The World Health Organization and Anaesthesia

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Summary

The World Health Organization has been involved in a wide range of global healthcare initiatives for many years. Recently an initiative ‘Safe Surgery Saves Lives’ has been launched to improve the safety of surgery throughout the world. Safe anaesthesia is a key component to achieving this aim.

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The World Health Organization (WHO) has been promoting safety and quality in healthcare since its inception. Its definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” was promulgated in the Preamble to the Constitution of the World Health Organization signed on 22 July 1946 by the representatives of 61 States, and entered into force on 7 April 1948.

The Global Burden of Disease study into the mortality and disability from major illnesses was initiated in 1992 at the request of the World Bank and supported by the WHO. It describes the most comprehensive picture so far of the priorities in disease and disability around the world, and identifies the impact on health of age, wealth, stability and country.

More recently, iatrogenic injury has been identified as a major cause of harm in all countries, age groups and all healthcare settings. This ‘iatrogenic’ harm represents a public health problem comparable with deaths and injuries from road traffic accidents. In response to mounting attention to this problem, the WHO, through its World Alliance for Patient Safety, has established a program for action, called the Global Patient Safety Challenge. The first Challenge, called Clean Care Is Safer Care, has already made a major impact in improving hand washing and thereby preventing the spread of infection.

In numerous developing countries it has long been recognised that many essential surgical procedures are performed by personnel with inadequate training, facilities and equipment. Trained anaesthetists are also required for these essential surgical procedures and make crucial contributions to the emergency management and resuscitation in trauma and obstetrics, and to many other aspects of acute care. The role of the modern anaesthetist in promoting safe surgery extends beyond the operating room, and includes optimising co-existing medical conditions and providing pain relief and appropriate medical management in the postoperative period.

Unfortunately there is a serious shortage of trained anaesthetists in many developing countries [1], and there is at times a severe lack of facilities available for the provision of safe anaesthesia [2]. Not surprisingly, the avoidable mortality rate attributable to anaesthesia in some areas is very high (for example, 1 : 150 in Togo [3], 1 : 504 in one Central Hospital in Malawi [4] and 1 : 1923 in another in Zambia [5]: compare with cited rates in developed countries as low as 1 : 71 429 [6]). Anaesthetic accidents are particularly important as a preventable cause of maternal deaths. Even some developed countries have improvements to make in anaesthesia care. The Confidential Enquiries into Maternal Deaths in UK showed that anaesthesia accounts for 3% of direct maternal deaths and recommended that the care of women at high risk of maternal haemorrhage must involve consultant anaesthetists at the earliest possible time and that dedicated obstetric anaesthesia services should be available in all acute units [7].

The recognition of deficiencies in surgical care as a substantial cause of iatrogenic harm and therefore as a legitimate and important public health problem, is in itself a breakthrough in the conceptualisation of health priorities. In the second ‘Challenge’, called ‘Safe Surgery Saves Lives’, the aim is to reduce errors in surgical care to avoid injury. As safe surgery is dependent on the provision of
safe anaesthesia services, recommendations about anaesthesia provision form an important part of this work.

The WHO strategy is to define a universally applicable set of minimum standards for surgical care that will save lives and identify practical measures with which to monitor progress in different units. In 2007, four working groups have been formed that correspond to the four focus areas of the present challenge: Clean Surgery, Safe Anaesthesia, Safe Surgical Teams, and Measurement of Outcomes. These groups are developing a systematic checklist that is simple to implement, detailing tasks that are critical to safety. The tasks identified to ensure safe anaesthesia will be underpinned by technical papers exploring optimal equipment, patient monitoring, medications, and intra-operative communication. These papers will include an update of the International Standards for Safe Anaesthesia developed by the International Task Force on Anaesthesia Safety adopted by the World Federation of Societies of Anaesthesiologists in 1992 [8].

WHO has already promulgated the Integrated Management for Emergency and Essential Surgical Care toolkit. This includes recommendations on minimum standards for surgical and anaesthesia services, aimed particularly at rural healthcare facilities. WHO established a Global Initiative for Emergency and Essential Care in 2005, to coordinate collaborations for strengthening capacities in emergency and essential surgical and anaesthesia care worldwide [9]. This has involved the creation of a permanent department and the appointment of an anaesthetist (Professor Meena Cherian) to the WHO – remarkable evidence of a newfound commitment to the importance of this specialty to the safety and well-being of patients everywhere. This new work in 2007 will continue to build on these initiatives.

The World Federation of Societies of Anaesthesiologists (WFSA), which is affiliated to the WHO, has established a Safety and Quality Committee to give impetus to its commitment to addressing the problem of iatrogenic harm. This Committee, along with the Association of Anaesthetists of Great Britain and Ireland and GE Healthcare, have launched an initiative called ‘Global Oximetry’ (GO) to extend the informed use of pulse oximetry as an essential component of safe anaesthesia to patients around the entire globe (see p 75–7 in this supplement). Elements of this initiative include the provision of affordable, robust and reliable oximeters, training in their use, evaluation of the practitioner’s competence in interpreting and responding to reductions in oxygen saturation, arrangements for maintenance of the oximeters, and agreements with local authorities to adopt and maintain oximetry as a standard of care. Pilots are already under way in Vietnam, Uganda, and the Philippines and a fourth pilot is planned for India. As with the WHO ‘Challenges’, measurement is essential, and the uptake and effective use of oximetry will be assessed.

The WHO ‘Challenges’ should be seen as adding to and consolidating work in progress. They are intended to focus attention on factors known to be major contributors to iatrogenic surgical and anaesthesia harm and to galvanise action to address these. The timeframe for producing the checklists and drafts of the technical papers is very short, but consultation and revision will continue through the next phase in 2008, in which the checklist and other recommendations will be evaluated in a series of studies.

The WHO would like to acknowledge this supplement produced by the Association of Anaesthetists of Great Britain and Ireland and regard it as an important contribution to raising awareness of the difficult challenges facing anaesthesia services in developing countries.

References