and other family members are able to spend with them will vary according to the facilities that are available. Rituals and beliefs concerning the death of an individual, and the management of the body, usually involve religious or cultural observance. There are many beliefs surrounding the distinction between physical and spiritual life, in particular the belief that something of the individual survives death, either to be reborn through reincarnation or to fulfil their spiritual destiny in the afterlife. It is important that the correct funerary procedures, if any, are followed in order to ensure that the bereaved are not distressed by any omission which they consider important.

All societies, whether religious or not, have to deal with the problem of the death of their patients and the bereavement of parents and other close family members. Like other transitions in an individual’s life, death is usually marked by a rite of passage in which central values are restated and important social bonds re-emphasised. Precise customs vary in different religions and traditions, but common features include the washing and laying out of the corpse (which may be embalmed), and the wake, or watching over the dead body. These customs may need to be modified to prevent the spread of infection to other members of the community, or because of the need to perform post-mortem examinations to establish an exact cause of death. Effective hand-washing procedures remain of paramount importance.

In countries where the climate is characterised by extremes of temperature, refrigeration of dead bodies until they can be returned to the family is essential. Each hospital should have a mortuary building adjacent to, but separate from, the hospital. To prevent the spread of infection, staff working in the mortuary will need to be provided with separate clothing for use in that department. The use of two pairs of gloves, or thick rubber gloves and protective clothing, will be necessary for the post-mortem examination if there is suspected infection of the body with life-threatening bacteria or viruses.

The mortuary department will need to have facilities for families to see and spend time with their dead relative, and a separate comfortable area where documentation can be completed and any necessary interviews with local government officials can be conducted. The mortuary department not only provides facilities for post-mortem examination, but also, in large centres, it can be part of the government facilities for forensic post-mortems, which may provide additional resources for the hospital. Having these centres within a hospital may improve services for families, but care needs to be taken that there is a culture of openness that involves families in the consent procedures for all examinations performed after the patient’s death.

Conclusion

Each member of the hospital has a role to play in the prevention of hospital-acquired infections. The greatest responsibility lies with the healthcare professionals, particularly nurses and doctors, who in the hospital setting are in contact with patients and their families 24 hours a day, and because of this are the main perpetrators of cross-infection. However, they can also demonstrate good practice by, for example, being the catalysts for change, and improving the education of other hospital staff and families.

Further reading


1.3 Continuing medical education for healthcare professionals

Continuing medical education takes many forms, including the following:

- on-the-wards training
- short courses on the management of emergencies
- use of a readily available pocketbook
- the availability of a postgraduate education centre with library and Internet facilities
- departmental meetings
- online websites and organisations
- local (Ministry of Health) guidelines and publications
- courses and conferences
- Internet-based membership organisations (e.g. HIFA 2015 and CHILD 2015).

Every healthcare professional needs to engage in continuing medical education in order to keep up with the pace of change. They may be a long way away from a university. They may have no library within reach. They may not be sent any journals to read. They may not be able to go away for further education. In resource-limited countries they may not be able to afford a computer or Internet access, or to print out the myriad of teaching materials available on the web.
On-the-wards training
This is probably the most effective way of keeping front-line staff up to date, especially with regard to the management of emergencies such as eclampsia or the newborn infant who does not breathe at birth. For these mini-teaching sessions, as little as 1 to 2 hours a week can be very effective, and ideally a senior staff member who has been trained in medical education (e.g. through the Generic Instructor Course of the Advanced Life Support Group, ALSG) should lead. Manikins (e.g. of the newborn infant), in which the lungs expand only when the airway is positioned correctly and the face mask is properly applied, can be helpful. It can also be useful to include refreshments and to make the teaching sessions friendly and socially supportive so that staff look forward to them and are keen to participate and learn.

Short courses on the management of emergencies
The ALSG in collaboration with Maternal and Child Health Advocacy International (MCAI) has designed and made available for low-income countries 3- to 5-day courses in the emergency management of obstetric, neonatal and paediatric emergencies (see www.aslg.org and www.mcai.org.uk). These courses, which are certified, consist of a combination of lectures, workshops, skill stations and clinical scenarios, undertaken by volunteer instructors who have been through a Generic Instructor Course (GIC) on medical education, and who are skilled in the clinical components of the course.

Pocketbook
A pocketbook that is available at all times is one of the best ways of accessing up-to-date evidence-based information, and is particularly valuable for the management of emergencies when there is no time to go and look for a textbook.


Postgraduate education centre with library and Internet facilities
A postgraduate medical education centre that can be accessed by all healthcare staff is a good way of providing continuing medical education support. This education centre could, at the very minimum, consist of a reasonably sized, comfortable room containing a library and if possible at least one computer. This could function as the area where regular departmental meetings are held. All non-governmental organisations (NGOs) are concerned with sustainable development, and most of them regard education as a priority that requires major investment. If you are unable to obtain funding from your health service, cultivate a relationship with an NGO or similar organisation, and try to gain investment from them or other sources.

● The library should contain the basic textbooks, in editions that are as up to date as possible.

● If possible, subscriptions for the major obstetric and paediatric journals should be obtained or accessed online.

● It may be that none of the standard textbooks are published in your language. English is the major international scientific language, so it seems reasonable to focus on English language texts.

● If your centre has an electricity supply, if you are able to obtain a computer with CD-ROM, and if it is possible to install a telephone line or mobile Internet sticks are available, this will allow you to communicate by email with specialists in other countries, and to access the Internet in order to obtain up-to-date information on diseases and their treatment. The organisation Teaching-aids At Low Cost (TALC) (www.talcuk.org) is useful in this regard. Computers are now being designed solely for Internet use, and these are less expensive than the standard personal computer (PC). This investment, for the price of perhaps six good books, can make available a vast amount of up-to-date information. In most countries a subscription is required for access to the Internet, and there will be telephone line usage charges, for which funding will be needed. Again, English is likely to be the language of choice for your global communication.

● Security may be a problem. The postgraduate education centre will need to be designed with this in mind, so that books and computers are not stolen.

Departmental meetings
Many departments will need to hold regular meetings. Cases can be presented and discussed, and a journal club can be organised. Morbidity and mortality audit meetings are very useful for identifying areas where practice can be improved by the team. However, it is very important that this kind of meeting is supportive, non-judgemental, and does not to assign blame. It is a good idea for each department to hold one of their weekly meetings in English.

Online websites and organisations
The Internet has many millions of pages. A number of websites are listed below, which will give you an introduction to online obstetric and paediatric information.

● World Health Organization (www.who.int). It is important to remember the WHO when working in low-resource settings. It is tempting to compare standards of care with those in the UK and other well-resourced countries. However, the WHO has produced numerous publications and guidelines on minimum standards of care and is a very valid resource.

● UNICEF: www.unicef.org

● UNFPA: www.unfpa.org

UNICEF and UNFPA, like the WHO, can be an invaluable resource.

● Paediatric Information Education Resource (PIER): http://pediatricseducation.org

● International Paediatric Association (IPA): www.ipa-world.org

● Hong Kong College of Paediatrics: www.paediatrician.org.hk


● Canadian Paediatric Society: www.cps.ca/en

● Regional and General Paediatric Society (RGPS), Royal
1.4 Essential imaging facilities

Introduction

Despite the fact that the use of ionising radiation (‘X-rays’) for diagnostic purposes was discovered more than 100 years ago, up to two-thirds of the world’s population still have no access to primary care diagnostic imaging services. Some rural clinics may be located in remote impoverished areas such that imaging equipment is impossible for the population to access. However, clinics in larger towns, and certainly every institution that merits the title of ‘hospital’ should have, at the very least, simple radiographic and ultrasound equipment available. This will necessitate the training of healthcare workers to use the equipment appropriately and safely. Local healthcare workers will also interpret most of the examinations performed, and therefore need training in radiographic interpretation. Many African countries, for example, do not have a single radiologist. As most radiographic equipment is now digital, in the absence of a specialist opinion, teleradiology services are an option in

Local (Ministry of Health) guidelines and publications

Some countries are beginning to develop professional bodies (e.g. paediatric societies, obstetric societies, groups for nurses and midwives). Some of these professional bodies are developing guidelines and have access to resources which will be useful.

In addition, some Ministries of Health are working with organisations such as the WHO, UNICEF, the Johns Hopkins Program for International Education in Gynecology and Obstetrics (Jhpiego) and Save the Children to develop programmes and guidelines to improve local healthcare. It is important for those working in low-resource countries to be aware of the activities of the relevant government.

Courses and conferences

These will differ from one country to another, and will be linked with the Ministry of Health and professional bodies.

Web-based membership organisations: HIFA 2015 and CHILD 2015


The goal of these organisations is that, by 2015, every person worldwide will have access to an informed healthcare provider.

HIFA 2015 is a campaign and knowledge network with more than 5000 members representing 2000 organisations in 167 countries worldwide. Members include healthcare workers, publishers, librarians, information technologists, researchers, social scientists, journalists, policy makers and others – all working together towards the HIFA 2015 goal.

HIFA 2015 contributes to the broader goal of the Global Health Workforce Alliance: ‘All people everywhere will have access to a skilled, motivated and supported healthcare worker, within a robust health system.’

Members interact via two email discussion forums: HIFA2015 and CHILD2015. Together these organisations are building the HIFA2015 Knowledge Base, a picture of information needs and how to meet them. Membership is free and open to all.

1.4 Essential imaging facilities