TASK FORCE REPORT TO IUNS

PREVENTION AND CONTROL OF MALNUTRITION

SEPTEMBER 2009

The **International Malnutrition Task Force (IMTF)** for the prevention and control of malnutrition was launched in September 2005 in Durban at the 18th International Congress of Nutrition.

Aims of the Task Force

These are:-

- to establish three regional networks to coordinate technical expertise and develop capacity-building partnerships
- to raise the profile of malnutrition among health policy makers and donor agencies and advocate increased recognition of its importance to child survival
- to work with partners to build capacity to prevent and treat malnutrition
- to advocate for inclusion of malnutrition in medical and nursing curricula and for WHO case-management guidelines to be implemented in paediatric wards
- to facilitate the scaling-up of effective interventions to reduce malnutrition deaths
- to encourage health workers to undertake operational research to monitor and improve their performance and provide data for advocacy action
- to raise resources
- to publish and disseminate research findings and experiences.

The aims of the Task Force are of direct relevance to Millennium Development Goal 4, which seeks to reduce child mortality by two-thirds, as malnutrition currently contributes to a majority of child deaths and an integrated system of prevention, timely referral, correct inpatient treatment, and effective community care will improve child survival.

Structure of the Task Force

The Task Force comprises i) Governors ii) a Steering Committee, iii) Partnerships and iv) an Advisory Panel.

The Governors are:

International Union of Nutritional Sciences: Professor Ricardo Uauy (Chair of Governors)

International Paediatric Association: Professor Zulfiqar Bhutta

UNICEF: Dr Ian Darnton Hill (Nutrition) and Dr Flora Sibanda-Mulder (Nutrition Security/Emergency)

IAEA: Dr Lena Davidsson

WHO: Ms Zita Weise Prinzo (FND) and Dr André Briend (CAH) (until summer 2009)

WHO-SEARO: Dr Sultana Khanum

Members of the Steering Committee are:

Joint Conveners:

Professor Ann Ashworth, London School of Hygiene & Tropical Medicine, UK Professor Alan Jackson, University of Southampton, UK

Regional focal points:

South/Southeast Asia Dr Tahmeed Ahmed, International Centre for Diarrhoeal Disease Research, Bangladesh

Sub-Saharan Africa: Professor David Sanders, School of Public Health, University of the Western Cape, South Africa

Latin America: Dr Ana Maria Aguilar, Instituto de Investigaciones en Salud y Desarrollo Facultad de Medicina Universidad Mayor de San Andres, La Paz, Bolivia.

Partner representative: Mr Paluku Bahwere, Valid International, UK.

The <u>role of the Steering Committee</u> is to:

- develop biennial action plans for each region based on the objectives of the Task Force
- establish capacity-building partnerships to respond to local needs
- fulfil the regional action plans
- review progress annually and provide a report
- maintain a website.

<u>Partnerships</u> are identified as part of ongoing activities of the Task Force. Those already formed include WHO, UNICEF, the International Paediatric Association, the Royal College of Paediatrics and Child Health (RCPCH), Valid International, the Regional Centre for Quality of Health Care, the Blantyre Working Group, and the Latin America Nutrition Network. The University of Southampton is also a partner and has waived the administration fee for accommodating the Task Force.

<u>The Advisory Panel</u> is informal and broad-based, and includes all those who can contribute to attainment of the Task Force goals.

Activities

Most activities since the inception of the Task Force relate to a) building capacity to prevent and treat malnutrition, b) raising awareness of the importance of malnutrition in child survival, c) case-management guidelines, d) policy and planning.

1. Regional Training on Integrated Management of Severe Malnutrition

The Task Force facilitated a joint training by WHO and UNICEF on the Integrated Management of Severe Malnutrition. It was held at Muhimbili University College of Health Sciences, Dar es Salaam, in September 2006. Eight countries from East and Southern Africa were represented. Participants included health practitioners, WHO/UNICEF regional advisors and nutrition officers, and staff from Ministries of Health responsible for planning and implementing programmes to prevent and treat malnutrition. A short report was published (SCN News, Public Health Nutrition, Nutrition Gazette, and Field Exchange). In their opening addresses Flora Sibanda-Mulder (UNICEF) and Denise Coitinho (WHO) described the joint training as a milestone. Not only did it demonstrate the integration of community-based and facility-based care, but WHO, UNICEF, VALID and FANTA worked in partnership and set the example of moving forward together.

National trainings, follow-up and roll-out have occurred in several of the participating countries in partnership with VALID, UNICEF, WHO, RCPCH and the Clinton Foundation. The aim is to develop at least one centre in each country to lead capacity building activities.

2. Lancet 2008 Nutrition Series

Members of the Task Force were part of the Maternal and Child Undernutrition Study Group and played a key role in planning and coordinating this Series, and in writing papers. Seven key challenges for addressing undernutrition were identified, several of which coincide with the aims of the Task Force. The series advocated increased recognition of malnutrition in child survival strategies and the need to raise the profile of malnutrition in national action plans. Building strategic and operational capacity was also highlighted.

3. Technical Review Committee on Management of Severe Malnutrition

Alan Jackson chaired the WHO/UNICEF/IUNS Malnutrition Task Force meeting in Geneva, in June 2007, which reviewed particular issues and constraints in managing severely malnourished children in the community and in facilities, and identified actions needed for taking the implementation process forward both at research and operational levels.

4. Technical Review and Planning Meeting

Following the Geneva discussions, IAEA hosted a meeting in Vienna, in December 2008, of Task Force Governors to review progress and plan activities for 2009. One action point was to review guidance on the treatment of children with shock or severe fluid/electrolyte imbalance. It was agreed to set up a small informal group to meet under the aegis of WHO to review recent research and experience of alternative approaches to treatment of shock.

5. Interagency Research Advisory Group on Management of Acute Malnutrition in Infants

Alan Jackson represents the Task Force on the interagency group that addresses treatment of malnourished infants below 6 months of age, and is Chair of the group.

6. South/Southeast Asia

The Pacific Health Summit each year invites key decision-makers in science, policy, industry, medicine and public health to discuss how to achieve a healthier future through effective utilisation of scientific advances combined with appropriate policies for prevention and early detection of disease. Global nutrition was the topic chosen for 2008, and Alan Jackson spoke about the capacity-building work of the Task Force, stressing the importance of integrated approaches to prevention and treatment of malnutrition.

As part of the Global Review of Nutrition, Tahmeed Ahmed and colleagues from the Asia hub of the Task Force undertook a systematic review of the impact of the WHO guidelines on case-fatality rates of severely malnourished children. The results suggest that the WHO guidelines are sufficiently robust for adequate case-management. They also reviewed the efficacy of ready-to-use therapeutic food and concluded that in disaster situations it is a very good option for case-management of severe malnutrition.

Feedback was provided to SEARO regarding the Consensus Guidelines for Hospital-based Management of Severe Malnutrition, developed by the Indian Academy of Paediatrics. The guidelines have been published in the Indian Journal of Paediatrics, together with a commentary from the Task Force.

<u>In Bangladesh</u> national guidelines for case-management of severe malnutrition have been developed. Tahmeed Ahmed was keynote speaker at a national workshop convened for this purpose and ICDDR,B facilitated the process of reaching consensus. Public medical schools in Bangladesh do not have functional services for taking care of severely malnourished children. ICDDR,B has recently helped to establish nutrition services in Chittagong and Khulna Medical Colleges. These services enable a large number of doctors, nurses, and medical and nursing students to receive hands-on training in assessing and treating severely malnourished children.

<u>In Nepal</u> a training workshop in Kathmandu was facilitated by members of the Asia hub of the Task Force.

In <u>Indonesia</u>, the treatment of severe malnutrition was highlighted through an opening session in the Asian Congress on Diarrhoeal Diseases and Nutrition (ASCODD). Dr Ahmed spoke on the Asian perspectives while Dr Tom Heikens talked about the African perspectives of severe malnutrition.

The Asia hub is also very active in research on the pathophysiology and treatment of severe malnutrition. Ongoing/recently concluded research includes:

- high versus continuous low dose vitamin A supplementation to severely malnourished children (Bangladesh)
- management of severe malnutrition from primary health care clinics in Dhaka city
- efficacy of low-cost, local diets in the management of severe malnutrition, using stable isotope methodology (Mulago Hospital, Kampala)
- efficacy of reduced osmolarity ORS in management of diarrhoea in severe malnutrition (Bangladesh).
- psychosocial stimulation in improving growth and development of severely malnourished children (Bangladesh)
- development of RUTF using local food ingredients (Bangladesh)
- efficacy of RUTF compared with local diets (Bangladesh)
- efficacy of soy-based RUTF in treatment of severe acute malnutrition (Bangladesh).

7. Sub-Saharan Africa

<u>In Southern/Eastern Africa</u>, the Blantyre Working Group on the management of severely malnourished HIV-infected children was established in January 2007, linking Malawi, Uganda, Kenya, Zambia, Tanzania and South Africa. A regional education centre is to be established in the Department of Paediatrics, University of Malawi, within the Academic (Research) Network for Developing African Leadership in Child Health Nutrition. In Malawi, more than 1000 metric tons of ready-to-use food is produced locally, largely financed by the Clinton Foundation and is reported to have revolutionised case-management. A proposal to strengthen child health and nutrition in African Higher Education Institutions and develop a critical mass of child health scientists has been submitted to EduLink for funding.

<u>Support to Kenya and Uganda</u>: Task Force members assisted in expanding work in Uganda and Kenya in partnership with Action Contre la Faim, and provided operational research input aimed at evaluating impact, and identifying barriers and favourable factors. Ongoing training and support is provided to Kilifi district hospital (KEMRI/Wellcome Trust, Kenya) and to Mulago hospital (Uganda), mainly by Alan Jackson and Tahmeed Ahmed in partnership with IAEA.

<u>In South Africa</u>, training and post-training support to improve inpatient management of severe malnutrition is being provided by David Sanders and Thandi Puoane in collaboration with Provincial Departments of Health. Operational research indicates that good impact on casefatality can be achieved if there is sufficient leadership, including induction of new staff, onthe-job training and supervision. The research findings were presented at the National Nutrition Congress as part of advocacy to improve quality of care of severe malnutrition.

<u>Support to Malawi:</u> Malawi is recruiting a new cadre (the Community Nutrition and HIV and AIDS Worker) who will manage community nutrition programmes. In preparation, the Southern Africa Nutrition Capacity Development Initiative (SANCADI) supported the first phase of the development of a training Curriculum. This involved providing technical and financial support for a 5-day Curriculum Review Workshop in October 2007, with 22 key stakeholder representatives. The Workshop outputs were a job description, list of competencies, and a curriculum framework. One detailed module on Nutrition was subsequently developed. This process involves other stakeholders and SANCADI hopes to

support the training of the first batch of Trainers and monitor the implementation of the programme in the selected areas.

The Ministry of Health, with support from VALID, Concern Worldwide and other partners, has scaled-up community-based management of malnutrition to almost all districts, assisted by a CTC advisory service. In partnership with Save Children US, VALID explored the possibility of using CTC for the management of severely malnourished HIV-infected adults.

<u>Support to Zambia</u>: With the award of a World Bank grant to VALID, the CTC programme has been greatly expanded and sustained. In partnership with UNICEF, VALID is also providing technical support for the implementation of CTC, and is collaborating in training health workers throughout Zambia in the CTC approach.

<u>Support to Mozambique</u>: Community-based management of malnutrition has been introduced by the MoH in Nampula Province with support from Save Children US, VALID and UNICEF.

Support to South Africa: The Department of Health-Nutrition plans to integrate facility- and community-based care, but requires support in building capacity at district level in implementing CTC and providing continuing care and food security for children with malnutrition, HIV and AIDS after discharge into the community. These areas fall within SANCADI's mandate. SANCADI has arranged for Malawi to provide technical support to South Africa for the CTC component, while the University of the Western Cape will continue to support the strengthening of the facility-based component. A planning meeting was held in 2008 and SANCADI provided or sourced the technical support needed. With support from UNICEF and training provided by David Sanders and colleagues, the DoH is expanding implementation of the WHO guidelines for facility-based care, and associated training, to all 9 provinces.

With assistance of the University of the Western Cape, nutrition teaching of medical students at the University of Cape Town, School of Child and Adolescent Health, has been reviewed and the curriculum has been revised and strengthened. Management of severe malnutrition is now an established feature in the undergraduate nurses' curriculum at the University of the Western Cape.

<u>Support to Botswana</u>: Once the South African training for CTC is ready, Botswana will be invited to participate as they have indicated their interest in moving into community therapeutic care.

Support to Ethiopia: Technical support to the MoH has been provided for CTC in the Oromia Region and in Addis Ababa by VALID and Save Children US, where there is a high proportion of HIV/AIDS-related malnutrition. Sites for paediatric antiretroviral therapy have been established in Ethiopia and Kenya. VALID has also provided technical support to UNHCR for the roll out of CTC in refugee camps in parts of Ethiopia and eastern Sudan. The implementation of CTC in refugee camps requires adjusting protocols and the experience gained provides a new perspective on the operation of CTC in the field.

<u>Support to Djibouti:</u> Support was provided to the MoH by UNICEF and VALID for CTC in 3 pilot health centres of the capital city and in 5 rural districts.

<u>In Sudan</u>, assistance was given to the Ministry of Health by Tahmeed Ahmed in partnership with WHO in preparing national guidelines for management of severe malnutrition.

<u>In Central Africa</u>, World Vision with VALID technical support started a CTC programme in Southern Sudan in May 2007. In Burundi, Action Against Hunger piloted CTC programmes in Kayanza and Ngozi. In Chad, UNICEF and VALID are supporting the MoH to pilot CTC

in Kanem and Guera, and Save Children UK with technical support from Valid has started to implement CTC in Abeche.

In the <u>Democratic Republic of Congo</u>, Lot Quality Assurance Sampling within existing geographical boundaries is being tested as an alternative to Centric Systematic Area Sampling (CSAS). This will use fewer resources, reduce the time required for field surveying, and allow implementers to quickly determine whether coverage is acceptable or unacceptable.

<u>In Ghana</u>, discussions with partners have taken place with a view to improving the quality of care for moderately and severely malnourished children. This work involves the UK Ghana Doctors' Association.

8. Latin America

One of the main events was the joint declaration in 2007 by Ministries of Health of Bolivia, Colombia, Ecuador, Peru and Venezuela to fight malnutrition and reduce deaths from severe malnutrition. Inter-country activities are planned and the Andean Ministries of Health resolved that national programmes to eradicate malnutrition be established and given highest priority for policy, and that nutrition focal points of each country would meet to prepare a regional plan. Intersectoral links (including health, education, water, sanitation, agriculture and finance) and managerial capacity of nutrition-related staff are to be strengthened. A permanent forum has been set up.

<u>In Bolivia</u>, President Evo Morales and Minister of Health Dra Nila Heredia authorized a Zero Malnutrition programme, based mainly on activities carried out through the Task Force by Ana Maria Aguilar. Achievements include:

- nationwide advocacy to engage 328 municipal councils in preparing budgets to support malnutrition prevention activities and provide complementary food
- strengthening of nutrition networks nationwide to orientate health centres and households towards improving complementary feeding and ensuring availability of micronutrients and industrial-scale complementary food
- adaptation of the IMCI strategy to address nutritional problems, including a change of nutritional indicators
- organization of budget, supplies and commitments to reduce case-fatality rates for severe malnutrition to <5%. National training took place in February 2007.
- development of plans for early case-finding, community-based rehabilitation, and scaling-up training to improve inpatient treatment and follow-up of severe malnutrition at national level.

In 2007, case-management of severe wasting became a priority stream in the national development plan, and inclusion of severe wasting among children under five became mandatory for the National Information System. Drugs and supplements to prevent and treat malnutrition are available in hospitals nationwide. Collaborating agencies contribute to training budgets and equipment for hospitals. All 12 tertiary hospitals now implement the WHO inpatient guidelines, and case-management has improved with several hospitals achieving case-fatality rates of around 5%. Support costs were \$1200/hospital, and each team received manuals so they could train fellow workers. Regular monitoring is provided by local committees in collaboration with the Bolivian Paediatric Association. All health centres have ready-to-use therapeutic food, low osmolarity ORS, Sprinkles and zinc tablets. Health centres are supervising the domiciliary management of moderate wasting, and staff are being hired and trained for strengthening nutrition units. Curricula for them have been developed.

In Peru, guidelines have been drafted for the integrated management of severe malnutrition.

9. WHO training course on Management of Severe Malnutrition

An e-learning version of the WHO training modules has been developed by the Task Force and was displayed at the SCN meeting in Rome. It was handed over to WHO in Geneva in 2008 for general release. The 'master site' is based at Southampton with connections to several partner sites. This will widen access to the training course materials, and forms the first step in a more consistent approach to web-based availability of relevant training materials. This work has been carried out through a charitable donation from Microlink Inc, who have also provided support for the creation of a website and the secretariat needed to maintain these activities.

10. Collaboration with UK Department of Health and WHO

In June 2007, Alan Jackson presented the work of the Task Force to Dr Margaret Chan, Director General of WHO and her team and to the Chief Medical Officer and officials from the UK Department of Health. Possible opportunities for ongoing collaborations were identified.

The Department of Health through the National Institute of Health Research (NIHR) is supporting a systematic review of the 'Effectiveness of interventions to treat severely malnourished children'. This is being carried out within the Health Technology Assessment Programme by the NIHR Evaluation, Trials and Studies Coordinating Centre. This review is a requirement for the formal system for review of guidelines and protocols within WHO, and will thus inform any future review of the guidelines for treatment.

11. Website

The Task Force has initiated a website (www.imtf.org) to provide a database and information about resources, training, evidence-base for treatment guidelines, review of recent research, and answers to frequently asked questions, as well as information about the Task Force and its activities. Based on experience in South Africa and Tanzania, a package has been developed to help nurses acquire basic knowledge and skills for implementing best-practice in resource-poor settings. The package includes job aids, wall charts, lesson plans and in-service training materials.

12. Reprint of Waterlow's classic PEM book

Task Force members contributed to the update of specific chapters of the book Protein Energy Malnutrition by JC Waterlow. This book, which was published in 1992, has been out of print for sometime but provides much of the evidence-base for the WHO guidelines for the management of severe malnutrition. The updated version was released in April 2008.

13. Key Paediatric Texts

One of the aims of the Task Force is to see that prominent paediatric texts provide correct information about malnutrition. We therefore approached and advised the Editors of the 2008 edition of Nelson's Textbook of Pediatrics. Input was also provided to the Editors for the 4th edition of Nutrition in Pediatrics: Basic Science and Clinical Applications.

14. Reports and publications

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Prepared by Ann Ashworth Task Force Co-Convenor September 10th 2009