



Report

**WHO Meeting towards
A Global Initiative for
Emergency and Essential Surgical Care (GIEESC)**

8-9 December 2005

Executive Board Room, WHO

Geneva, Switzerland

*Clinical Procedures Unit
Department of Essential Health Technologies
Health Technology and Pharmaceuticals Cluster
World Health Organization*

Contents

Page Numbers

1. Executive summary	3
2. Background	4
3. Over all objectives	5
4. Introduction	6
5. Overview of Implementation of the WHO IMEESC in countries	7
6. Summary of Country Presentations on follow up activities	7
7. Video Conferences for activities in Ethiopia and Uganda	12
8. Round Table Discussions	13
9. Draft Terms of Reference (TOR)	16
10. Recommendations and Action Plan	17
11. Conclusions	18
12. Annexes	19-30
i. List of participants	
ii. Programme agenda	

1. Executive summary

Each year injuries kill more than 5 million people, accounting for nearly 1 in every 10 deaths. An estimated 500,000 women die from pregnancy related complications each year. In children between the ages of 4 to 14 years, road traffic injuries are the second leading cause of death. Death and disability in each of these groups are easily prevented or corrected by surgery, provided this service is made available in a timely manner. Most of these essential and surgical interventions can be delivered at the first referral level health facility (rural or district hospital, health centre, primary healthcare facilities) provided that the health care personnel possess a few basic skills and some basic equipment.

In order to address this need, WHO developed training materials on *Integrated Management for Emergency and Essential Surgical Care* and initiated regional and country training workshops to strengthen local capacity. Several of these training workshops, conducted jointly with Ministries of Health and in collaboration with partners and NGOs working within these countries, highlighted the need for a *Global Initiative for Emergency and Essential Surgical Care* (GIEESC) that could integrate and synergize the work of the individual groups, leading to a more effective and widespread training programme.

The objective of this global meeting was to strengthen international collaborations to improve emergency and essential surgical (including anesthesia) care at resource limited healthcare facilities through capacity building to manage life threatening conditions from injuries (trauma, disasters), pregnancy related complications, and infections.

The meeting participants represented experts from various disciplines of medicine (surgery, orthopaedics, obstetrics, anesthesia, emergency medicine, trauma, paediatrics), and included professionals in the fields of nursing, paramedical education and training programs, as well as professional and civil societies, local and international organizations, and various WHO departments at its headquarters as well as at the regional and country offices.

The participants were updated on the activities of the department of Essential Health Technologies from the inception of the CPR unit to the implementation of EESC project in 8 countries. Participants representing other organizations presented their activities in countries that contributed to improving the quality of emergency and essential surgical (including anesthesia) care and identified potential opportunities for collaborations with WHO and its partners.

This meeting resulted in a consensus on the establishment of the GIEESC with a secretariat hosted at WHO/EHT/CPR, Geneva. The participants developed a draft Terms of Reference (TOR) for the GIEESC and made recommendations for the next plan of action.

2. Background

Each year injuries kill more than 5 million people - nearly 1 in every 10 deaths; and tens of millions more visit emergency rooms for injuries due to road traffic accidents and assaults. In children (between the ages of 4 to 14 years) road traffic injuries are the second leading cause of death. The overall impact on child health remains poorly defined, but it is likely that poor access to facilities that provide surgical care and the resultant delays contribute significantly to mortality and disability from injuries.

Each year 500,000 women die from pregnancy related complications. Obstructed labor is one of the leading causes of maternal illness and death in sub-Saharan Africa and South Asia. In addition, obstructed labour is often the immediate cause of obstetric fistula that leads to untold suffering in a large number of women in these countries. This devastating condition affects more than two million women worldwide.¹

Training in basic resuscitation techniques and the equipment required for this purpose are often lacking at the first referral level facilities in developing countries. This is compounded by the shortage of trained health care workers due to the ravages of the HIV/AIDS epidemic, and as a result of 'brain drain' due to migration to urban settings and developed countries.² The health personnel who remain at these primary healthcare facilities are unable to perform life saving emergency and essential surgical procedures because of lack of medicines, equipment, or training.

Emergency and essential surgical care (EESC) has traditionally not been considered a public health priority in developing countries despite evidence of significant mortality, morbidity and disability imposed by treatable surgical conditions. The role of surgical interventions in poor and developing countries has traditionally been considered as minimal, because of perceived high costs, and limited human and material resource availability. It is, thus, not surprising that there are only a few studies examining cost-effectiveness of surgery in developing countries. For example, the first edition of the landmark book *Disease Control Priorities in Developing Countries* barely mentioned the cost-effectiveness of surgical interventions, save for cataract surgery.³ The second edition of the book, however, has an entire chapter devoted to cost-effectiveness of surgery in resource-poor environments, which testifies to the growing perception of surgery as an important part of the public health armamentarium.⁴

At the turn of the century, emergency and surgical (including anaesthesia) care is increasingly being recognized as a priority to reduce death and disability in life threatening conditions as a result of road accidents, falls, burns, disasters domestic violence, pregnancy-related complications, congenital anomalies and infections. Beyond treatment, Surgery provides primary and secondary prevention strategies for avoidable mortality, morbidity and disability. Anaesthesia expertise is not limited to the Operating Room (O.R) but importantly involves resuscitation, trauma and intensive care, and preoperative optimization of the patient and the appropriate anaesthetic technique for the particular surgery. Outside the O.R, anaesthesia is

¹ World Health Organization. The world health report 2005 - make every mother and child count. WHO | Chapter 4. attending to 136 million births every year <http://www.who.int/whr/2005/chapter4/en/index.html>

² World Health Organization, The world health report 2006 - working together for health <http://www.who.int/whr/2006/en/>

³ Jamison DT, International Bank for Reconstruction and Development. Disease control priorities in developing countries. New York: Published for the World Bank [by] Oxford University Press; 1993.0

⁴ Jamison D, Evans D, Alleyne G, Jha P, Breman J, Measham A, et al., editors. Disease Control Priorities in Developing Countries. 2nd ed. Washington DC: World Bank; 2006

required for procedures to treat burns, or perform special radiological investigations, as well as for pain relief (postoperatively, obstetrics, cancer therapy).

Injury prevention and capacity building requires providing basic training in primary care and first aid to school teachers, students, traditional healers and untrained health care workers. It also requires developing functional surgical and anesthetic competence in physicians, nurses and technicians, harnessing volunteerism to create capacity, exploring use of technology to provide care and training (telemedicine, telementoring, telesurgery), and developing estimates of cost and cost-effectiveness for each of the above proposed interventions.⁵ Surgical treatment of some common pathological conditions in developing countries may be more cost-effective than previously thought, and results provide evidence for the inclusion of surgery as part of the basic public health armamentarium in developing countries.⁶

Reviews of intervention studies in low and middle income countries suggest that simple dissemination of guidelines alone is often ineffective.⁷

WHO responded to the above challenge with the establishment of the Clinical Procedures (CPR) unit within the department of Essential Health Technology (EHT) focusing on strengthening capacities to bridge the gap at first referral level health facilities through a collaborative approach in an Integrated Management of Emergency and Essential Surgical Care (IMEESC).

3. Over all objectives:

Improve collaborations among organizations, agencies and institutions involved in reducing death and disability from road traffic accidents, trauma, burns, falls, pregnancy related complications, domestic violence, disasters and other emergency surgical conditions in order to strengthen capacity to deliver effective emergency surgical care at the first referral level facility, thereby contributing towards achieving the Millennium Development Goals (MDGs).

Specific objectives:

To establish a global initiative to:

- support capacity strengthening in the safe and appropriate use of emergency and essential surgical procedures and linked equipment in resource limited healthcare facilities, thereby improving the quality of care
- strengthening of existing training and education programs for safety of essential clinical procedures in countries

4. Introduction

A WHO meeting towards a Global Initiative for Emergency and Essential Surgical Care (GIEESC) was convened by the Clinical Procedures (CPR) team in the WHO Department of

⁵ Haile T. Debas, Richard Gosselin, Colin McCord, and Amardeep Thind, "Surgery." 2006. Disease Control Priorities in Developing Countries (2nd Edition), ed. , 1,245-1,260. New York: Oxford University Press. DOI: 10.1596/978-0-821-36179-5/Chpt-67 <http://www.dcp2.org/pubs/DCP/67>

⁶ Richard A. Gosselin, Amardeep Thind and Andrea Bellardinelli. Cost/DALY Averted in a Small Hospital in Sierra Leone: What Is the Relative Contribution of Different Services? World J Surg Vol 30(4), 2006 <http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s00268-005-0609-5>

⁷ Alexander K Rowe, Don de Savigny, Claudio F Lanata and Cesar G Victora, How can we achieve and maintain high-quality performance of health workers in low-resource settings?, The Lancet, Volume 366, Issue 9490, , 17 September 2005-23 September 2005, Pages 1026-1035. [doi:10.1016/S0140-6736\(05\)67028-6](https://doi.org/10.1016/S0140-6736(05)67028-6)

Essential Health Technologies (EHT), within the cluster of Health Technology and Pharmaceuticals. It was held at WHO headquarters, Geneva, in the Executive Board room on 8-9 Dec.2005. Participants represented the ministries of health (MoH) of some countries, international professional societies, non-governmental organizations with official relations with WHO, experts in the field of surgery, orthopaedic, paediatrics, anesthesia, trauma, emergency medicine, and obstetrics, directors of training and education programs (medical, nursing, clinical officers and paramedical personnel). The meeting also included WHO staff representing regional and country offices, head quarters departments linked to the CPR project on Emergency and Essential Surgical Care (EESC) such as Policy & Rational Use of Drugs, Human Resources for Health, Patient Safety, Violence & Injury Prevention, Making Pregnancy Safer, Child and Adolescent Health, Health Action in Crises, Global Initiative for Buruli Ulcer and Cancer programs.

This meeting followed on from an Informal Consultation held in WHO, Geneva in 2002, WHO/AFRO regional workshop held in Uganda in 2003, and training workshops on EESC held in 8 countries conducted by WHO in collaboration with the country MoH and, in some cases, partner NGOs.

The opening session was addressed by the Assistant Director General, Health Technology & Pharmaceuticals cluster, Dr V. Lepakhin, welcoming the participants and exhorting them to share their experiences and strengthen collaborations to improve the quality of emergency and essential surgical care at resource limited health care facilities. The main aim of this WHO meeting towards a GIEESC is to assist member states through addressing this as a public health issue contributing to achievement of the MDGs. The Director, EHT, Dr Steffen Groth, explained the role of the department in making Essential Health Technologies accessible to district hospitals, with the creation of CPR unit, which has developed standards, guidelines and training tools adapted to country needs.

The coordinator, CPR, Dr. Luc Noel emphasized the important role of CPR in bridging the gap between the universities and primary health care facilities through collaboration with the MoH and partners to provide access to basic EESC at 1st referral level facilities. This global initiative intends to develop and strengthen collaboration between technical and scientific societies, NGOs and universities to improve level of proficiency, capacity building, and dissemination of information among member countries and address the challenges involved in harnessing more resources to a neglected aspect of health care i.e. EESC.

Participants reported on their organizations' activities in countries towards building capacities in emergency and surgical (including anesthesia) interventions and identified potential opportunities for collaborations with WHO for EESC. The introductions of the participants were followed by the election of chairperson Dr. H. Debas, Co-chairperson Dr A.Wasunna and Rapporteurs Dr R.Moresky and Dr S.Awais.

5. Overview of Implementation of the WHO Integrated Management of Emergency and Essential Surgical Care in countries: Dr. Meena Cherian, WHO/EHT/CPR

This session aimed to update participants on the WHO EESC project activities since the establishment of the Clinical Procedures (CPR) unit in may 2004. Through the establishment of the CPR unit WHO signalled its recognition of " Emergency and Essential Surgical Care" as a public health issue that needed to be addressed in order to meet the MDGs.

The WHO EESC project has been launched in 8 countries including, Pakistan, Mongolia, Kyrgyzstan, Vietnam, Mozambique, Ethiopia, Ghana, Maldives during the last 18 months in collaboration with the respective MoH and the local WHO country and regional offices. It is anticipated that the project will continue in these countries and expand to additional districts, provinces, states in order to reach health providers at all primary health care facilities in each country. Additional countries will be included following project proposal requests from interested parties submitted through the country MoH and WHO/Country and Regional offices.

The project aims to strengthen capacity to deliver essential and emergency surgical care at the first referral level hospitals. The training programme is built around a WHO *Integrated Management of Emergency and Essential Surgical Care* (IMEESC) tool kit, which comprises of best practice protocols on clinical procedures safety, disaster management, HIV prevention, waste disposal, guidelines on policies, training curriculum, emergency equipment, teaching slides and videos. Monitoring and evaluation will be an integral part of the programme.

A low-priced edition (produced by WHO/SEARO) and Mongolian edition of the WHO manual *Surgical Care at the District Hospital* (SCDH) are now available. It is anticipated that the French adaptation will be available in 2006, while there are plans for translations in Korean, Russian, and Portuguese languages on requests received from countries. This manual is recommended by WHO for integration into the curriculum of medical, nursing and continuous education programs in countries.

6. Summary of Country Presentations on follow up activities

Focal persons representing WHO, MoH, and collaborating partners from 8 countries reported on the follow-up activities following the joint WHO and MoH training workshops on *Integrated Management for Emergency and Essential Surgical Care*. The reports of the workshops are available at⁸.

6.1. Achieving MDGs through Capacity Building of Health Workers by ESSEMCH in Pakistan. Dr. Assad Hafeez, WHO, Pakistan

The WHO IMEESC project was adapted to the local needs and priorities of reducing maternal and child mortality, and integrated into the local Emergency Maternal and Child Health (ESSEMCH) project. Health personnel who were trained using the WHO IMEESC tool made important contributions by providing emergency and essential surgical services in the earthquake affected area in northern Pakistan.

Five courses of 5 days each were held on ESSEMCH in collaboration with MoH, WHO, Advanced Life Support Group and Child Advocacy International (ALSG & CAI), UK. The course provided training for front line health workers in the “Golden Hour” management of emergency, paediatric, obstetrics and trauma patients. In addition, a number of 1 day course for paramedics, skilled birth attendants, ambulance personnel and instructors. As of December 2005, 19 courses had been organized with 370 health workers trained at various levels of care including training in large Afghan refugee camps. It is anticipated that training courses covering all districts in the country will be conducted over a period of 5 years.

Each course uses a selected methodology and comprises of lectures, skills training, scenario teaching, positive critical discussion, WHO IMEESC tools, pre and post training test and is

⁸ www.who.int/surgery

accredited by ALSG-UK. The workshops are conducted by a voluntary faculty and participants are given service incentives.

The following important lessons have been learnt during the initial period of the programme:

- Introducing life support training as public health intervention
- International accreditation
- Concept of voluntary faculty
- No per diem – but service incentive
- Sustainable integration e.g. the courses have integrated training in ESSMCH into District Health level, and continued with collaborations of USAID, Save the Children

6.2 Launching of WHO project Integrated Management on Emergency & Essential Surgical Care (IMEESC) in SICOT Education Centre in Pakistan. Prof. Dr. Syed Muhammad Awais, King Edward Medical College, Lahore, Pakistan

The WHO EESC project was introduced at the Annual International Conference of the Société Internationale de Chirurgie, Orthopaedics ET Traumatologie (SICOT, in official relations with WHO) in Egypt (2003) and Turkey (2004).

The WHO manual *SCDH* and *IMEESC* e-learning tool was launched in a WHO symposium at the inauguration of the SICOT Education Center at Lahore. The WHO IMEESC curriculum has been integrated into teaching programs for paramedics, nurses, medical students and residents. Short courses were organized for paramedics, nurses, orthopaedics residents and family physicians. Some of these health personnel volunteered their services in the earthquake disaster hit areas.

Several WHO/EHT publications stimulated the formulation of Framework for National Health Care Systems, which comprises of:

- Health Care Delivery Organizations (HCDO) consisting of Curative Health Care
- Delivery Organizations and Preventive Health Care Delivery Organizations.
- Health Care Providers (HCP) to staff different levels of HCDO.
- Policy for continuous development of health care systems through promotion of research and best practices, by supporting printing, e-learning, conferences traveling.
- Quality assurance by measuring effectiveness of already laid down standards of HCDO and HCP by producing monitoring and accreditation reports (national /international)

6.3 Pilot Project on Strengthening of Emergency & Essential Surgical Care at Selected Aimag and Soum Hospitals in Mongolia: Dr. Salik Govind, WHO/Mongolia

The major causes of emergencies in Mongolia include traffic accidents, violence, burns, accidental and sports-related injuries, pregnancy-related and surgery complications.

The project objectives include strengthening *Emergency & Essential Surgical Care Systems* to improve skills of health personnel by adopting WHO guidelines.

The phases of implementation included orientation of policy makers, translation of WHO publications into the Mongolian language, organization of national workshops and finally the launch of the project. Thus far 210 health professionals from 6 aimags (province) have been trained.

Partners of this project in Mongolia include WHO; MoH; Health Science University; professional associations of Surgeons, Gynecologists, Pediatricians, Trauma, Anesthetists and

Nurses; the Swiss Surgical Team of the International College of Surgeons; and Asian Development Bank (ADB).

Future plans include:

- expansion of the project to the whole country,
- development of a model emergency unit, development of mechanisms to monitor and evaluate the project,
- continued health personnel training with Swiss Surgical Team,
- development of national policy and guidelines on standardization of emergency equipment and expand project to ADB funded level and
- to improve supply of running water in hospitals with support from World Bank and other donors.

Lessons learned:

- The EESC project brought together 18 on-going vertical programmes in Mongolia, with its horizontal approach
- Needs assessment (using WHO IMEESC tools) prior to the training provided the following situation analysis:
 - many hospitals with no running water
 - many beds giving by UN agencies were not used for deliveries as culture was not to deliver from bed
- Collaboration to strengthen clinical skills (6 weeks training by Swiss Surgical team) to build local capacities for 'hard to reach' rural areas (which could be missed) may consider e-learning

6.4 Emergency and Essential Surgical Training in Kyrgyz Republic: Dr. Jochen Schmidt, GTZ-CIM, Kyrgyz Republic.

The national health care reforms (2005-2010) recognized the Emergency and Essential Health Care as an important goal. As a result Emergency Medical Services Training (EMST) has been integrated into the Kyrgyz State Medical Institute (KSMI) of Postgraduate Education for the training programmes for family medicine practitioners, feldshers, paramedics, ambulance workers, volunteers and ICU staff.

Translation of IMEESC book in Russian language and its integration into postgraduate education of health workers and development of IMEESC course material is ongoing. Facility based training and protocols are being developed for ambulance drivers.

The progress of the project includes nation wide 2-weeks ambulance staff training program, course for 5th year medical students, creation of chair for emergency health care at university and funding by World Bank & USAID.

Trained health personnel using WHO IMEESC and pre-hospital trauma care guidelines include Family Physicians (5), Residents of Family Medicine (19), Ambulances Feldshers (350), and Medical Students (50).

Future plans include:

- pre-hospital emergency course for medical students, FAP-Feldshers, midwives, hospital staff and emergency medical service in Bishkek,
- emergency and essential surgery equipment (diagnostic and Ambulance) from Kreditanstalt für Wiederaufbau (KfW) Funds and for Rural Part from European Union (EU) Funds,
- Production of local equipment.

Lessons learned:

- Assessment of patient outcomes, currently evaluation is done at the end of the course

6.5 Strengthening of Emergency & Essential Surgical Care at Primary Health Care Facilities in Viet Nam: Dr Luang Mai Anh, Hanoi, MoH, Viet Nam.

Viet Nam has 996 public and 41 private hospitals, each with high rates of injuries in children. Though the numbers of accidents and injuries have reduced after 2003, an important cause of mortality below age of 15 years is drowning and above 15 years is traffic injuries.

Emergency medical services lack proper equipments and adequately trained staff. Important activities are strengthening of emergency response and capacity in hospitals, and reduce work load of big hospitals.

Future plans are:

- to integrate WHO manual "*Surgical Care at District Hospital*" in existing training program
- provide emergency training,
- introduce monitoring and evaluation,
- translate best practices protocols and
- provide IMEESC tool kit to the selected centres to improve the capacity building.

Lessons learned:

- Integrate EESC training with country priority projects on child injury in collaborations with UNICEF

6.6 Integrated Management for Emergency & Essential Surgical Care in Maldives: Dr. Teodoro Herbosa, WHO/ Maldives

The vision of the programme in Maldives is to "Decrease the unnecessary loss of life and disability after mass causality through training program that would increase capacity of health system to manage emergencies and acute injuries".

A Joint WHO and MoH workshop held in Nov 2005 identified facilitators for training health personnel at identified atoll hospitals.

Several Training Courses have developed in Asia such as:

- Hospital Preparedness for Emergency Care (HOPE),
- Hospital Emergency Preparedness and Response Course (HEPR),
- Public Health Emergency Management for Asia and Pacific (PHEMAP).

Future plans are:

- To conduct WHO-MoH training workshop on emergency and essential surgical care in 2006.

6.7 Strengthening Emergency & Essential Surgical Care in Mozambique: Dr A. Mujovo, MoH Mozambique

There are 130 health facilities in Mozambique, which cover less than 50% of the population. Forty nine surgical technicians work at rural hospitals managing surgical, gynecology, obstetrics, orthopedic emergencies.

In September, 25 trainers were trained in the joint WHO with MoH workshop on Emergency and Essential Surgical Care held in Maputo. The ongoing activities aim to build capacities and strengthen emergency and essential surgical skills at first referral level, focusing 3 identified rural hospitals in Angonia, Marrameo, Xinavane provinces.

Future plans include:

- establishment of a Multidisciplinary Working Group that will visit all selected hospitals to update on the needs assessment (done prior to the workshop), best practice protocols for Clinical Procedures Safety will be selected for translation in Portuguese;
- updating of EESC through a regular surgical technicians course (1 per region per year) and regular surgical basic skills course (2 per province per year);
- by end 2006 a national evaluation program involving the selected hospitals and some more invited, more than 100 health personnel will be trained or updated

Lessons learned:

- continuing medical education and training of surgical technicians is very important as they are the frontline health care providers performing life saving emergency and essential surgical interventions
- visits to one of the selected hospitals by the other 2 hospitals for exchange of knowledge

6.8 Emergency and Essential Surgical Care in Ethiopia: Dr Biku Ghosh, Southern Ethiopia Gwent Health link, Tropical Health Education Trust (THET), Wales, UK

In Ethiopia, there are 683 health officers, 519 health centres and only 126 hospitals. Many health centres are more than 100 km away from any hospital. 80% of the population lives in rural areas. Only 40% people live within 5 km from a health centre. Southern region (SNNPR) has 14 million people with only 16 hospitals and 127 health centres. For the last 6 years the above link is organising training in emergency and essential surgical/obstetrics skills to health officers in remote health facilities in the SNNPR region, through workshops, hospital attachments in their local hospitals, with essential text books and journals.

A Continuing Medical Education program (with support from THET and British embassy in Ethiopia) for the health officers in the last four years has focussed on developing emergency and essential surgical, obstetrics and paediatrics skills at first referral health facilities in SNNPR region. It also aims at providing in future, training for 1 health officer in emergency surgery (6 months), 1 anesthesia nurse, 1 theatre nurse and 1 midwife (3-4 months) from selected few remote health centres. It also aims to upgrade these health facilities with essential equipment and blood banking, so that emergency surgery such as caesarian section etc can be carried out in these remote facilities.

A National Task force was established in November 2005, for developing and maintaining skills of frontline health workers towards meeting the MDGs (reduce child and maternal mortality, combat HIV, and develop global partnerships)

6.9 Joint WHO with MoH training for strengthening surgical skills with Buruli Ulcer program in Ghana: Dr Anthony Asare, Kumasi, Ghana (unable to attend)

Report on meetings available: www.who.int/surgery

7. Video Conferences for presentation of activities in Ethiopia and Uganda (day 1), discussions on development of TOR (day 2)

Participating teams: WHO/Uganda, Canadian Network for International Surgical Skills (CNIS), Dr Ron Lett; WHO/Ethiopia, Dr Haddis and colleagues

A video conference was held linking WHO HQ with WHO country offices Uganda and Ethiopia, during both days of the meeting sessions. This was useful for the participants from countries who were unable to attend so as to discuss their follow-up activities and obtain input on recommendations and action plans, terms of reference for the GIEESC. It was an interactive sessions with queries from participants in Geneva e.g. How the training is evaluated, how performance of the trainers is evaluated, how shortage of personnel is dealt with, how do you control their practice, how do you test their skills in basic procedures?

7.1 Uganda

The activities to improve EESC followed a WHO Regional Workshop on essential surgical care held in Kampala, Uganda in Dec. 2003 for 12 countries of Africa (report available: www.who.int/surgery). The WHO manual SCDH was introduced and participants gave their input towards the development of a training package IMEESC.

The Essential Surgical Skills (ESS) program of CNIS has established surgical teaching programs in 5 African countries (Ethiopia, Uganda, Mozambique, Malawi and Tanzania) with Quality evaluation being the main focus of ESS training programs. The SCDH has been integrated into the ESS training programs and an evaluation is done at the end of the training workshop. An evaluation of the SCDH manual by the learners revealed that they strongly agreed it was useful for the course and for their future career. They agreed to purchase the book at the developing country price (50% discount), but found it difficult to purchase from the WHO book orders without credit cards. WHO SCDH has to be ordered from WHO office in Geneva, and it was suggested that there should be 100 copies in each WHO office

Essential Surgical Skills Practice (ESSP) has trained 5000 medical interns and medical officers. Trauma courses were held in Tanzania, Ethiopia and Uganda. One hundred and fifty instructors from Uganda have been trained in fundamentals of anesthesia and orthopaedics

7.2 Ethiopia

Following the WHO / MoH workshop on strengthening emergency and essential surgical training skills of clinical officers, a team from WHO/Ethiopia made a visit to discuss with officials of the SNNPR and Amhara Regional Health Bureau (RHB). This also included district/woreda health offices and health professionals of the selected health centers/district hospitals, and members from Southern Ethiopia - Gwent health link, Wales to discuss the concept, objectives, strategies and launch of the programme, resulting in the identification of following priority tasks:

- Selection of 10 Rural Health Centers for the initiation of the programme, 5 in each of the SNNPR and Amhara regional states.
- Visits by the team to 8 of the selected Health Centers.
- Develop Debub and Gondar Universities as training centers for the Health Officers and Nurses.

A 2-days workshop was organized by WHO/Ethiopia in collaboration with the Federal Ministry of Health (FMoH), Regional Health Bureau (RHB) with senior teaching staff members from Debub, Gondar, and Addis Ababa Universities, resulting in draft proposals by Amhara and SNNP Regional States and submitted to the WHO/Ethiopia.

A stakeholders meeting, was organized in Addis Ababa in November 2005 with support of the Southern Ethiopia Gwent Health link, British Embassy, THET, UK in collaboration with the Regional health Bureaus and the Federal Ministry of Health. It also included representatives from Dehub, Gondar, and Addis Ababa Universities.

A National task force was established to assist the FMOH in coordinating and guiding the programme of supporting training and maintaining through CME of essential and emergency surgical skills of health officers and other frontline health workers. The task force would be responsible for developing its terms of reference, guidelines based on the WHO IMEESC for the training of health officers, nurse technicians (anaesthetist, OR, midwife) to work in rural health centers, and mechanisms for establishing a system for incentives and career structure of these health workers;

8. Round Table Discussions

The discussions included issues raised by the participants and through video conferences and e-mails. Following is a brief summary of the round table discussions:

8.1. Advocacy

Based on the country presentations, participants agreed on the need for advocacy to raise awareness for emergency and essential surgical care as a public health strategy. Surgical care cuts across programs such as maternal and child health, emergencies and disaster preparedness, trauma, and HIV. Anesthesia care extends beyond the operating room and includes patient safety at several levels including preoperative assessment, postoperative, intensive care, pain relief, trauma, resuscitation, and appropriate use of oxygen.

There was considerable discussion of the need to promote surgical care as an essential public health tool. Data to show the burden of diseases requiring surgical care and the cost-effectiveness of surgical interventions need to be generated and disseminated. For example, road traffic injuries is a huge public health problem in some countries like Nigeria where more people die of road traffic injuries than HIV each year. In Bangladesh surgical care provided in low-cost district hospital was found as cost-effective as immunizations⁹.

The cost-benefits of surgical care needs to be expressed in terms that will allow comparison to other public health interventions, e.g. dollars per DALY averted. The chapter in the World Bank publication 2006 on Disease Control Priorities (DCP) is an important first step in this direction. The authors⁵ informed the group that the chapter in this book addresses causes and burden of surgical conditions (injuries, surgical infections, acute urgent abdominal problems, digestive diseases, pediatric surgical conditions, maternal conditions, glaucoma and cataracts, malignant neoplasms, goiters). The emphasis is on the effectiveness of emergency interventions at various levels of care for major wounds, fractures, war injuries, traffic accidents, burns, acute abdomen, urologic emergencies, and head injuries.

8.2 Country implementation

⁹ McCord C, Chowdhury Q. A cost effective small hospital in Bangladesh: what it can mean for emergency obstetric care. *Int J Gynaecol Obstet* 2003;81(1):83-92

It was felt that the training program should be adapted to meet local needs and priorities (e.g. reduction of maternal and child mortality, HIV, injuries etc.) and made available in local languages to facilitate the training programmes. The training should be closely linked to the equipment requirement with special emphasis on the use of locally available low cost materials and resources. Some examples that were provided were the use of solar power for medical equipment, use of the bark of banana tree for splinting, the Kyrgys spinal boards. It was felt that a systematic documentation and dissemination of information on such tools would be very useful.

To ensure that the programmes were sustainable, it was felt that it was preferable to create local ownership for the programme and involve the MoH in its conduct. The WHO approach of initiating programmes only after receipt of proposals from the MoH was a step in this direction. However, it is recognized that countries would require support and encouragement to generate proposals, considering the number of competing health priorities that they have to deal with.

Strengthening local surgical, anesthesia, trauma, emergency medicine, nursing organizations and utilizing them as a resource in the training programme was felt to be one approach (by the WHO EESC project) that could be used to build local capacity for training.

While it was appreciated that the WHO standards and best practice guidelines were being used across the different clusters and department within WHO HQ, it was felt that country level coordination is also required for implementation. Different countries have used different approaches and these are lessons to be learnt from these experiences. For example, Pakistan integrated the WHO IMEESC with vertical program on MCH and developed ESSEMCH, whereas Mongolia is using a horizontal approach of standard training for building capacities in surgical and anesthesia interventions for trauma, pregnancy related complications, infections. It was felt that the experiences and lessons from these countries should be carefully documented for use by other countries proposing to initiate programmes. It was also felt that the availability of the WHO materials was not sufficiently communicated and greater efforts need to be made to make countries aware of them.

8.3. Accreditation and programme evaluation

It was emphasized that a programme for certification/accreditation was essential both to ensure that the quality of the training was maintained and also as an incentive both for the trainers and the trainees. However, it was felt that one time training and certification was insufficient since skills acquired during such training may be lost if they are not continuously applied and updated. The need to ongoing training and evaluation must be considered while developing an accreditation and certification programme. It was recognized that certifications would also create expectations of greater remuneration that would need to be addressed. This was also closely linked to the efforts to reverse the brain drain wherein trained health care professionals from developing countries were migrating to industrialized countries in search of higher incomes and that training often facilitated this “brain drain”. Risk to surgeons working in countries with high HIV prevalence and where adequate protective equipment and post-exposure prophylaxis was not available was another factor contributing to the brain drain that needs to be addressed. The International Labour Organization (ILO) and WHO have drawn up comprehensive guidelines for workplace policies for managing occupational risks to HIV/AIDS as well as non discrimination, prevention, care and support.¹⁰

¹⁰ World Health Organization, Joint ILO/WHO guidelines on health services and HIV/AIDS, Geneva, 2005
http://www.who.int/hiv/pub/prev_care/who_ilo_guidelines.pdf

The need for a formal evaluation of the training program with both process indicators and outcome indicators was stressed. Appropriate tools to achieve this at the country level need to be developed standardized and implemented at the country level. This assessment would also provide invaluable information on the benefits of the programme that would be useful for advocacy purposes. Identifying the right outcome indicators for surgical interventions would be a challenge given the wide variety of diseases and conditions where surgical treatment was provided. There was disagreement as to whether the usual morbidity and mortality indicators were appropriate. Innovative thinking and research is required to define the most appropriate indicators.

8.4 Resource mobilization

There was recognition that the current budget for this WHO program was insufficient to upgrade equipment to allow optimal implementation of the programme. It was felt that there was a need to capitalize on the UN Millennium goals (reduce child and maternal mortality, combat HIV and develop global partnerships) on health care to increase the funding envelope. A resource mobilization strategy needs to be developed but would be dependent on the development of an evidence base to support investments in surgical care in order to create interest among larger donors. There was discussion on the approaching industry for funds. However, issues related to conflict of interests would make it difficult for organizations such as WHO and for MoH to accept funds from industry, though there is a move within WHO to explore options for generating resources from the private sector.

9. Terms of Reference (TOR):

Participants were allocated to working groups to discuss training, research (situation analysis, evaluation of impact of training) and coordination of country projects in order to draft the TOR.

The participants agreed that the GIEESC will be established with the following TOR:

- i. GIEESC is a partnership of internationally recognized organizations, institutions, associations, agencies, NGOs and individuals from developing and developed countries
- ii. WHO will coordinate the activities of the partners in GIEESC and will act as the secretariat for the Initiative.
- iii. The members of the partnership will share expertise, work together in identifying problems, seeking solutions and working towards meeting the MDGs (maternal and child mortality, HIV) through improvement in the quality and safety of clinical procedures (essential surgical and anaesthesia care).
- iv. GIEESC will collaborate to:
 - Encourage research within resource limited settings
 - Identify specific research needs and funding sources on emergency and essential surgical care,
 - Promote the use of evidence-based emergency and essential surgical (including anaesthesia) practices
 - Facilitate information exchange and dissemination
- v. The partnership will promote appropriate and sustainable standards through an integrated approach to improve the quality and safety of emergency and essential surgical care at resource limited health care facilities.

- vi. The partnership will define and promote minimum standards based on evidence and best practice that are related to the MDGs.
- vii. The members of the GIEESC agree to collaborate in facilitating progress in the following areas:
 - international consensus on essential principles of safety in emergency and essential surgical (including anaesthesia) practices;
 - encouraging and supporting establishment of national programmes on essential surgical care;
 - promoting training in surgical and anaesthesia techniques to reduce blood loss, prevent HIV and other blood borne pathogens;
 - implementation of appropriate best practice protocols for Clinical Procedures safety at all levels of care
 - assuring quality and safety in emergency and essential surgical (including anaesthesia) practices
 - promote evidence-based emergency and essential surgical (including anaesthesia) practices

10. Recommendations and Action Plan

The following recommendations and action plan was made by the participants during the GIEESC meeting:

- **Advocacy**
 - Put together an editorial group to write a paper to highlight importance of surgery as a public health intervention and the crisis in surgical workforce, particularly in developing countries as a result of the so-called “brain drain”.
 - Develop an advocacy strategy for an IMEESC based on:
 - surgery as public health issue
 - importance of surgery in the care of mothers and children
 - critical role of surgery in disaster preparedness
 - Prepare advocacy material and disseminate eg. cataract surgery in improving quality of life and productivity
 - Publish in journals to raise the profile of IMEESC
 - Use of media such as BBC news, interviews
 - Video filming of what goes on in countries
 - Documentaries to show state of people in emergencies and lack of surgical care.
 - Developing web-discussion forum
- **Formulate a consensus statement** that endorses the wish of the participants to have international consensus to have WHO represent the coordinating bodies for all training initiatives in IMEESC and develop strategies on harmonizing collaborations.
- **Training issues:**
 - Develop monitoring and evaluation of training programs and on their impact on surgical care
 - Develop strategies on ensuring sustainability of training programs.
 - Involve academic institutions and professional associations as collaborators
 - Create a web-page of database of training programs identifying the ones that have WHO endorsement

- Consider WHO certification and WHO take responsibility for quality control perhaps using an external agency
- Greater use of telemedicine and e-learning
- Negotiate with manufactures for lower purchasing price of mannequins or seek tax exemptions for companies willing to donate them
- **Communication**
 - Collect information, statistics, impact data of training from all countries
 - Data on situation analyses
 - Facilitate information exchange between regions and countries,
 - Develop guidelines for monitoring and evaluation
- **Support Research** on country needs related to essential and emergency surgical care at first referral health facility in resource limited settings, outcome and public health impact of essential and emergency surgical care.
 - Estimate burden of surgical disease
 - Estimate cost-effectiveness of surgical care
 - Identify applicable surgical technologies and study their relative cost advantage
 - Exchange on methodological approach
 - Identification of appropriate impact indicators
 - Indicators for measuring change in practices- like change in equipment
 - Identification of other non quantifiable indicators that may be measured using qualitative approaches - sense of empowerment, rise in morale, change in attitude, performance improvement
- **Prepare Report of the meeting**
 - Obtain Comments from all participants to be included in draft report
 - Prepare first draft to be communicated to all participants by end March for review comments
 - Prepare final report to be disseminated to all participants, partners (local and international) and stake holders
 - Final Report to be put on web page

11. Conclusions:

The meeting concluded with acknowledgement of the important role of non-governmental organizations, partners, academic institutions and other WHO departments working with EHT/CPR, towards strengthening emergency and essential surgical care. Emphasis was made on a collaborative approach and coordination of local and international organizations to assess the impact of training in countries.

Annex 1
List of participants

WORLD HEALTH ORGANIZATION



ORGANISATION MONDIALE DE LA SANTE

**WHO Meeting towards a Global Initiative for Emergency
and Essential Surgical Care**
WHO/HQ, Geneva, Switzerland (Executive Board Room)
8-9 December 2005

LIST OF PARTICIPANTS

PARTICIPANTS

Dr D. ALNWICK
United Nations Children's Fund
Regional Adviser - HIV/AIDS
Eastern and Southern Africa Regional Office
Office Block E. Room 229
P.O. Box 44145
Nairobi - 00100
Kenya

Tel: + 254 20 622 771
Fax: + 254 20 621 009
E-mail: dalnwick@unicef.org

Professor B. AMMAR
Service d'Anesthésie Réanimation Urgences
Hôpital Mongi Slim
Sidi Daoud 2046 -Tunisie
or: 7 rue Khereddine
Carthage 2016
Tunisie
Tel: +21671764845 or 21671721721
Fax: 21671730324
E-mail: MS.benamar@rns.tn

Dr L.M. ANH
Deputy Chief
Occupational Health and Injury Prevention Division
Viet Nam Administrative of Preventive Medicine
Ministry of Health of Viet Nam
Hanoi
Viet Nam
Tel: + 84 47 36 63 49
Fax: + 84 47 36 62 41
E-mail: 1manh2004@yahoo.com or
maianh@moh.gov.vn

Dr R. ARAFAT
Chief Physician
Emergency Services County Hospital
Mures County Emergency Hospital

50 Gheorghe Marinescu
St. 540103 Targu
Romania
Tel: + 40 265 219 102
Fax: + 40 (0) 265 210 110
E-mail: arafatr@smurd.ro

Professor S. M. AWAIS
Orthopaedic Surgery
King Edward Medical College
University of the Punjab
8-Golf Lane GOR-1
Lahore
Pakistan
Tel: + 92 42 9200913/92 42 9211110
Mobile: + 92 333 4348716
Fax: + 92 42 7212227
E-mail: drsmawais@gmail.com

Dr P. BEWES
AMREF
Park House
32 Tuns Road
Necton
Norfolk PE37 8EL
UK
Tel: + 44 (0)1760 723 060
Fax: + 44 (0) 1760 723 060
E-mail: bewes@fish.co.uk

Dr S. BICKLER
Associate Clinical Professor of Surgery
and Paediatrics
Division of Pediatric Surgery
UCSD Medical Center
200 West Drive
San Diego, CA 92103-8404
USA
Tel: +1 619 543 21897

Fax: +1 619 543 3645
E-mail: sbickler@ucsd.edu

Dr J. BRIDSON
Child Advocacy
75a London Road
Newcastle-under-Lyme
Staffordshire ST5 1ND
UK
Tel: + 44 (0)1782 712599 (o)
+ 44 (0)1226 210154 (h)
Mobile: + 44 (0)7789 432711
Fax: + 44 (0) 1782 610888
E-mail: john@cauk.org

Dr J-L CAILLOT
Service d'Urgence Chirurgicale
CHLS
69495 Pierre-Bénite
France
Tel: + 33 4 78 86 14 08
Fax: + 33 4 78 86 57 10
E-mail: jean-louis.caillot@chu-lyon.fr

Professor A. CAMPANA
President
Geneva Foundation for Medical Education and
Research (GFMER)
Route de Florissant 3
1206 Geneva
Switzerland
Tel: + 41 22 346 77 16
Fax: + 41 22 346 78 34
E-mail: secretariat@gfmer.ch
aldo.campana@gfmer.ch

Ms C. CARPIO
Knowledge Management Officer
The World Bank
Latin America and the Caribbean Region
1818 H Street, NW
Washington DC 20433
USA
Tel: + 1 202 473 6522
Fax: +1 202 522 3099
E-mail: ccarpio@worldbank.org

Dr W. CHADBUNCHACHAI
Khon Kaen Regional Hospital
Trauma and Critical Care Center
Amphur Muang, Khon Kaen 40000
Thailand
Tel: + 66 (880) 43 336 798
Fax: +66 (0) 43 23 6006
E-mail: buncha@health2.moph.go.th

Professor F. CLERGUE

University Hospital Geneva
6, rue Willy Donzé
1205 Geneva
Switzerland
Tel: + 41 22 372 7402
E-mail: francois.clergue@hcuge.ch

Professor H. DEBAS
Director, Global Health Sciences
Global Health Sciences
University of California, San Francisco
3333 California Street, Box 0443
San Francisco, CA. 94143-0443
USA
Tel: + 1 415 476 0509/502 6045
Fax: + 1 415 502 6052
E-mail: hdebas@globalhealth.ucsf.edu

Mr C. DEBIEL
Dipl.-Ing., Architect
Max-Planck-Strasse 7
D - 46446 Emmerich am Rhein
Tel: + 49 2822 537 44 27
Fax: + 49 2822 97698 20
E-mail: christophdebiel@online.de

Dr M. DOBSON
Nuffield Department of Anaesthetics
John Radcliffe Hospital
Oxford OX3 9DU
UK
Tel: +44 1865 221 589
Fax: +44 1865 453 266
E-mail: michael.dobson@ndm.ox.ac.uk

Dr J. DONNELLY
Association of Surgeons of Great Britain
& Ireland
London
UK
E-mail: Jill.Donnelly@hptr.nhs.uk

Dr DULA DE SILVA
Adviser & Head of Health
Social Transformation Programmes Div. - Health
Section
Commonwealth Secretariat
Marlborough House
Pall Mall
London SW1Y 5HX
Uk
Tel: + 44 (0) 20 7747 6290
Fax: + 44 (0) 20 7747 6287
E-mail: D.DeSilva@commonwealth.int

Dr P. FENTON
Meyra

47800 Agnac
France
Tel/Fax: + 33 553 643889
E-mail 380mj@care4free.net
fenton.paul@wanadoo.fr

Dr R. FISHER
Department of Orthopaedics
University of Colorado Health Sciences Centre
4200 East 9th
Denver, CO 80262
USA
Tel: + 1 303 372 1226
Fax: + 1 720 848 2157
E-mail: Richard.fisher@uchsc.edu

Dr BIKU GHOSH (S Ghosh)
Consultant Surgeon and Coordinator , Southern
Ethiopia Gwent health Link ,
Nevill Hall Hospital, Abergavenny
Wales, NP7 7EG, UK
Tel: +44 1873 732439
Fax: +44 1873 732440
E-mail: Sunirmal.Ghosh@gwent.wales.nhs.uk
Bikughosh@aol.com

Dr C. GIANNOU
International Committee of the Red Cross
19 Avenue de la Paix
1202 Geneva
Switzerland
Tel: +41 22 730 22 79
E-mail: cgiannou@icrc.org

Dr Aberra .A. GOBEZIE
Medical Director
Awassa Referral Hospital
and CME Coordinator, SNNPR region
Ethiopia
Mobile Tel: +251 916824834
Fax: +251462206517
E-mail: Aberrag2000@yahoo.com

Dr J. GOOSEN
Trauma Unit
Johannesburg Hospital
Postnet Suite 235
Private Bag X 26000
Houghton 2041
South Africa
Tel: + 27 11 488 3373
Fax: + 27 11 488 4322
E-mail: jacquesg@internext.co.za

Dr R. GOSSELIN
P.O. Box 1983
El Granada

CA 94018
USA
Tel: 001 650-712-8927
Fax: + 1 650 712 8928
E-mail: froggydoc@comcast.net

Mr B. GREEN
Manager, Institutional Relations
United Nations and Commonwealth Department
Department for International Development (DFFID)
AbercrombieHouse
Eaglesham Road
East Kilbride
Glasgow G75 8EA
UK
Tel: + 44 1355 843 648
Fax: + 44 1355 843 338
E-mail: b-green@dfid.gov.uk

Professor HAHNLOSER
International College of surgeons (ICS)
(Swiss surgical team)
Ave. Jean-Gambach 24
1700 Fribourg
Switzerland
Tel: + 41 26 322 2574
Fax: + 41 26 323 2120

Professor HEGELMAIER
President ICS German Section
Chirurg. Abteilung KKH Stadthagen
Krankenhausstr. 1
31655 Stadthagen
Germany
Tel: + 49 57 21 701 233
Fax: + 49 57 21 701 245
E-mail: Hegelmaier@t-online.de

Dr T.J. HERBOSA
Associate Professor
Division of Trauma
Department of Surgery
Philippine General Hospital
University of the Philippines
Manila
Philippines
Tel: + 632 5249 966
Fax: + 632 5261 709
E-mail: therbosa@apoy.upm.edu.ph

Professor M. HINSENKAMP
Secretary General of the International Society
of Orthopedic Surgery & Traumatology (SICOT)
Appointed Head of Orthopaedic Surgery and
Traumatology Dept.
Erasmus Hospital

Université libre de Bruxelles
808 Route de Lennik
1070 Brussels, Belgium
Tel: + 32 2 555 3640
Fax: + 32 2 555 4991
E-mail: mhinsenk@ulb.ac.be

Dr P. JISKOOT
Verlengde Slotlaan 66
3707 CK Zeist
The Netherlands
Tel: + 31 30 6915335
E-mail: p.jiskoot@planet.nl

Dr J. KABUTU
P.O. Box 19567-00202
KNH - Nairobi
Kenya
Tel: 254 20 273 8226/8327
Fax: +254 20 273 7867
E-mail: anaesthesia_ke@yahoo.com
ksa@arcc.or.ke
jkabutu@wananchi.com

Dr B. KEHRER
International College of Surgeons (ICS)
(Swiss surgical team) ICS Switzerland
Tuitilostrasse 5
9011 - St. Gallen
Switzerland
Tel: + 41 22 71 223 5969
E-mail: kehrer@swissonline.ch

Ms N. KELLY
Health Volunteers Overseas (HVO)
1900 L Street
NW, Suite 310
Washington DC, 20036
USA
Tel: + 1 202 296 0928
Fax: + 1 202 296 8018
E-mail: n.kelly@hvousa.org

Dr M. KINGMA
Consultant
Nursing and Health Policy
International Council of Nurses
3 Place Jean Marteau
1201 Geneva
Switzerland
Tel: + 41 22 908 01 00
Fax: + 41 22 908 01 01
E-mail: kingma@icn.ch

Dr KLOEBER
(Dr JOHNSON instead)
WMA The World Medical Association

13, ch. du Levant
CIB - Bâtiment A
01210 Ferney-Voltaire
France
Tel: + 33 4 50 40 75 75
Fax: + 33 4 50 40 59 37
E-mail: wma@wma.net

Dr R. KULLIER
Senior Medical Research Officer
Geneva Foundation for Medical Education and
Research (GFMER)
Route de Florissant 3
CH – 1206 Geneva
Tel: + 41 22 346 77 16
Fax: + 41 22 346 78 34
E-mail: secretariat@gfmer.ch
aldo.campana@gfmer.ch

Dr N. KUMAR
Professor
Maulana Azad Medical College
New Delhi
India
Mobile: + 41 78 713 5930
E-mail: kumar_neeta@hotmail.com

Dr S. KUMAR
Regional Programme Officer, Health and Nutrition
UNICEF Regional Office
5-7 Avenue de la Paix
Palais des Nations
CH 1211, Geneva 10
Switzerland
Tel: + 41 22 90 95 549
Fax: + 41 22 90 95 909
E-mail: ksanjiv@unicef.org

Dr R. LANE
Chairman
Overseas Surgical Fellowship Group
Vice-President
Association of Surgeons of Great Britain & Ireland
Temple Usk
Colden Common
Winchester, Hants, SO21 1TB
UK
Tel: + 44 1962 71 2383
Fax: + 44 1962 71 4614
E-mail: rhlane@aol.com

Dr R. LETT
(Video Conference Uganda)
Canadian Network for
International Surgery
1037 West Broadway - Suite No. 205
Vancouver BC V6H 1 E3

Canada
Tel: +1 604 739 4708
Fax: + 1 604 739 4788
E-mail: lett@cnis.ca

Ms S. MACKAY
Programme Communication Officer
United Nations Children's Fund
UNICEF East Asia and Pacific Regional Office
19 Phra Atit Road
Bangkok 10200
Thailand
Tel: + 662 356 9206/9499 Ext. 9206
Fax: + 662 280 3563
E-mail: smackay@unicef.org

Ms V. MALDA
ANESVAD
Henao 29
Bilbao
Spain
Tel: + 34 94 441 80 08
Fax: + 34 94 441 07 39
E-mail: veronica.proyectos@anesvad.org

Dr M. MCCUNN
Founder and CEO, Global Injury Solutions
Trauma Anaesthesiology and Surgical Critical Care
Medical Director, Neurotrauma ICU
R Adams Cowley Shock Trauma Center
University of Maryland School of Medicine
22 South Greene Street
Baltimore, MD 21201
USA
Tel: + 1 410 328 2359
Fax: + 1 410 328 7175
E-mail: mmccunn@gmail.com

Dr G. MEHTA
C-132 Defense Colony
New Delhi 110024
India
Tel: + 91 11 510 123 20
Fax: + 91 11 510 123 20
E-mail: gmehta51@yahoo.co.in

Dr P. MEREDITH
Fondation Meredith
La Bassire
1267 Vich
Switzerland
Tel: + 4122 362 27 66
Fax: + 41 22 362 34 47
E-mail: dr.meredith@bluewin.ch

Dr A. E. MEURSING
Erasmus Medical Centre

Department of Anaesthesia
P.O. Box 2040
3000 CA Rotterdam
Netherlands
Tel: + 3110 4639 222
Fax: + 3110 4639 222
E-mail: a.meursing@planet.nl

Dr P. MEYER
Member of the Foundation Council
Specialist in Surgery
Avenue J.-D. Maillard 1bis
1217 Meyrin
Switzerland
Tel: + 41 22 782 39 90/92
Fax: + 41 22 785 28 94
E-mail: pmeyer@latour.ch

Dr T. MOCH
DTC - Sekretariat
Von der Tann Strasse 6
20259 Hamburg
Germany
Tel: + 49 40 64 55 37 08
E-mail: thmoch@aol.com

Dr R.T. MORESKY
International Emergency Medicine
Director of International Emergency Medicine
New York-Presbyterian
The University Hospitals of Columbia
and Cornell
45 West 60th Street - Apt. 8k
New York, NY 10023
USA
Tel: + 1 646 641 66 44
E-mail: rtn2102@columbia.edu

Dr Charlie MOCK
Harborview Injury Prevention and Research Center
Box 359960
Harborview Medical Center
325 Ninth Avenue
Seattle, WA 98104
USA
Tel: 206-521-1520 (or 206-764-2141)
FAX: 206-521-1562,
Email: cmock@u.washington.edu

Dr. Arreola-Risa CARLOS
Attending Trauma and Laparoscopic Surgeon
Member of The National Research System/Health
Division,
CONACYT,
MEXICO
Tel (81) 83 48 15 10
E mail: arissac@yahoo.com

Dr A.G. MUJOVO
General Surgeon
Chief of Dept. of Medical Assistance
Central Hospital
Maputo
Mozambique

or:
Ministry of Health
Avenida Eduardo Mondlane
Salvador Allende
P.O. Box 264
Maputo
Tel: + 258 1 314 127
Mobile: + 258 82 30 48 51
Fax: + 258 1 314 127
E-mail: Mujovo@hotmail.com

Dr A. NSIAH-ASARE
Chief Executive
Komfo Anokye Teaching Hospital
P.O. Box 1934
Kumasi
Ghana
Tel: + 233 51 24564
Mobile: + 233 277 890 400
E-mail: anasare@kathksi.org

Dr A.B. OMOLOLU
Department of Surgery
University College Hospital
Ibadan
Nigeria
Tel: + 234 805 616 5587
E-mail: bade57@gmail.com

Dr E. PARRY
Mr J. RENNIE
The Tropical Health and Education Trust (THET),
210 Euston Road
London NW1 2BE
UK
Tel: + 44 207 679 8127/8/9
Fax: + 44 207 679 8190
E-mail: eldryd@thet.org

Dr M. PELLEGRINI
Senior Consultant
Paediatric Anaesthesia Unit
Geneva Children's Hospital, University Hospital of
Geneva
6, rue Willy Donzé
1205 Geneva
Switzerland
Tel: + 41 22 38 28 802 (bip 6858302)
Fax: + 41 22 38 24 750
E-mail: michel.pellegrini@hcuge.ch

Dr. V.D. RAVAL
Association of Surgeons of Rural India
President
FRCS (Eng) general surgeon
Bharati Hospital, Patan
(N. Gujarat) 384 265
India
Telephone: 02766 - 230688/230629
Mobile: 98250 74069
Email : drjayeshraval@yahoo.co.in

Dr P.H. REEMST
Surgeon
Rural Surgery
Maxima Medisch Centrum
Eindhoven
The Netherlands
Tel: +31 40 8888000 (o)
+31.40.2952316 (h)
E-mail: p.reemst@onsnet.nu

Professor M. RICHTER-TURTUR
German Association of Surgeons
Chirurgie
Kreisklinik
Moosbauerweg 5-7
82515 Wolfratshausen
Germany
Tel: +49 8171 75 211
Fax: +49 8171 75 660
E-mail: MRTurtur@AOL.com
DTC@kreisklinik-wolfratshausen.de

Dr C-H. ROCHAT
Member of the Foundation Council
Urologiste
Chemin Beau-Soleil 12
1206 Geneva
Switzerland
Tel: + 41 22 347 47 15
Fax: + 41 22 346 52 38
E-mail: rochat@deckpoint.ch

Dr S. RYPKEMA
Medicus Mundi
Acacialaan 3
5342 HK OSS
Netherlands
Tel:
Fax:
E-mail: rypkema@zonnet.nl

Dr J-P. SAC-EPEE
Agence de Coopération en Études
Internationales de Santé
Président d'ACOETIS

3850 Jean Talon Ouest Suite 132
Montréal - Québec H3R 2G8,
Canada
Tel: + 1 (514) 282 0099/(514) 282 0099
Mobile: + 33 6 20 97 02 71
Fax: + 1 (514) 737 3928
E-mail: jpsacepee@acoetis.org

Dr H. SANDBLADH
Senior Officer, Health in Emergencies
International Federation of Red Cross
and Red Crescent Society (IFRC)
P.O. Box 372
1211 Geneva 19
Switzerland
Tel: + 41 22 730 44 07
Mobile: + 41 79 357 16 13
E-mail: hakan.sandbladh@ifrc.org

Dr J. SCHMIDT
EMS Instructor & Consultant
(GTZ/CIM)
Ministry of Health
KSMI Osh Branch
Emergency Medical Service Training Center
10 Verhni Uvamskaja Street
Osh, 714000 Kyrgyz Re
Kyrgyzstan
Tel: + 996 (3222) 390 14
Fax: + 996 (3222) 217 62
E-mail: j.schmidt@emst.org

Dr B. M. SCHNEIDER
Global Academy of Tropical Health
Trauma Department
General Hospital
Augsburg
Germany
Tel: + 49 821 400 2934/2943
Fax: + 49-821 484 712
E-mail: bm.schneider@uni-ulm.de

Dr Vice Admiral V.K. SINGH
Surgeon
Director General Armed Forces Medical services
Ministry of Defense New Delhi
c/o President, Dr (Maj. Gen) Dr G.S. Misra
VSM
Senior Consultant in Surgery
Office of the DGAFMS
Ministry of Defense, "M" Block, DHQ
New Delhi - 110 001
India
Tel: 011 2569 3028/2309 3015

Professor D. SOUTHALL
Honorary Medical Director

Child Advocacy International
75A London Rd
Newcastle under Lyme
Staffs ST5 1ND
UK
Tel: + 44 (0)7710 674003
E-mail: davids@doctors.org.uk

Dr D. A. SPIEGEL
Division of Orthopaedic Surgery
Children's Hospital of Philadelphia
2nd Floor Wood Building
34th Street and Civic Center Blvd.
Philadelphia, PA 19104
USA
Tel: + 1 215 590 1527
Fax: + 1 215 590 1501
E-mail: spiegeld@email.chop.edu

Professor SVENSON
International Hospital Federation
Immeuble JB SAY
13, Chemin du Levant
01210 Ferney Voltaire
France
Tel: +33 (0) 450 42 60 00
Fax: +33 (0) 450 42 60 01
E-mail: pergunnar@ihf-fih.org

Mr Yohannes TADESSE
(Video Conference)
Head
Health Service Training
Ministry of Health
Addis-Ababa
Ethiopia
Tel: +251 115159976
Fax: + 251 11150288
E-mail – hstdfmoh@ethionet.et

Dr A. TAMRAT
Médecins sans Frontières
78 rue de Lausanne
Case postale 116
1211 Geneva 21
Switzerland
Tel: + 41 22 849 8484
Fax: + 41 22 849 8484
E-mail: abiytamrat@geneva.msf.org
officegva@geneva.msf.org

Dr A. VIALLE
32 rue de la Cour
74940 Annecy-le-Vieux
France
Tel: +33 450 32 55 95
E-mail: viallea@wanadoo.fr

anne.vialle@gmail.com

Dr E. VOIGLIO
Service d'Urgence Chirurgicale
CHLS
69495 Pierre-Bénite
Lyon
France
Tel: +33 4 78 86 14 08
Fax: +33 4 78 86 57 10
Email: ERIC.VOIGLIO@adm.univ-lyon1.fr

Mr I. VON VOSS
Counsellor
Permanent Mission of the Federal Republic of
Germany to the
Office of the United Nations and other International
Organisations
28c Chemin du Petit-Saconnex
1209 Geneva
Switzerland
Tel: + 41 22 730 1248
Fax: + 41 22 730 1285
E-mail: pol-2-io@genf.auswaertiges-amt.de

Dr A. WASUNNA
New Consulting Rooms
Nairobi Hospital
Argwings Kodhek Road
P.O. Box 21167
Nairobi
Kenya
Tel: + 254 20 272 21 60 Ext. 556
+ 254 20 418 26 00 (h)
Mobile: + 254 72 27 254 61
Fax: + 254 20 418 26 00
Email: wasunna@hotmail.com

Dr S. WIETESKA
ALSG Centre for Training & Development
29-31 Ellesmere Street,
Swinton
Manchester M27 0LA
UK
Tel: + 44 161 794 1999
Fax: + 44 161 794 9111
E-mail: swieteska@alsg.org

Dr D. WILKINSON
John Radcliffe Hospital
Oxford OX3 9DU
UK
Tel: + 44 1865 221 590 (o) + 44 1865 513 688 (h)
Fax: + 44 1865 22 00 27 (o) +44 1865 513 688 (h)
E-mail: douglas.wilkinson@nda.ox.ac.uk

Professor H. WOLTERING
EMDM
DISMED
Anne Frank Str. 26
48599 Gronau
Germany
Tel: + 49 25 62 24 617
Fax: + 49 171 211 17 97
E-mail: woltering@vitalpark.de

Ms. Garance UPHAM
President, Peoples' Health Movement Geneva
International
86 Chemin Pré de Planche,
F-01280, Prévessin-Moëns.
France
Tel: +33-660-83-9448 (home)
Tel: +33-4-5042-8226 (work)
Fax: +33-4-5042-8316
E-mail: g_upham@club-internet.fr

Dr. Massey BEVERIDGE
Director, Office of International Surgery &
Assistant Professor of Surgery
University of Toronto
D7-38, Sunnybrook & Women's College Health
Sciences Centre
2075 Bayview Avenue
Toronto M4N 3M5 Canada
Canada
Office +1 416 480-5260, Fax +1 416 480 5261
Home +1 416 486-5760, Pager +1 416 713-4864
Email: massey.beveridge@sw.ca

WHO

Dr. S GROTH
Director
Essential Health Technologies
Tel: 00 41 22 791 4387
Fax: 00 41 22 791 4836
E-mail: groths@who.int

Dr L. NOEL
Coordinator
Essential Health Technologies
Clinical Procedures (CPR)
Tel: 00 41 22 791 3681
Fax: 00 41 22 791 4836
E-mail: noell@who.int

Dr M. CHERIAN
Medical Officer
Essential Health Technologies
Clinical Procedures (CPR)
Tel: 00 41 22 791 4011
Fax: 00 41 22 791 4836
E-mail: cherianm@who.int

Dr. H OSTENSEN
Coordinator
Essential Health Technologies
Diagnostic Imaging and Laboratory Technology (DIL)
Tel: 0041 22 791 3649
Fax: 00 41 22 791 4836
E-mail ostensenh@who.int

Ms I. VELAZQUEZ
Information Technology Officer
Essential Health Technologies
Tel: 00 41 22 791 4687
Fax: 00 41 22 791 4836
E-mail: velazquezi@who.int

Ms P. DRAMEH
External Relations Officer
Health Technology and Pharmaceuticals
Tel: 00 41 22 791 3211
E-mail: dramehp@who.int

Ms T. SKAUG
External Relations Officer
Health Technology and Pharmaceuticals
Tel: 00 41 22 791 1633
E-mail: skaugt@who.int

Dr J.-B. TAPKO
WHO/AFRO
Tel: 00 47 241 39 501
E-mail: tapkoj@afro.who.int

Dr J. L. DIFABIO
WHO/AMRO
Tel: 00 1 202 974 3788
E-mail: DIFABIOJ@paho.org

Dr N. METWALLI
WHO/EMRO
Tel: 00 20 2 670 25 35
E-mail: MetwalliN@emro.who.int

Dr V. HAFNER
WHO/EURO
Tel: 00 45 39 17 17 17
E-mail: vha@who.dk

Dr T. WALIA
WHO/SEARO
Tel: 00 91 11 2337 08 04
E-mail: waliat@whosea.org

Dr G. HARRISON/Dr N.-U. SOE
WHO/WPRO
Tel: 00 63 2 5211036
E-mail: harrisong@wpro.who.int
nyuntus@wpro.who.int

Dr O.A. BABANIYI
The WHO Representative
P.O. Box 3069
Addis-Ababa
Ethiopia
Tel: 00 251 11 544 5180
E-mail: babaniyio@et.afro.who.int

Dr S. GOVIND
WHO Consultant
Mongolia Office
Ulaanbaatar
Mongolia
Tel: 00 976 11324683
E-mail: GovindS@mog.wpro.who.int

Dr E. DAVOLI
WHO Barcelona Office
Emergency Medical Services (EMS)
22-26 Marc Aureli
08006 Barcelona
Spain
Tel: + 34 93 24 18 270

Fax: + 34 93 24 18 271
E-mail: eda@es.euro.who.int

Dr A. HADDIS
(Video Conference)
WHO Consultant
Addis-Ababa
Tel:
Ethiopia

Dr A. HAFEEZ
c/o WR Pakistan
P.O. Box 1013
Islamabad
Pakistan
Tel: + 92 51 9255077 ext 14
Fax: + 92 51 2279027
E-mail: hafeeza@whopak.org

Dr S. SEVERONI
Head
WHO Country Office
Albania
Tel: 00 355 42 34 430
E-mail: sseveroni@who-albania.org

Dr H. TRODESSON
WHO Representative
Hanoi
Viet Nam
Tel: 00 84 4 943 37 37
E-mail: trodssonh@vtn.wpro.who.int

Dr K. ASIEDU
Communicable Diseases (CDS)
Tel: 00 41 22 791 2803
E-mail: asieduk@who.int

Dr R. BENG OA
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 2410
E-mail: bengoar@who.int

Mr Y. CHARTIER
Sustainable Development and Healthy Environments
(SDE)
Tel: 00 41 22 791 1607
E-mail: chartiery@who.int

Dr M. GULMEZOGLU
Family and Community Health (FCH)
Tel: 00 41 22 791 3417
E-mail: gulmezoglum@who.int

Dr Q.M. ISLAM
Family and Community Health (FCH)
Tel: 00 41 22 791 5509

E-mail: islaamm@who.int

Dr M. KAPILA
Health Action in Crises (HAC)
Tel: 00 41 22 791 1984
E-mail: kapilam@who.int

Dr H. HARMANCI
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 3407
E-mail: harmancih@who.int

Dr G. ANNUNZIATA
Health Action in Crises (HAC)
Tel: 00 41 22 791 1566
E-mail: annunziatag@who.int

Dr E. KRUG
Noncommunicable Diseases and Mental Health
(NMH)
Tel: 00 41 22 791 3535
E-mail: kruge@who.int

Dr J.-D. LORMAND
Noncommunicable Diseases and Mental Health
(NMH)
Tel: 00 41 22 791 3207
E-mail: lormandj@who.int

Dr E. MASON
Family and Community Health (FCH)
Tel: 00 41 22 791 3281
E-mail: mason@who.int

Mr J.-J. MONOT
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 1092
E-mail: monotj@who.int

Dr F. MONTERO
Noncommunicable Diseases and Mental Health
(NMH)
Tel: 00 41 22 791 2977
E-mail: monterof@who.int

Dr Mathews MATHAI
Family and Community Health (FCH)
Tel: 00 41 22 791 3210
E-mail: mathaim@who.int

Dr C. PESSOA-DA-SILVA
Communicable Diseases (CDS)
Tel: 00 41 22 791 2844
E-mail: peassoasilva@who.int

WHO/EHT/CPR 2006

Dr P. PHILIP
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 3203
E-mail: philipp@who.int

Dr M.C. SEPULVEDA-BERMEDO
Noncommunicable Diseases and Mental Health
(NMH)
Tel: 00 41 22 791 3706
E-mail: sepulvedac@who.int

Dr B. STILWELL
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 4701
E-mail: stilwellb@who.int

Dr T. TAN-TORRES
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 3497
E-mail: tantorrest@who.int

Dr A. ULRICH
Noncommunicable Diseases and Mental Health
(NMH)
Tel: 00 41 22 791 1292
E-mail: ulricha@who.int

Dr M. WEBER
Family and Community Health (FCH)
Tel: 00 41 22 791 2603
E-mail: weberm@who.int

Ms. Julie STORR
Evidence and Information for Policy (EIP)
Tel: 00 41 22 791 3343
E-mail: storrj@who.int

Dr. W. SCHOLTEN
Quality Assurance and Safety: Medicines (QSM)
Tel: 00 41 22 791 5540
E-mail: scholtenw@who.int

Annex 2
Program agenda



WORLD HEALTH ORGANIZATION
ESSENTIAL HEALTH TECHNOLOGIES

**WHO Meeting towards a Global Initiative
for Emergency and Essential Surgical Care**
WHO/HQ, Geneva, Switzerland (Executive Board Room) 8-9 December 2005,

Day 1: 8 December 2005		
08h30	Registration	
09h00	Welcome Remarks: Assistant Director General, Health Technology and Pharmaceuticals	Dr V. Lepakhin ADG/HTP
	Opening of the Meeting: Director, Essential Health Technologies	Dr Steffen Groth HTP/EHT
	Introduction and Overview of the Clinical Procedures Mission: Coordinator, Clinical Procedures	Dr Luc Noel EHT/CPR
	Introduction of participants	
	Election of Chairperson and Rapporteurs	
10h00	Session 1: Progress of Country Project Implementation	Chairperson
	Overview of implementation of the Integrated Management of Emergency and Essential Surgical Care in countries (10 minutes)	Dr Meena Cherian EHT/CPR
	Presentations by countries (8 minutes each) • Pakistan: (2 presentations)	Dr A. Hafeez Dr S. Awais
10h30	COFFEE BREAK	
11h00	Video conference with Uganda; Ethiopia	
11h30	Presentations (8 min. each)	
	- Mongolia	Dr G. Salik
	- Kyrgyzstan	Dr J. Schmidt
	- Vietnam	Dr Luong Anh
	- Mozambique	Dr A. Mujovo
	- Ethiopia	Dr S. Ghosh
	- Ghana	Dr A. Ansare
	- Maldives	Dr T. Herbosa
12h30	LUNCH BREAK	

DAY 1: 8 DECEMBER 2005 (contd.)

14h00	Session 2: Round Table Discussions on Country Activities	Chairperson
-------	---	-------------

WHO/EHT/CPR 2006

	- Interested Partners and Organizations	Participants
15h00	Standardized training: WHO Integrated Management for Emergency Surgical Care (IMEESC) tool kit: (10 minutes)	Ms I. Velazquez,EHT
15h10	Session 3: Round Table Discussions	Chairperson
	Discussions of international consensus on strategies to harmonize collaborations to: <ul style="list-style-type: none"> - support such training using WHO training materials adapted (translation, dissemination) to local needs - commitment of support to WHO (financial and technical) for identified countries for 2006-7 - promotion of evidence-based research on impact of such training - (needs assessment, improvement of quality at resource limited health care facilities) - strategy to respond to requests for training in countries - Establish "an international collaborative research" agenda to generate knowledge about the true determinants of performance and about the effectiveness of strategies to improve performance." 	Participants
15h30	COFFEE BREAK	
16h00	Discussions (contd.)	
17h15	Summary of Day 1	Rapporteur
DAY 2: 9 DECEMBER 2005		
09h00	Session 4: Terms of Reference (TOR) for a Global Initiative for Emergency and Essential Surgical Care (GIEESC)	Chairperson
09h00	Discussions on the development of Terms of Reference for GIEESC to support WHO secretariat to respond to country Project proposals on: <ul style="list-style-type: none"> - Training - research (situation analysis, evaluation of impact of training) - coordination of country projects 	
10h00	Video conference: Uganda	
10h30	COFFEE BREAK	
11h00	Development of TOR for GIEESC and support WHO secretariat for response to country needs to improve Emergency and Essential Surgical Care (including anaesthesia)	
12h30	LUNCH BREAK	
14h00	Session 5: Recommendations and Action Plan: Discussions	Chairperson
15h30	COFFEE BREAK	
16h00	Draft Action Plan	Chairperson
17h00	Closing Session	Chairperson