Facilitators Report

Joint WHO Meetings with Ministry of Health on Strengthening Emergency and Essential Surgical Care in Nepal

9-12 November, 2004
Kathmandu, Nepal

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1. Executive summary

Joint WHO with Ministry of Health (MoH) meetings were held in Kathmandu for collaborating trainings for strengthening capacities of health personnel on *Emergency and Essential Surgical Car*e (EE*SC)* at resource limited health facilities and introduce the use of WHO *IMEESC* toolkit in the training courses in surgery, trauma and anaesthesia towards a standard training

This was followed by meetings with members of the professional societies and universities for implementation of best practice protocols in the training programmes on surgery, trauma, emergency, obstetrics, anaesthesia and HIV, and transplantation programme in Nepal. There were 50 participants representing policy makers from MoH and health providers (directors from district, zonal and regional and teaching hospitals, medical and nursing school, surgeons, directors of emergency and disaster management, nursing, medical laboratory and quality assurance departments, obstetricians and anaesthesiologists).The WHO project on *EESC* was introduced and discussions were held with the purpose of identifying target audience, logistics and planning of Training of Trainers (TOT) workshop in 2005. Meetings were held with focal persons in the MoH, and with directors of international partners representing Japan International Cooperation Agency (JICA), German Development Cooperation (GTZ), World Bank and Medicins Sans Frontier (MSF) for collaborations on building capacities.

Field visits were undertaken to rural healthcare facilities (district hospital and primary health care centres) and tertiary hospital. The meetings held with directors of departments of surgery, neurosurgery, trauma, emergency care, anaesthesia, laboratory and nursing. Participants of the meeting included the 'Renal Transplant committee' established at Bir Hospital, which will be the first Government Hospital to start a renal transplant programme in Nepal.

Discussions were held on the existing Medical General Practitioners programme (MDGP) in Nepal which includes anaesthesia training for general practitioners and health workers from district hospitals. The utility of WHO *Integrated Management of Emergency and Essential Surgical Care* (*IMEESC)* training toolkit was demonstrated to anaesthesiologists, surgeons and nurses for incorporation in hospital training programme and medical education**.**

The meeting led to a consensus by MoH and WHO country office for planning a needs assessment and training of health personnel in emergency and essential surgical and anaesthesia procedures with linked equipment towards reducing death and disability in trauma, disaster, pregnancy related complications particularly in women and children.

2. Background

Nepal is a landlocked Himalayan Kingdom with a total population of 27,133,000. The infectious diseases, maternal and perinatal disorders, and nutritional deficiencies are responsible for more than two thirds of the disease burden (68%) in Nepal. Degenerative and noncommunicable diseases contributed to about a fifth of the estimated burden (23%), and injuries and accidents contributed the remaining (9%). In addition there are important newly emerging and re-emerging diseases: malaria, kala-azar, Japanese encephalitis, tuberculosis and HIV/AIDS. The highest risk groups are children under five, particularly females, and women of reproductive age. In case of adult males (15-44 years), tuberculosis, accidental falls, ARI and motor vehicle accidents were the leading causes contributing the burden of disease for that age group. The high burden due to maternal and perinatal disorders emphasizes the need for effective reproductive health programme, especially in the remote areas.

In Nepal the major equity issues relate to gender, age, caste, ethnic group, income and area of residence. Total number of physicians are 5,384 with a density of 0.21 per 1 000 population. The issues which adversely affect the ability for the health sector to effectively address the equity include: inadequate staff motivation; deployment and retention problems; over-centralization and a resulting lack of responsiveness to local needs; inequity in service provision and health outcomes; insufficient community involvement in planning, implementation and supervision of service delivery

The health policy framework for health sector development set out in the Second Long-term Health Plan (SLTHP). The main policy in the SLTHP focused on the provision of an "Essential Health Care Services Package (EHCP)". This package consists of priority public health measures and essential health care services for the management of common illnesses and injuries.

The current Ninth Medium-term Plan calls for high priority to be given to the availability of the EHCP at the district level and below, and expanding the system of health facilities and strengthening the referral system. Reproductive health and family planning programmes will be strengthened to reduce the maternal and child mortality and morbidity. A master plan covering human resources, equipment, medical instruments will be developed to support the ongoing health programmes. Participation of the private and NGO sectors will be encouraged and mobilized particularly in the provision of specialized services. [1,2]

3. Objectives

- Visits to teaching and district hospitals for the proposed surgical training program

[1] http://www.who.int/countries/en/cooperation_strategy_npl_en.pdf
[2] http://www.who.int/countries/npl/en/

- Meetings with policy makers, key health providers and stakeholders to support training for strengthening capacities of health personnel on *EESC* at resource limited health facilities.
- Introduce and facilitate the use of WHO *IMEESC* toolkit in the training courses in surgery, trauma and anaesthesia towards a standard training
- Collaborating with partners in Nepal for obtaining their support in the training courses on *EESC.*

4. Field visits for a Situation Analysis

Field visits were made by the team (WHO, WCO, MoH) to the following health facilities:

- National Academy of Medical Sciences (NAMS)
- National Public Health lab (NPHL), Teku
- Patan Hospital (DH),
- Bhaktapur Hospital and Dadikot PHC
- Bir Hospital
- Kanti Children's Hospital, WHO Collaborating Centre for Child Health

5. Meetings at Ministry of Health, Nepal

Meetings were held with focal points in MoH, Dr MK Malla, (Chief specialist, Policy, Planning and International Cooperation Division) and Dr. B.D. Chataut, (Director-General of Health Services).

6. Meetings at the WHO Country Office, Katmandu, Nepal

Meeting was held with Dr Lin Aung, WHO country Office to brief on the field visits and meetings with policy makers, health personals and partners.

7. Meeting discussions

Discussions with policy makers, directors and staff of the health facilities addressed the following issues:

- Access to basic surgical interventions is needed to save lives in many life threatening conditions (injuries, infections, pregnancy related complications, disasters) therefore, gaining attention as a public health issue. WHO is addressing this through the project *EESC* at resource limited health care facilities.
- The *EESC* project uses a horizontal approach to improve access to basic care at primary health care facilities.
- Capacity building for the health providers and policy makers by introducing the WHO *IMEESC* tool kit comprising of comprehensive policy guidelines, needs assessment, essential emergency equipment list, training curriculum, best practices and training videos.
- Incorporation of the WHO *IMEESC* tool in the wider surgical programs of Nepal for management of trauma, obstetrics emergencies, anesthesia and disasters in medical and nursing schools, and continuing medical education and training programs.
- Experience of the Patan hospital with the existing Medical General Practitioners programme (MDGP) in Nepal which includes anaesthesia training for general

practitioners and health workers from district hospitals will be useful in the proposed trainings.
- The utility of WHO IMEESC training tools was demonstrated and seen as important in policy decisions and day to day practice by anaesthesiologists, surgeons and nurses for eventual incorporation in hospital training programme.

8. Recommendations and action plan

- Preparation of a Joint report of the meetings for dissemination to participants, partners (local and international) including putting on the WHO website.
- Wider dissemination of the WHO training materials and in particular to each of the district and teaching hospitals in the 2 regions identified by MoH and WHO country office.
- Preparation of joint project proposal with WHO country office and MoH for strengthening surgical (including anaesthesia) training in Nepal.
- Collaborations to incorporate the WHO *IMEESC* toolkit in the surgical and anaesthesia training programs in Nepal.
- Share project plans, WHO *IMEESC* toolkit with WHO partners in Nepal (JICA,GTZ,DIFD,MSF)
- To establish a "Working Group" for planning training workshops in Nepal

9. Conclusions

This meeting identified the need for the proposed surgical training program and areas requiring strengthening capacities at primary health care facilities for access to basic surgical care.The WHO training materials on emergency and essential surgical procedures and equipment will be incorporated in the training and education programmes in Nepal. GTZ will collaborate for needs assessment and training of trainers programme in Nepal and JICA expressed interest to attend the training workshop in Nepal in 2005.

10. Acknowledgements

- Directors and staff of the Health facilities visited
- MoH, Nepal
- Japan International Cooperation Agency (JICA),
- German Development Cooperation (GTZ) ,
- Medecins Sans Frontier (MSF)
- WR of WHO Country Office Nepal
- WHO/SEARO
- Departments of Essential Health Technologies, Evidence and Information for Policy (Patient Safety), Making Pregnancy Safer, Violence and Injury Prevention, Child and Adolescent Health, WHO HQ, Geneva, Switzerland

Annexe 1. List of participants of the Meeting

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Annex 2: Program Agenda

- Visits to teaching and district hospitals in Nepal for a Situation analysis
- WHO Meetings with directors of teaching and district hospital in Kathmandu regions
- Introduce and facilitate the use of WHO *IMEESC* tool kit
- Discussions
- Collaborative approach to surgical training on *EESC* procedures and linked equipment
- Recommendations and follow up action plan
- Conclusions of meetings and visits

Annexe3: WHO training tools for improving skills of health personnel

Needs Assessment and Evaluation Form for Resource Limited Health Care Facility

Essential Emergency Equipment in Emergency Room*

*At an entry point in any health facility such as:
Emergency room/ Admission room / Treatment room/ Casualty room

1. **Name/Address of Health Care Facility** _____
   Country _____
2. **Type of Health Care Facility** (please check one)
   - Primary or First referral level facility/ District Hospital/Rural Hospital ☐
   - Health Centre ☐

3. **Human Resources** in emergency room (please indicate number of health staff)
   - Doctors____ Nurses ___ Clinical or Health officers ____Technicians ___ Paramedical staff ___
4. **Physical Resource**

(a) Infrastructure

	Yes	No
▪ **Is there an area or room designated for emergency care?**	☐	☐
▪ **Is there running water?**	☐	☐
▪ **If yes: Interrupted / Uninterrupted (please circle one)**		
▪ **Is there an electricity source?**	☐	☐
▪ **If yes: Interrupted / Uninterrupted (please circle one)**		

(b) Equipment

	Yes	**No**
▪ Is a list of essential emergency care equipment available?	☐	☐
▪ Is following available		
- Oxygen Cylinder: Interrupted /Uninterrupted (please circle one)	☐	☐
- Oxygen Concentrator: Interrupted /Uninterrupted (please circle one)	☐	☐
- Equipment for oxygen administration available (tubes, masks)	☐	☐

Essential Emergency (EE) Equipment	Yes, in some equipment	Yes, in all equipment	No
▪ **Are the EE equipment in working order?**	☐	☐	☐
▪ **Is there access to repair if equipment fails?**	☐	☐	☐
▪ **Is there access to repair within the health care facility?**	☐	☐	☐
▪ **Is there access to repair outside the health care facility?**	☐	☐	☐
▪ **If yes, how far (in km): 1-25 / 26-50 / 51-200 / >200 (please circle one)**			
▪ **Is there an agreement for the maintenance of the equipment with the supplier?**	☐	☐	☐
▪ **Do the health care staff in the emergency room get training in the use of the equipment?**	☐	☐	☐
▪ **Is information available on supply, repair, and spare parts for the equipment?**	☐	☐	☐

5. **Quality, safety, access and use**

	Yes, in some procedures	Yes, in all procedures	No
▪ **Are the best practice protocols for management of essential emergency procedures available?**	☐	☐	☐
▪ **Are the protocols for safe appropriate use of equipment in essential emergency procedures available?**	☐	☐	☐

- **How often is 'room to room inspection' performed to ensure that** EE equipment **and supplies required for the essential emergency procedures are available and functioning? (please circle one)**
  Daily / weekly / monthly / 6-monthly / yearly / once in ___ years / never

	Yes	No
▪ **Are the information, education and training materials on emergency procedures and equipment available in the emergency room for health care staff use?**	☐	☐
▪ **Are there introductions of any new procedures/interventions?**	☐	☐
▪ **If yes, which procedure/intervention: (please specify)**		
▪ **Has referral to other health facility decreased because of skills and knowledge of procedures and intervention?**	☐	☐
▪ **Are records maintained?**	☐	☐

6. **Policy**

	Yes	No
▪ **Is there a policy to promote training for health care staff in the essential emergency management of trauma, obstetric care and anaesthesia?**	☐	☐
▪ **Is there a policy to update the protocols for the emergency management of trauma and obstetric care adapted to local needs?**	☐	☐
▪ **Are there any guidelines on donation, procurement, and maintenance of all EE equipment?**	☐	☐
▪ **Is there a list of extra health personnel to be contacted in disaster situations?**	☐	☐

For guidance use WHO generic list of Essential Emergency Equipment

Department of Essential Health Technologies
World Health Organization, 20 Avenue Appia, 1211, Geneva 27,Switzerland
Fax: 41 22 791 4836 Internet: www.who.int/surgery

WHO Generic Essential Emergency Equipment List

This checklist of essential emergency equipment for resuscitation describes minimum requirements for emergency and essential surgical care at the first referral health facility

Capital Outlays	Quantity	Date checked
Resuscitator bag valve and mask (adult)		
Resuscitator bag valve and mask (paediatric)		
Oxygen source (cylinder or concentrator)		
Mask and Tubings to connect to oxygen supply		
Light source to ensure visibility (lamp and flash light)		
Stethoscope		
Suction pump (manual or electric)		
Blood pressure measuring equipment		
Thermometer		
Scalpel # 3 handle with #10,11,15 blade		
Scalpel # 4 handle with # 22 blade		
Scissors straight 12 cm		
Scissors blunt 14 cm		
Oropharyngeal airway (adult size)		
Oropharyngeal airway (paediatric size)		
Forcep Kocher no teeth 12-14 cm		
Forcep, artery		
Kidney dish stainless steel appx. 26x14 cm		
Tourniquet		
Needle holder		
Towel cloth		
Waste disposal container with plastic bag		
Sterilizer		
Nail brush, scrubbing surgeon's		
Vaginal speculum		
Bucket, plastic		
Drum for compresses with lateral clips		
Examination table		
Wash basin		
Renewable Items		
Suction catheter sizes 16 FG		
Tongue depressor wooden disposable		
Nasogastric tubes 10 to 16 FG		
Batteries for flash light (size C)		
Intravenous fluid infusion set		
Intravenous cannula # 18, 22, 24		
Scalp vein infusion set # 21, 25		
Syringes 2ml		
Syringes 10 ml		
Disposable needles # 25, 21, 19		
Sharps disposal container		
Capped bottle, alcohol based solutions		
Sterile gauze dressing		
Bandages sterile		
Adhesive Tape		
Needles, cutting and round bodied		
Suture synthetic absorbable		
Splints for arm, leg		
Urinary catheter Foleys disposable #12, 14, 18 with bag		
Absorbent cotton wool		
Sheeting, plastic PVC clear 90 x 180 cm		
Gloves (sterile) sizes 6 to 8		
Gloves (examination) sizes small, medium, large		
Face masks		
Eye protection		
Apron, utility plastic reusable		
Soap		
Inventory list of equipment and supplies		
Best practice guidelines for emergency care		
Supplementary equipment for use by skilled health professionals		
Laryngoscope handle		
Laryngoscope Macintosh blades (adult)		
Laryngoscope Macintosh blades (paediatric)		
IV infusor bag		
Magills Forceps (adult)		
Magills Forceps (paediatric)		
Stylet for Intubation		
Spare bulbs and batteries for laryngoscope		
Endotrachael tubes cuffed (# 5.5 to 9)		
Endotrachael tubes uncuffed (# 3.0 to 5.0)		
Chest tubes insertion equipment		
Cricothyroidectomy		

This list was compiled from the following WHO resources:

WHO training manual: Surgical Care at the District Hospital
WHO Emergency Relief Items, Compendium of Basic Specifications*
WHO/UNFPA Essential drugs and other commodities for reproductive health services.
WHO Essential Trauma Care Guidelines
* For specifications refer to this book

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