WHO Regional Workshop on Essential Surgical Care Report Held in Kampala, Uganda 1-2 December 2003
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EXECUTIVE SUMMARY

A WHO regional workshop on Essential Surgical Care was organized by the WHO Department of Essential Health Technologies within the cluster of Health Technology and Pharmaceuticals. It was held at Kampala, Uganda from 1 to 2 December 2003 and was attended by representatives of international and local non-governmental organizations, professional societies, experts in surgery, orthopaedics, obstetrics, anaesthesia, trauma, emergency care and directors of district hospitals from 10 countries of Africa.

The discussions centred on strengthening the existing education and training programmes in the country; establishing collaborative partnerships between stakeholders in identifying requirements in training in essential emergency procedures for trauma and pregnancy-related complications and anaesthesia at the first referral health facilities in developing countries. Participants identified an urgent need to improve the quality and extent of training in surgical, and acute care, particularly at first referral level (district hospitals), and to update the WHO training manual *Surgical Care at the District Hospital*.

Objectives

The objectives of the workshops were as follows:

To improve the quality of essential surgical care in first referral level of health facilities managing trauma, and obstetrics emergencies, in a WHO collaborative approach at country level through a workshop aiming at:

1. Facilitating the introduction and dissemination of the WHO manual “Surgical Care at the District Hospital” in the education and training programmes of medical and nursing schools, first referral level hospitals, health centres and medical libraries;
2. Encouraging collaboration with the international and local relevant organizations such as surgical and orthopaedic societies, teaching hospitals and medical universities to strengthen existing training programmes in essential surgical care at country level.

Summary of discussions

Following the opening session and adoption of the proposed workshop agenda, presentations were made on the WHO strategies for essential surgical care and situation analysis on essential surgical care in Africa. The shortage of health professionals, especially surgeons
restrictedly posted in teaching hospitals and practising in urban areas and inadequate, untrained staff at first referral level hospitals in rural areas were of major concern. Discussions focused on the need for surgical care at district level, with emphasis on adequate working conditions underlined by a national policy on emergency surgical procedures to reduce death and long term disability due to trauma and pregnancy related complications. There is need for: (i) appropriate facilities at district hospital level with minimum basic essential equipment; (ii) reinforcement of surgical competencies of health personnel working at first referral health facilities, and; (iii) good national strategies for motivation and retention of these health personnel.

Participants witnessed the utility of the WHO document “Surgical Care at District Hospital ” and agreed on the relevance of its contents on guiding day-to-day practice. They formulated recommendations for practical use of chapters related to equipment and practice. It was also agreed that this working document could be used as reference in teaching surgical teams at district hospital level. Participants put emphasis on the need for a collaborative approach to successfully face up trauma and obstetric care at first referral level health facilities. There is a need to strengthen the skills of the health providers (clinical, medical officers, nurses, paramedical staff) responsible for resuscitation procedures in trauma, obstetrics and Anaesthesia. Appropriate training for all surgical team members and their social recognition were found important aspects to be considered for professional capacity-building, motivation and retention of staff at first referral level health facilities. There was an urgent need to address the research in the area of the impact of training in best practice interventions at district hospitals.

In the closing session, participants reiterated that this project has enormous potential to fulfil the need of training health providers at first referral health facilities in the management of emergency procedures. Acknowledgement was made of the important work of WHO in partnership with ministries of health, local and international Organization, professional societies and other institutions in addressing the need to strengthen collaboration in training in essential emergency and surgical care at the district hospitals.

RECOMMENDATIONS

I. Participants:

Participants agreed to undertake the following actions after the workshop:

1. Prepare a report with the recommendations from the workshop to sensitize:
   - Ministries of Health/National health authorities
II. National Health Authorities:

Participants recommended that Ministries of Health/National health authorities should:

1. Support the development of a national policy and guidelines on essential surgical care.
2. Encourage and support the establishment of committees on essential surgical care at national and hospital level.
3. Promote the integration of essential surgical care services into undergraduate and postgraduate programmes in medical, nursing and paramedical schools.
4. Establish and promote education and training in emergency procedures and equipment for surgery, obstetrics and anaesthesia.
5. Give recognition to trained personnel and motivate personnel working at the peripheral health care structures such as district hospitals and health centres.

III. WHO:

Participants recommended that the World Health Organization should:

1. Assist Member States in the implementation of national health policies, guidelines and plans of implementation.
2. Make WHO training manual ‘Surgical Care at the District Hospital’ and other materials available as hard copy, in CD-ROM and on the WHO website in order to facilitate their wider use.
3. Develop guidelines and tools with regional professional societies for monitoring and evaluating to improve essential surgical care at district hospitals.
4. Encourage Ministry of Health to identify funding for national initiatives to promote essential surgical care.
5. Support professional associations involvement in promoting essential surgical skills.


7. Plan and implement follow-up activities.

IV. Partnership:

Participants emphasized the role of partnership to support National initiatives to promote essential surgical care through training and education of health personnel in order to:

- Reduce unnecessary blood transfusions particularly in trauma and pregnancy related complications.
- Prevent the transmission of HIV and other infectious agents through best practice guidelines and education.

BACKGROUND

Injuries and pregnancy-related complications are among the leading causes of death. Males in Africa and Europe account for the highest number of injury deaths, while pregnancy-related haemorrhage, hypertension, sepsis, abortion and obstructed labour are the leading causes of death in women in low and middle-income countries. World wide, 60% of pregnant women and about 43% of children under 5 years of age are anaemic, with the highest estimated prevalence in Africa and Asia, resulting in serious consequences for surgical (and anaesthetic) care. Road traffic injuries in men aged 15 - 44 years constitute the second highest cause of ill health and premature death world wide, second only to HIV/AIDS. Road casualties threaten to take up about 25% of hospital beds in developing countries. Death and disability due to injuries and pregnancy related complication result from lack of facilities and trained human resources to give prompt appropriate care in rural/first referral level health facilities. There are rarely specialist surgical teams in district hospitals in developing countries and medical and senior paramedical staff performs a wide range of surgical procedures with limited, low technology apparatus and equipment. An integrated approach to training is therefore required to address their particular needs.

The Department of Essential Health Technologies has developed a training guide and E-learning tools for health care providers, “Surgical Care at the District Hospital” on the safe use of essential emergency surgical procedures and linked equipment at the first referral level of care.

Situation Analysis in Africa on essential surgical care: General overview
Eighty-five per cent (85%) of the population is rural; there is shortage of:

- Human resources (especially professionals)
- The available human resources, especially medical doctors/surgeons/nurses also have to take up other responsibilities, which leads to diminished productivity.
- Often doctors end up leaving rural posts for the urban hospitals where there is better purchasing power and access to professional groups.
- Funds made worse by deteriorating economies.
- Surgical supplies, which usually have to come from the capitals or from donors. Transport and telecom are a big problem.

**Role of health providers and policy makers in essential surgical cares**

Road traffic injuries are a global public health problem affecting all sectors of society. Around 15% of all pregnant women develop a potentially life threatening complications that calls for skilled care and some will require emergency intervention to survive. Therefore, training in essential emergency procedures is a particular priority.

The College of Surgeons of East Central and Southern Africa (COSECSA), has established a basic surgical training programme. Hospitals that wish to be accredited as training centres will have to meet a set of criteria decided by the examination and training committee. Success in basic surgical training will lead to the diploma of Membership of the College. Members will then be eligible to enrol for higher speciality training, which can be carried out in the candidate’s own country if accredited facilities exist. This is supported by all the national ministers of health and the Commonwealth Regional Health Secretariat in Arusha, Tanzania. The system allows freedom of movement between centres in the region for all or part of the training, in order to benefit from a particular area of expertise. In this way, it is hoped that this programme will facilitate a more varied approach to higher surgical training and open up surgical training to a larger number of doctors with the diploma recognised throughout the region.

The Canadian Network for International Surgery (CNIS) holds short courses on Essential Surgical Skills in collaboration with the Association of Surgeons of East Africa (ASEA) and over 2500 personnel have been trained using the earlier WHO training manuals as a basis. CNIS also teaches the Trauma Team Training Course, a short course in injury management for non-physicians, and Injury Epidemiology.
Health Volunteers Overseas/Orthopaedics Overseas is an NGO that supports medical, surgical, dental, nursing and physical therapy training programs in developing countries. The orthopaedic division currently is active in 14 countries, supplying volunteer physicians and educational materials for orthopaedic resident and paramedical training programs.

The need for health information and related services in the developing world is huge, and all efforts are to be commended. The different approaches should co-ordinate with each other in order to maximize benefits to the users and, by extension, to the populations they serve. HINARI (WHO) coordinates with INASP/PERI and e-IFL. It is an across-the-board offer of access online to full-text journals which is made to all members of institutions (universities, professional schools, government offices, research institutes, teaching hospitals, national medical libraries) in 111 developing countries.

Review and utility of the WHO training manual *Surgical Care at the District Hospital*

The initial discussion focused on the printed manual and suggestions (on specific technical topics will be sent by the participants), for changes in a second printing or second edition. These included:

- Use a loose leaf style
- Translate in as many languages as possible (French was an urgent need, Portuguese).
- Add standard forms which could be copied or removed for use
- Give clear referral guidelines.
- Re-arrange sections (e.g. include the paediatric topics in a separate paediatric section, trauma topics in traumatology section).
- Add algorithms
- Add protocols (printable) for use in the wards/O.R/emergency room
- Add teaching materials in an easy-to-read format aimed at the medical officer.
- Add learning objectives.
- Add material specifically for operating room nurses.

In general it was suggested that it had a practical layout and was good for teaching in medical and nursing education and training programmes.

A collaborative approach with the major stakeholders especially the teaching institutions, policy makers and health care providers at the all levels of health care delivery is mandated. The
Introduction of *Surgical Care at the District Hospital* manual will allow to strengthen and add value to already existing curricula in the teaching institutions and first referral health facilities. It was emphasized that there will be monitoring and evaluation of assessing the impact at health facilities, following the implementation of best practice guidelines from the training manual.

**Collaborative approach to trauma and obstetric care at first referral health facilities**

It was recognized that since there is a shortage of specialist physicians surgeons, obstetrician, anaesthesiologists at the first referral health facilities; the medical officers, nurses and technicians are required to perform some of the life saving procedures. The is a need for training existing health care staff in the essential emergency surgical skills to reduce death and disability due to trauma, pregnancy related complications, anaesthesia initiating a strategy to provide safe patient care through:

- Implementation of emergency clinical procedures guidelines for resuscitation in trauma, surgery, emergency and obstetrics training programmes
- A reduction in unnecessary transfusions and risks associated with transfusion therapy training of medical, clinical officers, nurses, technicians in resuscitation, infection control, use of essential equipment
- Monitoring and evaluation of implementation of best practice guidelines in health facilities. Regular hospital meetings to identify the best practices are very useful adjunct to success.

The importance of national policies and guidelines was again reiterated, together with the education and training of health providers, the development of standard operating procedures use of best practice guidelines on essential emergency procedures in trauma, pregnancy related complications, resuscitation, and infection control.

**Utility of WHO tools on essential surgical care**

Participants witnessed the utility of the WHO document “Surgical Care at District Hospital Level” and agreed on the relevance of its contents on guiding day-to-day practice. They formulated recommendations for practical use of chapters related to equipment and practice. It was also agreed that this working document could be use as reference in teaching surgical team at district hospital level

Participants put emphasis on the need of collaborative approach to successfully deal with trauma and obstetric emergencies at the first referral level of care. In this regard they called for strengthening the skills using the basic best practice protocols for training in emergency
procedures of the team including surgeons, obstetricians, anaesthesiologists, theatre personnel, emergency room (casualty) staff. Appropriate training for all surgical team members and their social recognition were found important aspects to be considered for professional capacity building, motivation and retention in their teaching jobs in order that they continue training medical, nursing students and technicians for first referral level health facilities.

**Monitoring and evaluation**

The WHO tools on essential surgical care were discussed for monitoring and evaluation to improve the emergency care at the first referral health facilities. A generic list of essential emergency equipment linked to the emergency procedures from the WHO materials (including Surgical Care at the District Hospital) was reviewed and suggestion that it could be locally adapted for monitoring and evaluation of the emergency care (entry point at any first referral health facility). Needs assessment for generic essential emergency equipment provides a set of indicators that can be adapted to provide the basis for a system of monitoring and evaluation to improve the quality of essential emergency care at the health facility.

It was emphasized that the Ministry of Health should be involved at all levels. Particular attention should be paid to identifying and involving key persons/positions, such as those responsible for health systems, hospital services or technical services.

**RECOMMENDATIONS**

**I. Participants:**
Participants agreed to undertake the following actions after the workshop:

1. Prepare a report with the recommendations from the workshop to sensitize:
   - Ministries of Health/national health authorities
   - Professional associations and scientific society
   - Education and training institutions/libraries
   - NGOs and other relevant Organization
   - Potential funding agencies.

2. Initiate the formation of a Working Group/Steering Committee to prepare a draft national policy and guidelines for submission to the Ministry of Health.

3. Act as focal points and facilitators in organizing training workshops to promote essential surgical care at first referral health facilities.

4. Facilitate the dissemination of recommendations and WHO learning materials on essential surgical care, in conjunction with appropriate institutions and Organization.
5. Assist in the establishment of a system for the monitoring and evaluation of essential surgical care.

II. National Health Authorities:

Participants recommended that Ministries of Health/National health authorities should:

- Support the development of a national policy and guidelines on essential surgical care.
- Encourage and support the establishment of committees on essential surgical care at national and hospital level.
- Promote the integration of essential surgical care services into undergraduate and postgraduate programmes in medical, nursing and paramedical schools.
- Establish and promote education and training in emergency procedures and equipment for surgery, obstetrics and anaesthesia.
- Give recognition to trained personnel and motivate personnel working at the peripheral health care structures such as district hospitals and health centres.

III. WHO:

Participants recommended that the World Health Organization should:

- Assist Member States in the implementation of national health policies, guidelines and plans of implementation.
- Make WHO training manual ‘Surgical Care at the District Hospital’ and other materials available as hard copy learning materials and on CD-ROM and WHO website in order to facilitate their wider use.
- Develop guidelines and tools with regional professional societies for monitoring and evaluating to improve essential surgical care at district hospitals.
- Support Ministry of Health in identifying funding for national initiatives to promote essential surgical care.
- Support professional associations involvement in promoting essential surgical skills.
- Support research on outcome and public health impact of essential surgical care.
- Plan and implement follow-up activities.

IV. Partnership:

Participants emphasized the role of partnership to support National initiatives to promote essential surgical care through training and education of health personnel in order to:
• Reduce unnecessary blood transfusions particularly in trauma and pregnancy related complications.

• Prevent the transmission of HIV and other infectious agents through best practice guidelines and education.
WHO Regional Workshop on Essential Surgical Care  
Kampala, Uganda 1-2 December 2003

Agenda and Programme of Work

**Day 1 9:00h**

1. Opening session

2. Situation Analysis in Africa on essential surgical care

3. Requirements for appropriate essential surgical care at first referral health facilities
   - Role of health providers
   - Role of policy makers

12:30-14:00 BREAK

4. Introduction to the WHO document on “Surgical Care at the District Hospital” (SCDH)
   - The “Surgical Care at the District Hospital” Manual
   - Recommendations for minimum basic requirements to improve essential surgical care

17:30 End of 1st day

**Day 2 9:00h**

5. Utility of the SCDH manual in first referral level health facilities, medical and nursing education and training programmes

6. Collaborative approach to trauma and obstetric care at first referral level health facilities with links to materials within the department and other WHO departments of “Prevention of Violence and Injuries” and “Making Pregnancy Safer”

7. Utility of WHO assessment tools and adapted to local needs, for monitoring and evaluation of the impact of training, to improve the quality of essential surgical care at first referral health facilities

12:30-14:00 BREAK

8. Next steps and action plan

9. Conclusions

17:30 CLOSING SESSION
WHO WORKSHOP ON ESSENTIAL SURGICAL CARE  
KAMPALA, UGANDA  
1-2 DECEMBER 2003  

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