

Nursing in the Tropics

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20.1 INTRODUCTION

Welcome to nursing in the tropics. The purpose of this chapter is to discuss some of the issues specifically associated with nursing in the tropics. You will have your own definition of nursing and there is no intention to define nursing here, though Henderson's definition is considered later in the paper. The term 'tropics' refers to a large part of the planet and there are many different places in which to use nursing skills. You would be working in the tropics if you took a job at Darwin Hospital. You would also be working in the tropics if you were working in the Solomon Islands, on indigenous communities in northern Australia, at a refugee camp in Uganda, or in a modern clinic in the United Arab Emirates.

If you look at a map of the world you can see that the tropics covers most of Africa, South East Asia, most of the islands of the Pacific, northern Australia, a large part of South America and the Caribbean area. Within this region we find deserts, tropical forests, large cities, small remote communities, heat, cyclones, teeming rain and drought. Some inhabitants are extremely poor while others are among the richest ten percent of the world. Civil war continues in some tropical countries and refugees flee for safety causing great strain on the countries to which they flee. Chapter 1 deals with the tropical environment in some detail.

If we take the terms literally nursing in the tropics could range from working in a crowded refugee camp in Central Africa to working in a modern well-equipped major hospital in northern Australia. Just as there are many parts of the tropics in which you may be working, there are many different nursing contexts in these areas. You could be working for one of the health departments of the northern Australian states with your work based in city hospitals or city based health services, rural hospitals or remote area nursing posts where you are working alone. You could be working with *Medicins Sans Frontiers* in a refugee camp, or the Australian peacekeepers in a range of locations. You may be working for the tourist industry on an island resort in North Queensland or assisting in the development of a malaria program in a poorly resourced Pacific nation.

With so many potential working environments it is not possible to write in detail about each one of them. Rather topics will be covered in general terms and from this you will be able to apply the information to your specific area of work. This chapter will not be considering nursing in well-equipped hospitals or clinics. However what will be covered are some of the key issues related to working in contexts that are challenging to us, and ways of preparing ourselves for these contexts.

Specific topics that will be addressed include working with reduced physical and human resources particularly in rural and remote locations, the issues associated with extension of nursing practice and dealing with unfamiliar clinical situations, cultural differences that may be encountered and personal challenges we may face when moving to a different locality.

This chapter does not contain specific disease management guidelines as many of the specific tropical diseases are covered in other chapters of this book.

Nursing in the tropics is about more than dealing with different diseases. The environmental, socio-economic, political, and cultural factors and the health delivery system of the area in which you are working need to be considered. These factors are the major influence on the health of the people in the region.

An assessment of the local community will assist the health care providers in determining the focus of health education and advocacy programs. Chapter 2 considers environmental issues as well as issues of poverty and overcrowding which are related to socio-economic factors. Chapter 4 discusses custom and culture. The health delivery system will be influenced by both the socio-economic conditions of the country as well as the political situation. State politics are not the only influences on the delivery of health services. Local politics may be quite complex depending on the customs and culture of the people. For nurses to be able to work effectively within the health delivery service they need to understand the local political system of the area in which they are working.

The International Council of Nursing's theme for 2004 is "Nurses Working with the Poor; Against Poverty". This recognises the impact that poverty has on health and, with 1.2 billion people living in extreme poverty¹ most of these in tropical areas, there is much to be done.

20.2 RESOURCE ISSUES

20.2.1 Where are all the dressing packs?

One of the first things you will notice when working in an impoverished environment is the lack of physical resources. Where you may have been used to being able to order any particular wound dressing you needed, or at least been able to choose from a range of dressings, you may now find that not only is there only one form of dressing available but that these dressings are in short supply.

Water supply may be limited or it may not be reticulated. You may need to boil it, filter it or 'clean' it in some other way. Perhaps there is no electricity or the generators may only work during daylight hours. Roads may be in a poor state and public transport non-existent. Transporting seriously ill people from your community may not be an option. You may find that the disposal system for contaminated waste is not what you are used to. Similarly you may be expected to clean, sterilise and reuse equipment that in Australia is disposed of after one use. Medications and intravenous fluids may be limited in quantity and have passed their use by date.

In dealing with these conditions you need to take your lead from other health professionals in the workplace while looking for creative solutions to ensure that you are able to maintain adequate hygiene standards. You will be surprised at how enterprising you become in dealing with physical resource shortage.

Key points about working in a resource poor situation:

- Challenging – this can be exciting and frustrating. Focus on the excitement.
- Frugality – you need to learn to use only what is absolutely essential.

- Safety – while resources may be limited it is still essential to maintain safety particularly in the areas of infection control and use of drugs.
- Creativity – nurses throughout the last two centuries have been able to adapt to the situation in which they found themselves. Read some stories about nurses who worked in remote parts of Australia in the 19th and early 20th centuries. Look at the works of nurses who went to war. The old adage about creativity being the mother of invention certainly comes in here.
- Acceptance of the limitations of the system – you will need to accept the limited physical resources if you are going to be able to manage in the situation. Otherwise you will be continually frustrated and in danger of taking on too much personal responsibility for the failings of the system. This is not healthy psychologically.

Box 20.1 How an egg carton, a cotton ball and a keen nursing aide saved a lung

Erica was 4 years old, poorly nourished and had constant chest infections that were difficult to treat and impossible to cure. She lived on an indigenous community in Queensland. She had longstanding consolidation of the middle and lower lobe of her right lung. There was concern that she may need to have travel to the state capital for surgery to remove this part of her lung if her health was to improve.

To try and stave off the need for surgery the nurse at the hospital devised a physiotherapy plan. This hospital had very limited resources but Karen, one of the nursing aides, a young woman from the community who had limited health training, was keen to get involved. Erica came to the hospital every morning for percussion and drainage and a game was devised to help her expand her lungs. The nurse taught Karen how to do the percussion and drainage and showed her the game. This involved using an old egg carton and a cotton ball. Each day Erica was encouraged to try and move the cotton from one space to the next in the carton. When she first tried she could not move it from one space to the next. This game proved to be the stimulation Erica needed. She was very keen to get the cotton ball moving.

Within six weeks there was some improvement in her lung function as evidenced by her ability to move the cotton ball several spaces with one blow. After four months her lungs had cleared considerably and her general health also improved. She had very few episodes of chest infection in the following years.

20.2.2 Where are all the health staff?

Human resources may be limited in terms of numbers and education level of health staff. You may find you are the senior health professional in the workplace. There may be several health care aides or assistants or local health workers (various names are used). These people, with probably limited health training, are your most valuable resources. Cherish them, respect them, teach them and learn from them. They will know the community and can open many doors for you. They know all the short cuts and how local systems work. They can provide cultural and language interpretation for you which is vital if you are to have any impact on the healthcare of the patients.

While many of these people will have had limited educational opportunity, most are keen to learn all they can. As outlined in the story about Erica in Box 20.1, most of them are able to respond to the needs of the situation with some basic training.

20.3 EXTENDED PRACTICE

With your limited resources you may find you are now expected to take on tasks you have never done. If you are working in a remote area, besides the clinical calls on your time you may find you have a whole range of administration and management tasks that you have not done before. You may have to order the stock, hire staff, teach health workers/assistants and organise the morgue facilities. Let's focus on the clinical tasks.

Imagine you are working in a remote clinic somewhere in the tropics. You're busy dealing with the malaria cases that the health aides are not able to manage, when in comes a family with a six-month old severely dehydrated infant needing immediate attention. They are followed by two children who are breathless due to untreated chest infections and you remember that you are supposed to be running some antenatal classes in half an hour. Needing a busy exciting life – you've got one!

Before you head to work in an area where there are limited resources you need to prepare yourself. You will need good clinical skills. Seek opportunities to develop these. For instance spend time working in an emergency department to gain skills in assessment, resuscitation and management of a variety of conditions at one time. Visit the paediatric clinic to learn about treatment options for a range of conditions. Read good clinical journals. Develop your acute and chronic wound management skills by attending some wound clinics and perhaps undertaking some study in this area. Consider enrolling in some of the training schemes offered, such as that by the Council of Remote Area Nurses Australia. For instance their Remote Emergency Care² program covers the principles of emergency management in a range of clinical situations including patient assessment, dealing with shortness of breath, fluid resuscitation, cardiac emergencies, spinal injuries, obstetric emergencies, paediatric emergencies and managing multi casualty situations. Gaining experience and skills in a range of situations, not just emergencies, will give you confidence and competence. In addition, the agency for which you are working will also provide some training and orientation to the specific workplace.

Once you arrive more help is at hand. In situations where health staff are called on to deal with a large number of clinical conditions, standard operating plans (SOPs) are useful. They come in various forms. The local health authority may have the treatment regimes for common, and not so common, conditions that may present. The aid organisation for which you are working will also have such resources. These tools are used in some rural and remote areas of Australia. Examples includes *The Primary Clinical Care Manual*³ developed by Queensland Health and the Royal Flying Doctor Service, *Clinical Procedures Manual for remote and rural practice*⁴, a publication of the Council for Remote Area Nurses of Australia and *CARPA Standard Treatment Manual*⁵ developed by the Central Australian Rural Practitioners Association.

As these tools are developed within the specific health district in which they are to be used, they address the conditions seen in that area and use treatments that are available in that area. Examples of general medical topics include assessment of severe injuries, managing bites and stings, giving local anaesthetics i.e. nerve and ring blocks, managing skin conditions, and coping with specific emergencies. Chronic disease management is also covered.

For each topic there is a dot point list of what you need to do, ask and look for. Treatment, including specific drug doses, is clearly outlined. Follow up care is also outlined. The presentation of these SOPs allows for quick access to the important information. Flow charts, dot points and bolded areas are all utilised. None of them has discussion sections. They are to-do manuals. However if you want more information you can look at the reference papers behind the guidelines. For instance, the *CARPA Standard Treatment Manual* has a companion reference book⁶.

Don't forget you have the resources of the other health staff also. If they have worked in the area for some time they may have already developed a range of skills that they can pass onto you. Take whatever opportunity presents itself to learn. These could be informal discussions with colleagues, watching someone perform a skill you do not have. Ask them to watch you practise it. Read whatever you can find and talk with patients who may know a lot about their particular condition.

Remember however that you need to work within the limitations of the situation. With limited resources you cannot do everything. You need to accept that doing your best in a difficult situation is the only possibility. If safe water supplies, medications, surgery, and safe transport are not available, there will be people whose condition will lead to their premature death.

This will be particularly difficult when patients and their families do not have the money to pay for the services provided in a system where payment is necessary. Access to basic medical care in Australia is free through the Medicare program. It is not so in all other places. Where people cannot afford health services they may die from preventable and/or treatable conditions.

20.4 CULTURAL DIFFERENCES

Before reading on, please read Chapter 4 of this book if you have not already done so. The chapter covers the topic of culture, custom and health in some detail and will, hopefully, give you some idea of the impact of custom, culture and human behaviour on health. Once you have read Chapter 4 please read on here as we discuss cultural competence.

In recent years providing culturally competent care has become an important focus of nursing. "Cultural competence is a dynamic, fluid, continuous process whereby an individual, system or health care agency finds meaningful and useful care-delivery strategies based on knowledge of the cultural heritage, beliefs, attitudes and behaviours of those to whom they render care"⁷. To provide culturally competent care we need to appreciate the cultural uniqueness of each person.

This implies that to be able to effectively interact with people we need to appreciate their world viewpoint. We cannot do this unless we appreciate that our own viewpoint has been developed within our own culture.

Most readers will have been raised within the Western culture where science and rationalism inform our beliefs. As nurses you will have gained your knowledge and skills within the Western medical model. In its simplest form this model has a biological focus with the aim of curing the body⁸. While many of us now recognise the impact of poverty, working conditions, poor economic conditions etc on health and no longer see illness as only

biological in nature, the dominant feature of the Western medical model is this biological focus. Illness is seen as a malfunction of the body in some way and contagious disease is passed from one person to another via specific pathways. For instance malaria is caused by a parasite which is passed from one person to another via the mosquito. Not everyone sees it this way. Perhaps an example from the middle of the twentieth century will illustrate this point.

Box 20.2 Kuru and the Fore people⁹

In the late 1950s and early 1960s the Fore people of the Eastern Highlands of New Guinea were experiencing *kuru* which is a progressive fatal disease of the central nervous system, similar to Creutzfeldt-Jacob disease or the human form of mad cow disease. Most people died within a few months of becoming infected. Western epidemiologists claimed that the disease was caused by the funerary practices involving opening the skull and handling the brain of the deceased, possibly even consuming part the brain. The Australian authorities forced the Fore people to stop these practices and within a few years there were no further cases of *kuru*.

The Fore people categorised illness according to cause. *Kuru* fell into the major category of illness. It affected mainly adults, the productive members of the society. Sorcery was seen as the cause of this category of illness and it was attributed to enemies. The second category of illness was caused by spirits, ghosts or breaking social rules. These illnesses affected mainly children and they could be cured by offering compensation to the offended party¹⁰.

For the Fore people illness was caused by social forces. There was no notion of biological cause of disease. Rather unseen forces that could be manipulated by men, in the case of sorcery, or that existed in the world with people, were the agents of destruction. Each instance of illness had its own particular perpetrator. Even when conditions were recognised as similar the Fore needed to ask the question “Who is causing this illness?” No one person could be blamed for all instances of an illness. Sickness was a threat to social order¹¹.

The Fore people did not agree with the Western epidemiologists view about the cause of the illness. They knew the cause was sorcery and they used their belief system for seeking the cure for the instances of *kuru*. Among the methods used by them were divination to unmask the sorcerer, visits to noted healers in the region, public meetings to exhort sorcerers to cease their activities, and the closure of hamlets to outsiders in an attempt to prevent enemies obtaining sorcery material.

This final response to the disease changed living conditions¹². Hamlets became quite isolated in an attempt to prevent body parts (eg nail clippings) and other bodily discharges, which were used in sorcery bundles, falling into the hands of enemies. Prior to the 1950s, movement between Fore hamlets had been frequent; by the late 1960s houses were padlocked, and travellers were kept to paths that did not go through villages. It is this action that the Fore believed was their salvation. The incidence of *kuru* diminished after the hamlets were closed and this decline was directly attributed to the quarantine measures they implemented to prevent sorcerers gaining access to bodily materials¹³. In contrast the Western epidemiologists attributed the reduction of *kuru* during the 1960s to the cessation of the particular funerary practices outlawed by the Australian authorities. Each party interpreted the results from within their own belief system.

What this story demonstrates is that each person operates from within their belief system and the resilience of our belief systems. Most of us remain fixed in our viewpoints particularly when it involves important matters.

You may well find that you are working in a situation where Western medical views are not well accepted. Or people may accept Western medicine and combine it with other treatments. For example you may find that the patient's treatment regime is being combined with traditional treatments. This can be very challenging to you personally. If you have not developed an understanding of how your own views developed and how entrenched these views are, you will find it difficult to appreciate that your patients need to operate from within their cultural beliefs and values.

Some ways to assist you care for patients from a different culture include:

- Show acceptance and respect for all your patients.
- Learn what you can about how people understand health and illness. Local health workers can fill you in here once they are sure that you will not denigrate their viewpoint.
- Don't pretend to understand what you don't understand. Rather accept that you will not understand all the reasons for another's actions.
- If you make a cultural *faux pas* apologise for it, where it is appropriate to do so. If you are accepting of others, most people will accept your mistakes.

20.5 SOME CONDITIONS SEEN IN THE TROPICS

There is a range of diseases seen in the tropics related to the presence of specific parasites or hosts or other infectious agents. Many of these have been covered in other chapters of this text and you are referred to these for specific information. However you will find some familiar patterns of disease across the tropics having their roots in poverty, poor water supply and sanitation and lack of suitable foods for infants and children.

Conditions rarely seen in developed communities are found in poorer settings, including some of the indigenous communities in northern Australia. These include rheumatic fever, tuberculosis, diarrhoea and ear infections. It is not the tropical climate that leads to these conditions, rather overcrowding and lack of appropriate sanitation or a safe water supply. So you may find these problems in slum areas of cities, in refugee camps, in communities remote from water and sanitation services.

In addition to the environmental conditions that ensue from overcrowding, many of the inhabitants are not well nourished and already carry a burden of chronic illness. This has an impact on the individual's ability to deal with acute episodes of illness with lowered immune status reducing the body's chance of overcoming the assault¹⁴. Hence mortality and morbidity can be much higher in these communities.

20.6 PERSONAL ISSUES

A number of related factors can combine to make life difficult for you when you are working in an area of high challenge and limited resources. On first arrival, you may well experience problems adapting to the different culture in which you are living. Constant hot humid

weather is the feature of many tropical areas. Energy levels are drained by this. Your work has brought you to the area and it may be difficult to develop a life beyond work depending on the place you are working. The community may always see you as the 'nurse' never as an individual in your own right. Your personal support system is no longer close and you can find it hard to talk to others about what is happening for you. You might live in accommodation with other people who work with you and the discussion is always about work. You may have had a couple of incidents at work that have reduced your confidence in your clinical skills. You might constantly see deaths particularly of children and young people.

Any one of the above can be stressful and a combination of them can lead to real problems for you. Both the constant hassles of daily coping in difficult work situations and the impact of managing major clinical situations can lead to unresolved stress.

“The existing unregulated and professionally chaotic remote work environment has the potential to create serious stress related psychological problems for remote health practitioners” wrote Kelly¹⁵ of the Australian situation. She found the preventable sources of stress in remote health workplaces to be:

- Working beyond legal, professional and training boundaries;
- Lack of orientation and preparation for workplace;
- Lack of policies, protocols and guidelines;
- Lack of cross cultural education; and
- Conflicting and unrealistic expectations of remote practitioners.

The situation may not be any better in the tropical country in which you are working. Earlier in the paper we discussed how to prepare yourself for working beyond your current boundaries. Despite preparation this is still challenging. It is essential that you insist on proper orientation to the workplace and if there are no guidelines, try to develop some to give consistency and stress-reduction to your own work. Communication and cultural matters can be problematic even with the best of intentions. Find out what you can about the community in which you will be working and ask for education in the culture of the people. Ask the health assistants who belong to the culture for assistance in this area.

By choosing to work in a challenging situation you are demonstrating that you want to make a difference in the health of the people with whom you will be working. Your expectations may be very high. We need to appreciate that good health comes from a combination of social and economic factors. Our role can seem like putting bandaids on those whose social and economic factors are not conducive to health at the current time. When you become disheartened keep in mind Henderson's definition of nursing that was adopted by the International Council of Nurses.

The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health, its recovery, or to a peaceful death that the client would perform unaided if he [sic] had the necessary strength, will or knowledge. And to do this in such a way as to help the client gain independence as rapidly as possible. (Henderson 1966)¹⁶.

This states that caring for people in their current situation is an important element of nursing. However advocacy is also an important nursing role. Where possible we need to work to

improve social and economic conditions. If drains are overflowing and the water supply is poor, engineers are needed to improve the conditions. We can lobby for the engineers but we cannot see every death from water-borne infections as our personal responsibility. If we do, we will experience constant failure and the human spirit becomes bruised and ill when this occurs. However by providing the best nursing care possible in the situation in which you find yourself you are making a difference to the individual and family with whom you are working.

Managing these personal issues requires discipline and focus. We need to develop a range of techniques to support ourselves. These may include relaxation exercises, having an absorbing interest outside of work, assertive communication with ourselves and others. This means we get to know ourselves so we can understand what is happening to us and accept and own our feelings and reactions.

Kelly¹⁷ has developed a quick dot point sheet to remind us of some of the ways we can care for ourselves. This is reproduced in Table 20.1 overleaf.

20.7 CONCLUSION

Nursing in the tropics will be challenging and rewarding. Initially, you may be pulled out of your comfort zone but with preparation and support you will soon gain the confidence to manage effectively in the workplace. Before leaving for your new workplace, do as much preparation as you can. Find out about the place where you will be working and try to gain some knowledge about the culture of the people living there. Build your clinical skills using whatever opportunities arise to gain and practise new skills. Make opportunities to learn new skills. Talk with other nurses who have worked in such places so you have some idea of the conditions under which you will be expected to work. Look at how you can look after yourself in challenging working and living environments.

Once you arrive at your new workplace take time to get to know the other health care staff with whom you are working. Seek advice from them and make use of the local knowledge acquired by them. Listen to health workers from the local community as they have the experience of living in the community. They know what happens and how the community works.

Work may be hard and draining. You need to take the rewards of the job when they come along. Make sure you congratulate yourself when you achieve success in your work. Take pleasure from your contact with patients and use your sense of humour to get you through the difficult times. Finally, when working in any new environment, always be aware for your own personal safety. Seek advice and avoid, where ever possible, confronting and potentially dangerous situations.

Table 20.1 Path to Sustainability in Remote Area

(long-term wellbeing, job satisfaction, high self esteem)

(Source Kelly KB. Avoiding Burn-out in Remote Areas: Surviving the Day to Day Hassles. Alice Springs:CRANA, 2000. ¹⁷)

1. Maintain resilience and wellbeing:

- Maintain balance lifestyle (work, rest and play).
- Maintain good social support networks.
- Regular periods of rest or time out.
- Maintain a healthy lifestyle.

2. Act on the situation:

- Clarify your role and its boundaries.
- Clarify others' expectations of you.
- Skill up: have sufficient skills to deal with likely occurrences.
- Identify sources of stress.
- Act to change stressors which can be changed.
- Learn to live with stressors which can't be changed.
- Use good problem solving skills

3. Be active about managing your stress responses:

- Accept responsibility for your wellbeing.
- Actively manage stress responses as they arise.
- Realistic view of human capabilities – prioritise, set realistic goals, and then set boundaries.
- See challenges as growth producing experiences.
- Optimism: reframe, look for positives, reduce negative self talk.
- Keep a journal.

20.8 REFERENCES

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20.9 FURTHER READING

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20.10 USEFUL WEBSITES

- Australian Wound Management Australia <http://www.awma.com.au/>
- Council of Remote Area Nurses of Australia <http://www.crana.org.au/default.html>
- Google Australia <http://www.google.com.au/> to search for information about agencies which employ nurses in tropical areas and about the country in which you will be working.

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