



Minutes

Dialogue meeting with WHO on child health research

Time: 26 February 2010, 10:00 - 13:30

Venue: CSS ('Kommunehospitalet'), Room 2.2.50 Øster Farimagsgade 5

Annexes: Agenda, list of participants, summary of presentations by Danish researchers

Background

At the invitation of Enreca Health – Danish Research Network of International Health and in collaboration with Universities Denmark's Platform for Human Health and Copenhagen School of Global Health, a meeting between two representatives from WHO's Department of Child and Adolescent Health and Development (CAH) and a number of Danish researchers were conducted at the University of Copenhagen. 15 participants from research projects representing the universities of Aarhus and Copenhagen (LIFE, Pharma, SUND), as well as from clinical research and Danida participated in the meeting. The purpose of the meeting was to give a mutual briefing on the on-going work, to exchange experiences and to discuss the possibilities for further technical collaboration.

Presentations

Mikael Östergren, Department of Child and Adolescent Health and Development, WHO

CAH is directed by Dr Elizabeth Mason and is one out of six departments within the Family and Community Health Cluster. It operates at three levels (Headquarters, regional and country level) through WHO offices and in strong partnership with other UN specialized agencies (in particular UNICEF), national Ministries of Health as well as civil society organizations and research institutions (such as GAVI). It ensures WHO technical leadership on child and adolescent health specifically and works closely with other departments in charge of interventions having a strong influence on child health such as the department of Immunization, Vaccines and Biologicals, which is also located within the Family and Community Health Cluster.

For a full organiogramme, see power point slides

For more about CHA, see http://www.who.int/child_adolescent_health/about/en/

José Carlos Martines, Coordinator, Newborn and Child Health, Department of Child and Adolescent Health and Development, WHO

Dr Martines gave a global overview of the limited progress on MDG4: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate. By 2008, only 16 countries were classified to be 'on track' to meet MDG4., Fortunately these include China, which in numeric terms account for a great deal of the global progress. The ten worst performing countries are all to be found in sub Saharan Africa and their lack of progress can to a large extent be attributed to violent conflict as well as to a high prevalence of HIV.

The main causes of child mortality are well known – newborn causes, diarrheal diseases, pneumonia – and most are preventable. Unfortunately, they receive minimal funding, particularly for research on how to implement interventions that can control these diseases. 97% of current research funding is allocated to develop new interventions. HIV/AIDS prevention and treatment receives a great proportion of available funds.

A key function for WHO and CAH is to set priorities, to promote research on interventions, translate research results into good practices. By using its position as a ‘middle man’, it can bring together researchers, donors, national ministries and civil society.

CAH has identified a set of research priorities, which hold significant influence on neonatal and child deaths and has organized a donor meeting to discuss the fundability of the following challenges:

- Perinatal asphyxia
- Low birth weight
- Neonatal sepsis
- Management of diarrhea
- Management of pneumonia

CAH is involved in research initiatives aiming at assessing the significance of home visits by community based health workers within the first week after delivery in terms of child survival (promising results from large scale studies in Ghana, India and Pakistan), in simple antibiotic treatment of neonatal sepsis (large scale studies are underway in five countries), in efficacy of neonatal vitamin A supplementation (large scale studies are underway in Ghana, India and Tanzania) and in improvement of family responses to referral of sick newborns (a large scale study is underway in India). Furthermore, CAH is promoting research on infant practices (Cuba) and creating a consortium to promote and support ‘Maternal, Newborn and Child Health’ engaging developed and developing countries.

Emphasis is put on translation of research results into programmes. Publications and dissemination after completion of research and not least to use new information as evidence for revised guidelines are promoted and supported.

For more information on MDG4, go to: <http://www.un.org/millenniumgoals/childhealth.shtml>
<http://www.who.int/pmnch/en/>

During the discussion, a question was raised about the role of nutrition in WHO and it was noted that the resources of WHO to fund research on nutrition is limited and that WHO is more active working on guideline development in relation to nutrition. It was also asked how WHO can take up new research results on the effect of early BCG vaccines and turn them into a priority for revised guidelines. It was underlined that vaccines is a priority and that WHO has adopted the position in which it will assess the impact of early vaccinations based on the published evidence and within ‘a wider perspective’ that will keep in mind the main goal of reducing newborn and child mortality.

Finally, on the issue of training and human resource development, WHO was urged to use its unique position and credibility within national ministries of health to advocate for pre-service training of health staff. Such an investment would be more cost effective than in-service training where key

staff is taken away from their duties. This suggestion was well taken, especially since WHO has offered more pre-service training over the past years. Furthermore, WHO was asked to lobby for more capacity development with universities to create strong research environments and also to strengthen distribution of its technical material to medical and public health students.

Follow up

The participants found that the meeting had been constructive and useful. Some concrete steps of possible action include:

WHO

- Keep contact! At the next meeting of CAH's research consortium on maternal, newborn and child health a representative from the group of Danish researcher will be invited to participate.
- Involve students. WHO is open to collaborate on how to involve students as interns in Headquarters and regional or national offices building on the tradition of the Danish universities to send interns to WHO Europe's regional office.

Enreca Health / Platform for Human Health

- Establish a new working group for child health! Invite this group of researchers to a follow up meeting with a view of establish a new working group that can be consulted by CAH.
- Survey on distribution of WHO material among students. To consider doing a small questionnaire based survey among international students (primarily at the global health courses) on how much they have used (received) WHO material (guidelines, books, leaflets).

Presentations by Danish researchers

Freddy Karup Pedersen, Consultant, University Clinic of Paediatrics II, Rigshospitalet, introduced a Danida funded capacity building and research project (2009 – 2011) based in South Vietnam. The project is centred at a Child Hospital no 1 in Saigon which has 1000 paediatric beds and covers 100.000 under 5s in the field sites. The project aims directly at fulfilling MDG4 and will pilot under Vietnamese conditions the WHO recommended approach to improve child survival that integrates neonatal survival packages and HIV/AIDS intervention with IMCI (Health for Children under 5). The activities are home based, community based and health facility based health education and health intervention, leadership and community advocacy, training and technical expert consultancies. The causes of neo natal deaths include acute respiratory infections and dengue fever and they are under research by the project.

For more information go to <http://www.davifo.dk/?p=192>

Christine Stabell Benn, MD, State Serum Institute / the Bandim Health Project, presented some of the major findings from the Guinea Bissau. Through the Bandim Health Project a number of Danish and local researchers have followed 100,000 people in rural as well as urban Guinea Bissau. Some of the most thought provoking observations are focused on effects of child vaccinations, e.g. that early BCG vaccine to low-weight newborns seem to reduce neonatal mortality by up to 45% which in itself makes it a relatively simple intervention with a potential strong impact on the success of MDG4. In addition to that another observations made by the Bandim Health projects were that early measles vaccine at 4.5 months of age reduces mortality by 49% from 4.5-36 months of age and early DTP vaccine to low-birth-weight girls increases mortality by 500% from 2-6 months of age. Neonatal vitamin A supplementation was reported to have sex-differential effects, being beneficial for boys, but detrimental for girls, coinciding with DTP vaccination. This leads to the conclusion that:

=> Routine interventions have major non-specific effects on mortality

The effects of the interventions are sex-differential

The interventions interact with consequences for mortality

=> We may reduce overall mortality significantly with the existing tools.

Finally, it was mentioned that application for ethical clearance of a BCG child vaccination research project at three major Danish hospitals had been submitted by the Bandim Health project in order to compare the findings from Guinea Bissau with data from Denmark. The project results are strongly documented in a number of peer reviewed publications which can be found at this website:

www.bandim.org

Kim Fleicher Michaelsen, MD, Professor, LIFE, University of Copenhagen, presented major findings from two studies on within the **Paediatric and International Nutrition** research project which aims at providing evidence to optimise nutrition, growth and development in infants and children in high as well as low income countries and to optimise nutrition among pregnant women and people living with HIV in low income countries. The two studies are the Complementary and young child feeding (CYCF) – impact on short and long term development and health study and the The Copenhagen Perinatal Cohort which is constituted of 9215 individuals born between 1959 and 1961. The studies have been subject to international recognition and media coverage because of

the results on obesity risks in adulthood. The findings from the studies suggest that late introduction of complementary feeding may protect against adult overweight, and that the onset of mixed feeding rather than prolonged breastfeeding that has an effect on obesity later in life.

Henrik Friis, MD, Professor, LIFE, University of Copenhagen, also belongs to the Paediatric and International Nutrition research group. He introduced three studies: WinFood: Prevention of childhood undernutrition w traditional foods; TreatFood: Treatment of moderate acute undernutrition; and iABC study: Early life body composition and markers of metabolic syndrome. The WinFood study is constituted of two trials among children in Cambodia and Kenya. It testes the effect of two different aid diets on lean body mass and functional outcomes. The TreatFood project takes place in Niger and Sierra Leone and is testing the effect of different soy based food aid diets on lean body mass and functional outcomes. The iABC study is located in Ethiopia and is designed as cohort study among children analyzing their growth, physical activity, development as well as body composition and markers of metabolic syndrome at two points of time.

Birgitte Folmann, PhD student, Institute of Anthropology, University of Aarhus, introduced her PhD study which is entitled 'Becoming healthy again: ARV receivers navigating dilemmas of reproduction, health and respectability in Northern Uganda'. Building on a variety of qualitative methods (depth interviews, life story interviews, semi-structured interviews as well as observations) the study seeks to explore fertility desires among men and women receiving ARV therapy, especially how counselling on reproductive health is given to HIV positive client by the health sector and how personal negotiations versus interaction with the public health care system takes place. The preliminary findings suggest that with improved life expectancies thanks to ARV therapy more HIV positive women can be expected to become pregnant and reproductive health services and PMTCT component should be included in ARV programmes. Furthermore, pregnant women who are HIV negative at first antenatal visit should be tested again later in their pregnancy.

Ebba Holme Hansen, Professor, MSc, Institute for Pharmacology and Pharmatherapy, University of Copenhagen, briefly described the project 'Quality Medicine Use for Children in Uganda' on children and medicines in the Faculty of Pharmaceutical Sciences (Pharma), which include studies from the WHO affiliated Health Behaviour in Scool-aged children (HBSC) project. She talked about a new Children and Medicines project which is an interdisciplinary project drawing on child focused methods. Some of the co-researchers are Marianne Stubbe Østergaard, Annette Olsen and Susan Reynolds Whyte. The project is based in the Child Health and Development Centre, Makerere University, Uganda and gathering four faculties from the University of Copenhagen (Life, Pharma, Health and Social sciences). It is a capacity strengthening project aiming at provide research to improve the quality of medicine use and management for children in Uganda through training of Ugandan PhD and master students as well as post docs. The key dimensions of the project are diagnostic procedures, availability and use of medicines, communication of perceptions and knowledge and coherence of policies and four contrasting medication scenarios are used to study these dimensions: acute respiratory diseases and asthma in U-5, epilepsy, HIV/AIDS and worms (schisto).

<http://www.chdc-muk.com/index.htm>

Annette Olsen, Senior Researcher, Parasitology/Helminthology group within DBL-Life, University of Copenhagen, started by briefly presenting four different PhD projects which explore different aspects of helminth and parasite control. The projects are based in Zambia (2), Uganda and Ghana and all focus of children under 14. Annette Olsen is also involved in the above described project 'Quality Medicine Use for Children in Uganda' through one Phd on barriers to adherence and communication in preventive treatment of intestinal schistosomiasis in children in Jinja, district, Uganda and a postdoc project on the safety, efficacy, acceptability and long term health impact of praziquantel (syrup, suspension or the like) against *Schistosoma mansoni* in pre-school children. Finally, Annette Olsen presented 'SCORE: Schistosomiasis Consortium for Operational Research and Evaluation', a consortium aiming at conducting action-research on various aspects of schisto, such as mass treatment strategies and evaluation of morbidity. The component that is conducted within DBL by a Tanzania researchers focus on school children aged 7-12.

<http://score.uga.edu/>

Ib Bygbjerg, Professor, Department of International Health, Immunology and Microbiology, University of Copenhagen, presented the European Commission project 'Improving the quality, effectiveness and access to basic treatment for severe febrile illness and chronic anaemia caused by malaria and other common infections'. It is a project which among others also include Anja Poulsen and Britt Tersbøl and such prominent institutions as LSHTM; Joint Malaria Programme, Tanzania; KCMC, Moshi; NIMR, DsM, Tanzania. Purpose: to address the needs of children and pregnant women in the treatment and prevention of malaria in 2 regions of NE-Tanzania. The project takes its point of departure in the fact that there are a number of weaknesses in prevention and treatment of malaria, especially in relation to drug policy in a highly drug resistant area, in treatment of at risk children, in the use and confidence in hospital care, and in the protection for children and pregnant women from effects of prolonged/severe anaemia. A number of peer reviewed publications are printed or under revision discussing the findings which show that 50% of severely ill febrile children had negative malaria slides, but were treated with anti-malarials only and that 25% of bacteriaemic children had vaccine preventable infections (HIB, pneumococci). A different project 'Improving Prevention and Diagnosis of Active Tuberculosis in Children in North-East Tanzania' was also briefly presented by Ib Bygbjerg. The overall aim of this project is to evaluate interventions that will improve diagnosis of TB and thus reduce the child morbidity and mortality among children in a resource limited region with high prevalence of malnutrition, HIV and TB in North-East Tanzania. The objectives are to

- 1) Assess the diagnostic performance of new diagnostic tools based on immunological markers (QFT, IP10 and MCP2 test) and evaluate if they can contribute to diagnosing active TB.
- 2) Focus on an evaluation of how well the National Tanzanian TB score chart performs compared to a potentially improved score chart.
- 3) Assess if a TB awareness chart can be developed and used to make health staff aware that TB is a potential diagnosis.

Anja Poulsen presented an intervention to improve quality of care in paediatric wards in the north-east of the United Republic of Tanzania. It was a part of the project described by Ib Bygbjerg

to improve the assessment of febrile children. The study took place in 11 district and two regional hospitals in Tanga and Kilimanjaro region. A baseline assessment was performed using an adaptation of the WHO model in the paediatric wards, afterwards evidence based interventions were developed; among others training, equipment, an admission form, and improved organisation. At the end of the intervention a second assessment was performed. The results indicate that it is possible to improve the standard of care of paediatric inpatient care even with limited resources.

Britt Tersbøl, assistant professor, Department of International Health, Immunology and Microbiology, and Helle Samuelsen, Head of Department, Department of Anthropology, University of Copenhagen (both absent), a poster from their joint research in Zanzibar was briefly introduced. The research project 'Community IMCI, Zanzibar' takes its point of departure in the intention of MoHSW Zanzibar to implement community IMCI. The aim is to explore community perceptions, experiences and practices concerning child health which is done through qualitative methods. So far a community study in two communities in North District has been carried out to bring about information that will facilitate well-adapted and effective implementation of community IMCI.



Programme

10:00 – 11:00 Presentation of research priorities and ongoing initiatives within the field of new born and child health at the Department of child and adolescent health and development, World Health Organization, Geneva by José Carlos Martines (research coordinator) & Mikael Østergren (health systems, data collection and advocacy coordinator)

Discussion

11:00 – 11:15 Tea break & social networking

11:15 – 13:00 Introduction to ongoing Danish based research projects within new born, child, adolescent and reproductive health by the participants (approximately 5 minutes each)

Introduction to CSGH, Universities Denmark's Platform for Human Health and Enreca Health by Flemming Konradsen & Lise Rosendal Østergaard

Discussion of potential areas of collaboration within research, courses and joint applications

Summing up: where to go next? By Flemming Konradsen

13:00 – 13:30 Lunch

Please confirm your participation by email to Lise Rosendal Østergaard at liron@sund.ku.dk no later than 23 February 2010.

This meeting is organized jointly by [Enreca Health –Danish Research Network for International Health](#) and [Copenhagen School of Global Health](#)

**Child Research and Development
A dialogue meeting with WHO
February 26, 2010
Participants
CSS Room 2.2.50**

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7.	Ib Bygbjerg	iby@sund.ku.dk	Consultant, RH, Chairman, Enreca Health, ISIM, University of Copenhagen
8.	Ebba Holme Hansen	ehh@farma.ku.dk	Professor, MSc, Institute for Pharmacology and Pharmatherapy, University of Copenhagen (Uganda, children, quality of drugs)
9.	Marianne Stubbe Østergaard	moster@sund.ku.dk	Senior researcher, Department of General Practice, University of Copenhagen (Uganda, children, quality of drugs)
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