditions, ready access to care is crucial because even when care is delivered free, it can still cost a lot of time and money to access, leading to poor compliance and poor outcomes. The growth in chronic conditions like diabetes require that we restructure how we provide care, and advances in technology can help us do so to achieve better results.

SUB-SAHARAN AFRICAN PERSPECTIVES ON NEW DISEASE BURDENS: MENTAL HEALTH

Dr Markos Tesfaye (*Head, Department of Psychiatry, Jimma University*) (*view slides*) began by reviewing progress on the three health-related MDGs in sub-Saharan Africa. Under-5 mortality (MDG 4) has been reduced somewhat, but it falls short of the goal and lags behind the rest of the world. The region has been able to cut maternal mortality (MDG 5) only slightly, with the rate for the WHO African Region still at 900 deaths per 100,000 live births. On the other hand, the region has had some success in reducing the spread and impact of HIV (part of MDG 6).

PROPOSED POST MILLENNIUM DEVELOPMENT GOALS, 2016–2030

- Reduce tobacco-related diseases by 2/3 in all income groups (*Mariam Claeson*)
- Reduce DALYs from mental health disorders and substance abuse by 50% (*Markos Tesfaye*)
- Affirm sexuality using a rights-based approach (*Sivananthi Thanenthiran*)

As a global health goal after the MDGs, Tesfaye proposed one to address mental health – because the burden of mental health disorders is high, the link between them and physical disorders is strong, and mental health is an overlooked human right. While neuropsychiatric disorders contribute only a little more than 1% of the years of life lost, they contribute nearly one-third of the years lost to disability. The links between mental and physical disorders go both ways – e.g. depression increases the risk of hypertension, and heart attacks often lead to depression. Mental disorders also tend to decrease treatment adherence for physical problems as well as accelerating disease progression and reducing the likelihood that people will seek help.

In many countries of sub-Saharan Africa, only 10% of the people suffering from severe mental illness have access to psychiatric care, making it particularly important to integrate mental health care with primary care and care in general hospitals. Cheap drugs exist to treat most mental health conditions; what low-income countries need most is more human resources. Integration will decrease stigmatization as well as increasing access to proper care.

Concretely, Tesfaye suggested a goal of reducing the DALYs lost to mental health and substance abuse by 50% between 2015 and 2030. Suggested targets include treating 50% of the depression in low- and middle-income countries, providing access to modern care for 50% of the people with psychoses, and reducing alcohol disorders by 50%. In discussion, it was pointed out that it is critical to prevent mental illness by addressing underlying causes, such as violence and war.

ASIAN PERSPECTIVES ON NEW DISEASE BURDENS: SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS

Ms Sivananthi Thanenthiran (*Programme Manager, Asian-Pacific Resource and Research Centre for Women (ARROW)*) (view slides) began by noting that of the MDGs, MDG 5 (maternal health) has seen the least progress. Women's sexual and reproductive health continues to be marginalized, rather than treated as a crucial part of human well-being. It is telling that it took seven years before Target 5.B – achieving universal access to reproductive health – was added to the maternal mortality target, and it still doesn't address contraceptive prevalence concretely. Even where contraception is available, there is usually little choice of method, and male participation continues to be very low. Researchers can help by pursuing innovation in contraceptive methods.

While fertility rates in the Asia-Pacific area have fallen dramatically, they remain high in many countries there, and many women – particularly poor rural women without educations – have more children than they want. Sexual and reproductive services often ignore young unmarried people, yet 43 percent of the world's babies are born to adolescent mothers in the Asia-Pacific region. A major problem

is that many women do not have control of their sexual and reproductive lives, and governments do not uphold their right to choose their partners and decide whether or not to have children. Moreover, governments do not prioritize interventions such as essential obstetric care or safe abortion services.

Thanenthiran emphasized that the 1994 Cairo Declaration and Cairo Plan of Action is more useful in promoting sexual and reproductive health and rights than MDG 5, providing a broader framework that can be used to change the status quo. To replace MDG 5, Thanenthiran suggested the new goal of affirming sexuality, using a rights-based approach. Specific targets could address maternal mortality (e.g. providing safe abortion services), contraception (e.g. increasing the percentage of the contraceptive prevalence rate that is male contraception), sexuality (e.g. establishing a certain minimum legal marriage age), and violence (e.g. outlawing domestic violence).

PANEL DISCUSSION: WHAT DOES GLOBAL HEALTH RESEARCH DO RIGHT TODAY? WHAT DOES IT NEED TO DO TOMORROW?

Dr Elizabeth Pisani (*author and independent consultant*) moderated the discussion. From the series of "provocations" that she together with Enreca Health had written to challenge the conventional wisdom about how health research operates, and that she distributed to participants before the conference (view 'Provocations to conference participants' developed by Enreca Health and Elizabeth Pisani), Pisani distilled a list of five problems with health research today (see box). She challenged each panel member to take one of the problems and either propose a solution or argue that it is not in fact a problem.

FIVE PROBLEMS WITH GLOBAL HEALTH RESEARCH TODAY (*Elizabeth Pisani*)

1. Research follows money, not need.
2. We worship at the altar of the randomized controlled trial.
3. Researchers have no incentive to share data or engage with communities.
4. Research does not inform policy.
5. We're training researchers to address yesterday's needs.

Prof Fred Binka (*Dean, School of Public Health, University of Ghana*) stated that, though he agrees that moneyed interests determine the focus of research, he no longer thinks that is a problem. Ghana does not have a research agenda – and that's not the donors' fault. But it should have one; it is more urgent for poor countries to invest in research than for rich countries to do so. In particular, Binka called for research into how to increase intervention coverage, and for program monitoring and evaluation, which he considers a

practical form of operational research. But giving developing countries untied health sector support to use as they best see fit – as Danida does, in line with the Paris Declaration on Aid Effectiveness – will only ensure that no local research is done. Binka suggested that instead, donors provide matching funds for health sector research. He clarified that is still critical for recipient countries to determine research priorities; but donors should insist that research is actually done.

Ms Sivananthi Thanenthiran (*Programme Manager, ARROW*) agreed that research doesn't automatically inform policy. As a result, her NGO now asks its research grantees to spend 50% of their grant money on advocating their findings. NGOs want to change policy, but they have sympathy with researchers and believe in evidence. People – and that includes policymakers – are illogical. We have tons of research; what we need is a communications strategy to find ways to connect research findings to politicians' existing concerns. Elizabeth Pisani asked if any researchers present felt that advocating policy would compromise them as scientists; nobody did (or at least no one was willing to say so). She then asked if everyone would be willing to give up half their research budget to advocating on the basis of their results – and again, no one said they would be unwilling.

Anil Kapur noted that if you don't advocate, your funding will be cut in the end anyway. Gibson Kibiki observed that while research budgets often include a dissemination component, it is invariably used for publications and conferences to communicate primarily with other scientists. Moreover, scientists are not trained to communicate their findings to laypeople in non-scientific language. Someone said that politicians do pay attention to what the media report, so researchers need to come down from their ivory towers and cultivate engage the media. A quick poll showed that researchers in the room were more likely to have had a beer or cup of coffee with a journalist recently than with a politician – another reason why researchers should use journalists as well as civil society representatives as intermediaries in communicating with politicians. One audience member suggested that it would be better for donors to provide research funding to the sectors that actually implement particular interventions – e.g. giving aid to ministries of science and technology, of mines, or of sanitation instead of just to the ministry of health.

Prof Ib Bygbjerg (*Chairman, Enreca Health*) said that Danida promoted research actively in the past, but the fact that this conference is to be the last one held by Enreca – a research network funded by Danida – testifies to shifting priorities. The active contributions here from the developing world show that it is no longer just the North deciding the research, but it is premature to stop funding collaboration. He asked how North and South can collaborate on setting the research agenda. The world is changing – witness the shift from medical science to health science, and from communicable to non-communicable disease – and training needs to reflect and anticipate these changes. Unfortunately,

health sector training is quite old fashioned, and Bygbjerg argued that while it takes a long time to change health policy, it takes a great deal longer to change training. The tendency is to treat diseases as well individual organs separately, where what is needed is a more holistic – and interdisciplinary – approach. It is a struggle to determine what and how to teach, and to get different faculties to work together. But if we can't figure out what to teach, how can we as researchers expect to know what to say to journalists and policy makers?

Kristine Binzer, Global Doctors, maintained that we need to learn from the diplomatic corps working in other sectors how to address global health in a language understood by researchers, policymakers, health professionals, and community members alike. Jens Aagaard-Hansen, Steno Health Promotion Centre, advocated not only adapting a cross-disciplinary approach in teaching but also revisiting the entire university incentive system, e.g. the way it discourages cross-disciplinary publications and research. Marc Mitchell, Harvard School of Global Health, maintained that one key reason that research doesn't affect policy is that we're doing the wrong research. It's relatively easy to fund and publish biological or disease-specific research, but not research into

CONSENSUS (or almost-consensus) RESPONSES TO THE FIVE PROBLEMS

Research follows money, not need.

- Donors should restrict some grant money to research – ideally matching funds.

We worship at the altar of the randomized controlled trial (RCTs).

- RCTs should be eradicated in favor of case studies, narratives, and progressive contextualization – as well as critical thinking.

Researchers have no incentive to share data or engage with communities.

- Researchers should be encouraged to share their datasets as soon as they have published on the basis of these data.

Research does not inform policy.

- Researchers should reserve half of their budgets for advocating their findings. And not just to politicians – to institutional policymakers and bureaucrats too, as well as to journalists and civil society representatives as intermediaries.

We're training researchers to address yesterday's needs.

- Our training programs should focus on non-communicable diseases, prevention, and health promotion. They should cultivate multidisciplinary approaches, and prioritize empirical and applied research over basic research.
- Donors should invest in building training capacity and infrastructure in the developing world rather than in bringing Southern researchers to the North.

how health systems can work better or apply the knowledge we have – applied research that can really improve health. Elizabeth Pisani wondered if perhaps we should simply remove the publication incentive for public health researchers. Amar-Singh, Department Hospital, Malaysia, stated that if we are to change the nature of research being done, we have to change the emphasis in medical education from curing disease and treating symptoms to prevention and health promotion. He suggested rewarding researchers for the application of their research rather than the mere publication of it. Someone suggested that great ideas drive research forward, and that the research agenda is North-driven simply because the North funds so much more research and thus more great ideas. Peter Aaby disagreed, saying that funders essentially fund research that will promote their own interests in some way. He also added that it's not really national politicians who make most health policy, but the institutional policymakers at organizations such as WHO and the World Bank – they are the people we most need to communicate with. To them, Maarten Kok added the street-level local bureaucrats – the people who make decisions on the ground.

Prof Susan Reynolds Whyte (*Department of Anthropology, University of Copenhagen*) argued for the benefits of treating health science as a social science. Rather than experimental hypothesis-testing, she said that we need to examine what health systems are actually doing and to be open to “the informal, the implicit, the unintended, and the contextual.” That means sinking more money into empirical research, and examining research itself. Whyte said that we need to utilize social science disciplines (e.g. ethnography, social history, political science, and the history of science and technology) as well as their tools, particularly narratives, cases, and ‘progressive contextualization’ (moving from the specific to the general context). She reminded the audience that while generating knowledge is great, we should not ignore the secondary benefits that conducting research can supply to developing countries, including health care, jobs, and money for underfunded facilities. And not only do national and local researchers deserve more support, but their local perspective allows more insight – and thus better research. Whyte called for an examination of the informal processes that formally organized health bureaucracies utilize, and for teaching that cultivates analytic acuity.

Elizabeth Pisani summarized Whyte's comments as being a call for the teaching of critical thinking, and she noted that narrative lends itself to political advocacy. Maarten Kok concurred with the emphasis on context over content, saying that the notion of transferable knowledge is largely illusory anyway.

Prof Gibson S. Kibiki (*Director, Kilimanjaro Christian Medical Centre*) spoke to how health researchers in sub-Saharan Africa are trained. Most of them train in the developed world, which is expensive and tempts many of them to remain abroad. Moreover, the specialized, high-

tech emphasis there is inappropriate for those who do return home. He made the case for training them in their native countries, which will not only provide a better skill fit and encourage them to stay, but will also give them a much better sense of what the research priorities there should be. Donors accordingly need to invest in building the capacity and infrastructure for such training in developing countries – an investment in sustainable education – rather than in bringing the researchers to the North to train, or investing primarily in research. Kibiki suggested that donors begin by identifying a few institutions in the South and making them centers of excellence that can form a network and eventually support satellite institutions.

Prof Peter Aaby (*Director, Bandim Health Project*) described how valuable he has found the practice of data-sharing to be. Yet researchers, particularly those who are collecting routine data in the South, justifiably fear that their data will be cherry-picked, analyzed, and published before they can do so themselves. To allay this fear while encouraging data-sharing, Aaby proposed that researchers be expected to release their datasets on the web when they publish something based on those data. If we added the restriction that other researchers who wish to utilize a given dataset must obtain permission from the researcher who generated the original data, it would encourage more collaboration, which would be particularly welcome to researchers based in the South. Of course, it takes a lot of work to clean data before a dataset can be used, and the original researcher typically cleans up only the small part of the data that he or she wants. One participant stated that Northern research institutes that want Southern researchers to sign data-sharing agreements want something for nothing; they should be asked to invest substantially in analytic capacity-building in the South before the South agrees to simply export its raw data.

Aaby also characterized the randomized controlled trial (RCT) as a worsening chronic disease that needs to be eradicated. A researcher sets the confidence interval to prove what he or she already knows, while ignoring the various contradictions that show up in the field – yet science should be about pursuing contradictions. Amar-Singh called for more research on the limited applicability of RCTs. While there was some disagreement about whether the RCT was more properly an acute disease, no one present was willing to defend it.

CLOSING REMARKS

Prof Ib Bygbjerg (*Chairman, Enreca Health*) listed some of the dualities, large and small, that had emerged during the day's discussions: basic vs. applied research, politicians vs. journalists, communicable vs. non-communicable diseases. How can we resolve these fundamental divergences? Bygbjerg suggested that we think of the post-Millennium Development Goals as a potential way to bridge these dualities.

DAY 2: Welcome

Friday 29 April 2011 at 13.30-16.00,
Alexandersalen, University of Copenhagen, Bispetorvet 1-3, Copenhagen.

STRENGTHENING SYSTEMS FOR RESEARCH FOR HEALTH: HOW CAN WE ENHANCE LOCAL OWNERSHIP AND LOCAL PRIORITY SETTING IN THE SOUTH?

The roundtable chaired by **Prof Carel Ijsselmuiden**, *Director, Council on Health Research for Development (COHRED) and Executive Director, Global Forum for Health Research* focused on moving research for health away from methods and methodologies to focus on systems and what is needed to build strong research for health systems.

Ijsselmuiden introduced the three main subjects proposed to the panelists:

- Instead of MDGs as the next step in measuring burden of disease, why not instead think of how countries can take control of their own research?
- What will Africa and low and middle income countries look like in 10-15 years, knowing that they are changing very rapidly as we speak.
- How can we talk more about solutions instead of problems. What for example has Malaysia done successfully that other countries can pick up and adapt?

COHRED invited participants to think in terms of political will and commitment. Indeed, research for health systems requires a number of steps to be taken that embrace:

- Involving ministries in understanding how research can help health, equity and development
- Defining priorities, policy frameworks and management infrastructures (e.g. directorate for research)
- Ensuring essential components such as human resources for health research (i.e. where are the people, how do they come up, who is needed etc.)
- Stable financing over the long term
- Coordination between ministries (Ministry of Health, Ministry of Education, Ministry of Science and Technology)
- International collaboration and partnerships (namely with fair contracting)

A few words were spoken about Forum 2012, a multisectoral conference which will take place in April 2012 in Cape Town and which will focus on systems. It is part of The COHRED Group's determined push to move from research

to innovation and to engage ministries of health and ministries of science and technology in its wake.

Three examples were given about how things could change:

- GAVI – of all 10 vaccines that go into Africa only one is pre-qualified in Africa. In fact, there is not even one pre-qualified vaccine production facility in Africa. This needs to be remedied in its next decade of operations.
- Uganda has invested heavily in science and technology in order to become less donor dependent.
- Rwanda is already moving beyond aid by strengthening its science and technology investments.

PANEL DISCUSSION

Dr Anil Kapur (*Managing Director, World Diabetes Foundation*) noted that learning happens when action happens. There is a need to get both delivering care and preventing diseases into action. It is not possible to import ideas from the outside, so it is important local people should be involved with initiatives. World Diabetes Foundation has started small initiatives, from which pride and further involvement have grown. For example, in Tanzania the project started with four outpatient clinics once a week and now there is a national programme on NCDs. With new information technologies there is a huge opportunity to leapfrog and create systems, as Brazil, China and India are demonstrating.

Mr Esben Sønderstrup (*Chief Health Adviser, Danida*) argued that focusing on the most relevant research means choosing what you perceive needs more attention than other issues. Factors to consider in prioritisation are:

- Biggest health problems still receive the most attention
- Research that improves equity must be high on the list of priorities
- There are never enough funds, so to spend efficiently it is important to select what gives the most health to the greatest number
- Lack of knowledge is not always the main obstacle
- Pre-empt growing health problems

This all has to take place when research institutions and uni-

versities have their own priorities. Politicians are not always interested and patient groups have a role to play in exercising pressure.

Prioritisation of programmes should take as a point of departure the burden of disease (ref. WHO 2004 BOD tables). Quality should be at the forefront of any research system so Denmark for example should focus on where the country has a strong standing in research and assist other countries to develop their own strengths.

Prof Flemming Konradsen (*Chairman, Platform on Human Health*) said that the roles of universities, research institutions and governments differ and so establishing research priorities at the national level does not make sense. Ministry of Health research institutions often obtain more funds than universities, so the latter should have space to set their own priorities as their role is to look ahead in time and not deal with current concerns. Qualitative research and research systems require strong institutions, yet most donors think it is a waste of resources to strengthen institutions. Each institution should have its own identity, its own image and its own fundraising.

Dr Amar Singh (*Senior Consultant Paediatrician, Head of Paediatric Department Hospital, Malaysia*) underlined that research is a vehicle of social justice. We need to reawaken research as meaningful action. Primary care is neglected as Malaysia has moved its resources into secondary and tertiary care. Communities need to be the focus to effect real change – they should question governments and demand change. This requires communities to be educated.

Dr Moshi Ntabaye (*Executive Director, Kilimanjaro Christian Medical Centre*) stated that building institutional capacity for doing research requires appropriate training. Every donor comes with a different set of requirements. In Tanzania there are government structures however there is a need to develop institutions to respond to needs. Advanced training is a heavy investment and innovative health research requires good training. In Tanzania the research labs are not accredited to do clinical trials; there is a need for accreditation but in order to obtain that, there is a need for people and infrastructure. Partnerships for research between North and South may help, although partnerships should be South/South to create synergies.

Prof Fred Binka (*Dean, School of Public Health, University of Ghana*) made reference to Brazil, Thailand, India and South Africa who all have strong research cultures. Need to invest in research, but it is a myth to expect other people to put resources in to build the systems. Most problems in the country are so basic that we need to deliver improvement. There is a need to develop human resources.

Ms Line Matthiessen-Guyader (*Head of Unit, Infectious Diseases and Public Health, DG Research & Innovation, European Commission*) said that the European

Commission Framework on R&D is the world's largest international programme with funding for low and middle income countries (2007 – 2013) to the tune of 52 billion Euros. The real question is how to ensure that research is relevant. This requires discussion with policy makers and Ministry of Health representatives in low and middle income countries. The European and Developing Countries Clinical Trials Partnership (EDCTP) was set up and has played an important role in platform building, with 53 clinical trials on HIV, TB and malaria. There is a need to move to sustainable development in developing countries. Research and innovation capacities must be strengthened so that the countries do not just do the clinical trials but also produce the drugs. There is a new initiative called the African Network for Drug and Diagnostic Innovation.

Dr Manuel M. Dayrit (*Director, Department of Human Resources for Health, WHO*) mentioned that the pace of change is accelerating and while in some countries inequalities are widening, in others they are being reduced. Many countries need to strengthen their health systems to address their inequalities. WHO as a global technical agency develops norms and consolidates best practice guidelines by consolidating the global experience. Norms if pursued by a country can be a driver to bring about systems and systematic change. Good research analyses the various components of a system and how they work. Once analysis is completed, the task of creating solutions is an exercise in synthesis and innovative thinking. Brazil has, for example, has over a period of 20-25 years, developed solutions to its health problems.

Prof Gibson S. Kibiki (*Director, Kilimanjaro Clinical Research Centre*) stated that the question is that of enhancing local ownership of research and data. Is ownership the same thing as using data? Town data does one have to know the value of what is owned? Do you take what you own further? Do you really only own data if you have the capacity to generate data? If local capacity is developed (infrastructure and human resources) then one can generate concepts, generate and interpret data, and decide what to do with data. The Kilimanjaro centre started as a place to take care of patients and now it comprises a medical school, where a range of health professionals are trained (MDs and PhDs). The institution has also set up a research institute and research proposals are being developed by local scientists, who are developing their own research agenda and data.

QUESTIONS AND COMMENTS FROM THE FLOOR: FROM A 'SICK SYSTEM' TO A 'HEALTH SYSTEM'

The question of bridging funds or capital for new ventures was raised, with a case quoted from Ghana where a pharmaceutical executive returned to try and set up a business, but this required his paying 18% interest per month on venture capital loans. Could, for example, DANIDA provide bridging funds?

DANIDA has a Business to Business (B2B) programme that encourages entrepreneurship. There should be a shift in thinking from a sick system to a health system.

It is interesting to see that we are not reaching the MDGs and we do not know why. Research should be done to understand why. We should enable people to take risks and try new approaches then carry out new research on which approaches work and why. We need to think about what kinds of research we need.

We need stronger university initiatives, such as for example Universities Denmark's 'Building Stronger Universities' platforms. The Wellcome Trust has assessed that a PhD in the South takes on average 8 years which is a waste of talent, funds and time. The reason it takes so long is the lack of funds to strengthen universities. There should be budget lines for research through both the Ministry of Health and the Ministry of Science and Technology.

CLOSING REMARKS

Strong research for health systems requires multi stakeholder involvement. Policy makers and politicians need to understand the stakes and so it is important to work with different ministries – health, science and technology. Small and medium enterprises (SMEs) play a strong role in economies as they know what is going on in research and they know what society needs.

Building institutional capacity for doing research requires appropriate training. There is a need to develop human resources within countries, with training appropriate to the country. Local ownership of policies, systems and projects is key; it is important local people should be involved with initiatives, just as it is important that systems should be financed by the country where the system is being put into place, and not by donors. Donors can provide expertise and training in the countries.

Qualitative research and research systems require strong institutions, yet most donors do not provide adequate resources to strengthen institutions. If local capacity is developed (infrastructure and human resources) then countries can generate concepts, generate and interpret data, and decide what to do with data.

There is a need for countries to develop their own priorities, a framework and a process to develop research. Change is happening rapidly and communities are growing. There is a need to support countries to deal with their own health issues.

