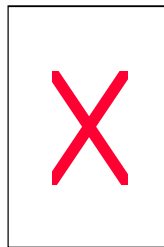


PERINATAL EDUCATION PROGRAMME

PRACTICE OF KANGAROO MOTHER CARE



UNIT 44

OBJECTIVES

When you have completed this unit you should be able to:

1. Promote Kangaroo Mother Care.
2. Teach a mother to give Kangaroo Mother Care.
3. Use Kangaroo Mother Care in the nursery.
4. Establish a Kangaroo Mother Care ward.
5. Teach ambulatory Kangaroo Mother Care.
6. Use Kangaroo Mother Care for transport.

COPYRIGHT

All rights reserved. No part of this Perinatal Education Programme may be altered in any way, nor may copies of the complete Programme be made, without the written permission of the editorial board of the Perinatal Education Trust. To facilitate the improvement of perinatal care, the Programme may be reproduced for teaching purposes provided due acknowledgement is given and the material is not sold for financial profit. While the advice and information in the Programme are believed to be accurate, the editorial board cannot accept responsibility or liability for any errors or omissions that may have been made.

PROMOTING KANGAROO MOTHER CARE

44-1 WHAT IS KANGAROO MOTHER CARE?

Kangaroo Mother Care, or skin-to-skin contact, is a method of caring for newborn infants. Kangaroo Mother Care (KMC) is particularly useful for nursing low birth weight infants (infants with a birth weight below 2500g). The infant is nursed between the mother's bare breasts in direct contact with her skin.

The details of the principles of KMC are given in Unit 43.

44-2 HOW IS KANGAROO MOTHER CARE IMPLEMENTED?

The implementation of KMC depends on the following:

1. The staff 's acceptance of KMC.
2. Adopting a KMC policy.
3. Writing KMC guidelines.
4. Training the staff to use KMC.
5. Empowering mothers to give KMC.
6. Teaching KMC to mothers.
7. Establishing facilities for KMC.
8. Managing ambulatory KMC.
9. Educating the community to accept KMC.

Every maternal and neonatal service should have both a Kangaroo Mother Care policy and a clear set of guidelines.

44-3 WHAT IS A KANGAROO MOTHER CARE POLICY?

The KMC policy states the benefits of KMC and a commitment of the service to implement and promote KMC. It does not have to be a long and complicated document.

44-4 WHAT ARE KANGAROO MOTHER CARE GUIDELINES?

KMC guidelines explain how KMC is implemented. Formal written protocols are needed.

44-5 WHO SHOULD PROMOTE THE PRACTICE OF KANGAROO MOTHER CARE?

All members of the staff, including nurses, doctors and administrators. In order that KMC succeeds, the whole staff must support the idea. Every mother should know about KMC. The general public should also know about KMC. In particular, the infant's grandmother needs to be educated to support KMC both in hospital and at home.

<p>THE PRACTICE OF KANGAROO MOTHER CARE SHOULD BE SUPPORTED AND PROMOTED BY ALL MEMBERS OF THE STAFF</p>

44-6 HOW ARE MOTHERS EMPOWERED TO GIVE KMC?

Many mothers have never heard about KMC and are afraid to give KMC, especially to small infants. Often mothers feel that their infant will receive better care in an incubator. Therefore, the benefits, safety and method of giving KMC must be explained to the mother. Once the community learns about KMC, many mothers may ask if they can give KMC to their infants.

44-7 HOW CAN THE PUBLIC BE INFORMED ABOUT KANGAROO MOTHER CARE?

It is important that the general public knows about and understands the benefits of KMC. The media has an important role to play in promoting KMC. The following can be used to inform the public about KMC:

1. Teaching KMC at schools.
2. Showing KMC in the media, especially TV and the local newspaper.
3. Discussing the benefits of KMC in the media, especially radio and magazines.
4. Using KMC posters or video presentations in primary health care clinics.

KMC SHOULD BE PROMOTED AMONG THE GENERAL PUBLIC
44-8 WHEN SHOULD MOTHERS FIRST BE TOLD ABOUT KANGAROO MOTHER CARE?

From the start of antenatal care, KMC should be included as an important part of educating pregnant women. The best method of teaching women about KMC during the antenatal period is for them to see other mothers providing KMC for their infants.

ALL PREGNANT WOMEN SHOULD KNOW ABOUT KMC
44-9 WHAT IS A KANGAROO MOTHER CARE SUPPORT GROUP?

This is a group of mothers who have themselves given their infants KMC. They are very effective in promoting KMC and helping mother with KMC. They can give KMC education at antenatal clinics or encourage and assist mothers to give KMC in the nursery or KMC ward.

44-10 WHY SHOULD KMC BE SUPPORTED BY CLINICS?

Because they will be involved in providing follow up to mothers who still need to give KMC to their small infants after discharge from hospital.

THE METHOD OF KANGAROO MOTHER CARE
44-11 HOW DOES A MOTHER GIVE KMC?

The naked infant (only with a nappy and woolen cap) is placed between the mother's bare breasts. The infant is nursed under the mother's shirt, blouse, T-shirt or dress.

44-12 HOW IS THE INFANT KEPT IN POSITION?

It is important that the infant is kept warm and held securely. Holding the infant skin to skin against the mother will keep the infant warm. A number of methods are used to keep the infant in place:

1. Usually the mother's shirt or blouse is tucked into a belt or trousers to prevent the infant falling out.
2. Sometimes a blanket or towel can be wrapped around the mother to hold the infant firmly.
3. A special KMC top can be used but this is not essential.
4. In preterm infants it is important to make sure that the airway is never obstructed. The infant's head should be slightly extended.
5. If the mother is lying down, she and her infant should be kept at an angle of about 45° by raising the head of the hospital bed or using a large pillow or cushion at home.

KANGAROO MOTHER CARE IN THE NURSERY
44-13 WHICH INFANTS CAN BE GIVEN KANGAROO CARE IN THE NURSERY?

Most infants can be given KMC as long as they are stable with a normal skin temperature, heart rate and breathing rate. Even infants in ventilators can be given KMC provided that their condition allows.

Both infants in cots and incubators can be given KMC. KMC has the most benefit in low birth weight infants.

Where there are no incubators, every infant can be given KMC. In these circumstances, KMC can dramatically reduce the mortality of low birth weight infants.

44-14 WHEN SHOULD KANGAROO CARE BE GIVEN IN THE NURSERY?

KMC should be given every time the parents visit (intermittent KMC). The mother should be encouraged to give KMC throughout the visit. Even if the visit is short, the infant will benefit from KMC. Some mothers spend most of the day in the nursery and can give KMC for hours at a time. Usually KMC is given for a short period to start with and then the time of the KMC becomes longer as the mother becomes more confident.

44-15 WHO SHOULD TAKE THE INFANT OUT OF THE INCUBATOR FOR KANGAROO MOTHER CARE?

The mother needs to be shown how to remove the infant and how to put it back into the incubator safely. Once the mother is able to do this correctly, she can take the infant out and put it back by herself. It is important that the mother informs the nursing staff when she wants to give KMC. She must always wash her hands well before touching her infant.

44-16 SHOULD THE INFANT BE MONITORED DURING KANGAROO MOTHER CARE?

1. Infants that are not being monitored in the cot or incubator do not need to be monitored during KMC.
2. Infants who are not having apnoeic attacks, but are being routinely monitored with an apnoea monitor, can be disconnected from the monitor during KMC.
3. However, if the infant is being monitored for heart and respiratory rate or oxygen saturation, this should be continued while the infant is receiving KMC.
4. If the infant is having apnoea attacks, the infant is unstable and should either not receive KMC or be monitored during KMC.

44-17 HOW SHOULD THE INFANT BE TAKEN OUT OF THE INCUBATOR FOR KANGAROO MOTHER CARE?

It is important that the infant does not get cold. Before removing the infant, make sure that it is wearing a woolen cap and clean nappy. If an apnoea monitor is being used to routinely monitor a well infant, switch it off. Do not forget to switch the apnoea monitor back on again when the infant is placed back in the incubator. If the infant is receiving an intravenous infusion or has skin probes, be careful that they are not pulled loose.

**** If the infant is receiving positive airway pressure, be very careful that the tubing is not disconnected. With care the infant can be moved from the incubator into the KMC position without disturbing the ventilatory support.*

44-18 WHERE SHOULD THE MOTHER SIT TO GIVE KANGAROO MOTHER CARE?

It is best if the mother sits next to the cot or incubator in a comfortable chair. Once the infant is well and no longer needs ventilatory support, intravenous infusions (drips) and skin probes or electrodes, the mother may give KMC while walking about with the infant in the nursery.

44-19 WHAT SPECIAL FACILITIES ARE NEEDED IN THE NURSERY FOR KANGAROO MOTHER CARE?

No special facilities are needed. Comfortable chairs for the mother and partner are required. A refrigerator is helpful to store expressed breast milk. In a very crowded nursery, space must be created for parents to visit and give KMC.

44-20 SHOULD THE INFANT'S SKIN TEMPERATURE BE MONITORED DURING KANGAROO MOTHER CARE?

This is usually not necessary if the infant's temperature has been stable in the incubator.

44-21 WHAT FEEDS SHOULD BE GIVEN IN THE NURSERY DURING KANGAROO MOTHER CARE?

As far as possible, give the infant its mother's own milk. Exclusive breast feeding is by far the best for low birth weight infants. Some small infants will breastfeed while others will have to be fed by nasogastric tube.

EXCLUSIVE BREAST FEEDING IS BY FAR THE BEST FOR LOW BIRTH WEIGHT INFANTS**44-22 HOW CAN A MOTHER ENCOURAGE A SMALL INFANT TO BREAST FEED DURING KANGAROO MOTHER CARE?**

1. Hold the infant correctly to place the infant's mouth over her nipple (latch properly). Often the "foot ball" position is easiest.
2. Express a little milk onto the nipple before latching the infant.
3. Place the nipple into the infant's mouth even if the infant does not suckle well.
4. Put the infant to the nipple every time she gives KMC. It does not matter if the infant only sucks once or twice.

With encouragement, many small infants will take part or all of their feed from the breast. The mother should start to express her breasts from the day the infant is born.

44-23 WHAT IS A LODGING WARD?

Often mothers have difficulty visiting their infants every day as they live far away and transport is expensive and infrequent. It is very helpful if these mothers can stay in or near the hospital on a 24 hour basis so that they can give intermittent KMC to their infants in the nursery.

This facility is often called a lodging ward. However, it is not a typical ward as these mothers are well. It is one or more rooms where mothers can be given accommodation. Often the lodging ward is next to the nursery and KMC ward so that they can share facilities. The lodging ward needs to be supervised but nursing is not required.

A LODGING WARD PROVIDES A MOTHER WITH A PLACE TO STAY SO THAT SHE CAN BE NEAR HER INFANT IN THE NURSERY ON A 24 HOUR BASIS**A KANGAROO MOTHER CARE WARD****44-24 WHAT IS A KANGAROO MOTHER CARE WARD?**

This is a special room where mothers can room-in for a few days so that they can give continuous KMC to their infants both day and night. Most of these mothers are well and do not need nursing care or routine observations. Every effort must be made to make the KMC ward as homely as possible and not look like a typical hospital ward. The KMC ward should be close to the nursery if possible.

A KANGAROO CARE WARD ENABLES THE MOTHER TO GIVE HER INFANT KANGAROO MOTHER CARE ON A 24 HOUR BASIS WHILE BEING SUPERVISED BY THE STAFF**44-25 WHAT IS THE IMPORTANCE OF A KANGAROO MOTHER CARE WARD?**

It provides a very valuable step between giving intermittent KMC in the nursery and giving continuous ambulatory KMC at home.

44-26 WHAT FACILITIES ARE NEEDED IN THE KANGAROO MOTHER CARE WARD?

1. A space for the mothers to sleep.
2. A living space where the mothers can eat and relax.
3. Toilets and showers.

Cribs are not needed in a KMC ward as the infant is continuously with the mother.

Similar facilities are needed for a lodging ward. In future all neonatal nurseries should be designed with both a KMC ward and a lodging ward.

44-27 WHAT FURNITURE IS NEEDED IN THE KANGAROO MOTHER CARE WARD?

The following is recommended:

1. Basic beds. Special hospital beds are not needed.
2. Small lockers where the mothers' clothes and personal items can be safely kept.
3. Comfortable chairs where mothers can sit to breast feed and give KMC. Light plastic chairs are useful.
4. Tables and chairs for meals.

If there is not enough space for chairs, mothers will have to sit on their beds, and have there meals in another room nearby.

44-28 WHAT NURSING IS NEEDED IN THE KANGAROO MOTHER CARE WARD?

A nurse is needed to supervise the mothers in the KMC ward. However, many mothers and infants are well and do not need to be provided with routine nursing care. It is important to have a nurse who is experienced and enthusiastic about KMC. If a professional nurse is not available, a non-professional nurse can be used as the KMC ward supervisor. It is helpful but not essential to have a nurse in the KMC ward at night provided that the KMC ward is close to the nursery so that the mothers can call for help if needed. Usually a team of two or three nurses is needed to provide adequate day cover in a KMC ward.

44-29 WHAT EDUCATION OPPORTUNITIES CAN BE OFFERED IN A KANGAROO MOTHER CARE WARD?

The mother's stay in a KMC ward provides an ideal opportunity for education. It is important that the nurse in the KMC ward is able to provide education, not only about giving KMC but also about other aspects of health. Topics, which should be taught in the KMC ward, include:

1. How to give KMC correctly and provide exclusive breast feeding.
2. How to give ambulatory KMC after discharge.
3. The importance of regular attendance at the follow up clinic.
4. A healthy diet and lifestyle for the mother.
5. The importance of immunizations for the infant.
6. How to avoid infection with HIV.
7. Family planning.

44-30 WHEN SHOULD MOTHERS AND INFANTS BE DISCHARGED FROM A KANGAROO MOTHER CARE WARD?

When the mother is able and confident to care for her infant at home. The weight and gestational age of the infant are less important. Usually the infant is discharged from the KMC ward when a weight of 1800 g has been reached. However, some infants can be discharged earlier.

The following criteria should be met before the mother and infant are discharged from the KMC ward:

1. The mother must be able to provide KMC correctly and should be confident to look after her infant. Usually the infant is fully breast fed.
2. The infant and mother should be clinically healthy.
3. Arrangements must be made for regular follow up at a clinic.

44-31 HOW EXPENSIVE IS A KANGAROO MOTHER CARE WARD?

Some funding is needed to establish a KMC ward. Thereafter, there is a small cost to the hospital for running a KMC ward, as the mothers need food and bedding. Mothers should be encouraged to bring their own food and bedding. The KMC ward has to be cleaned and staff are needed to supervise the mothers. However, there is a great financial saving because:

1. The mothers provide all the care for their infants.
2. Formula is not needed, as the infants are being breast fed.
3. The infants are discharged home earlier from the nursery.
4. There is also less infection in the nursery.

A KANGAROO CARE MOTHER WARD MAKES A GREAT FINANCIAL SAVING FOR THE HOSPITAL

44-32 HOW CAN FUNDING BE OBTAINED FOR A KMC WARD?

Many hospitals have obtained funding for their KMC ward from private institutions and service organisations.

AMBULATORY KANGAROO MOTHER CARE

44-33 WHAT IS AMBULATORY KANGAROO MOTHER CARE?

The word ambulatory means to "walk around". Ambulatory KMC refers to the KMC, which is given in the KMC ward and especially after the infant has been discharged from the hospital or clinic. Ambulatory KMC can be given once the infant has been discharged from the nursery. These mothers give KMC throughout the day. They can give KMC while walking around in or near their homes. Many low birth weight infants need KMC for days or weeks after they are discharged home.

AMBULATORY KANGAROO MOTHER CARE IS GIVEN WHEN THE MOTHER AND INFANT ARE BOTH WELL AND THE MOTHER IS ABLE TO WALK AROUND WITH HER INFANT.

44-34 WHICH INFANTS WOULD BENEFIT FROM AMBULATORY KANGAROO MOTHER CARE?

Infants that weigh less than 2000 g would benefit greatly from KMC. Some infants between 2000 g and 2500 g would also benefit from KMC, especially when it is cold.

LOW BIRTH WEIGHT INFANTS CAN BENEFIT FROM AMBULATORY KANGAROO MOTHER CARE AFTER DISCHARGE FROM HOSPITAL

44-35 WHEN SHOULD A MOTHER GIVE AMBULATORY KANGAROO MOTHER CARE?

It is best to give ambulatory KMC all the time. It can be given while the mother performs most household duties. When she is not able to give ambulatory KMC, it should be given by another responsible member of the household.

44-36 HOW SHOULD YOU MONITOR INFANTS RECEIVING AMBULATORY KANGAROO MOTHER CARE?

These infants should be seen regularly at the hospital or local clinic. The infant's weight must be measured to ensure that the infant is receiving adequate feeds and gaining weight. The clinic visit gives an opportunity to discuss KMC with the mother. Any problems can be identified and corrected.

44-37 HOW OFTEN SHOULD INFANTS ON AMBULATORY CARE COME FOR A CHECK UP?

The smaller the infant, the more often it should visit a clinic. Below 1500 g, daily checkups are needed. From 1500 g and above, three to four visits a week until 1800 g. Thereafter, weekly visits until the infant reaches 2500 g. These recommendations should be seen only as a guide, and will depend on the mother, on her family and support systems, on distances and ease of access to the clinic, and on how the infant is growing.

44-38 WHEN CAN AMBULATORY KANGAROO MOTHER CARE BE STOPPED?

Infants usually decide for themselves when KMC can be stopped. They become hot and restless and try to climb out of the mother's dress. By 2500 g, most infants no longer need KMC. However, although an infant no longer needs "skin-to-skin contact", it still needs the mother's presence and her breast feeding. Keeping the infant on the mother's back or a sling is recommended.

KANGAROO MOTHER CARE FOR TRANSPORT**44-39 CAN KANGAROO MOTHER CARE BE USED TO TRANSPORT INFANTS?**

Yes. Many stable newborn infants can be safely transported with KMC. This is a cheap and very effective method, as a transport incubator is not needed. If the infant is sick or unstable, it is still safer to use a transport incubator.

**** The use of KMC during transport has not been fully researched. If a sick infant needs to be transferred urgently, and a transport incubator is not available, the use of KMC by trained staff who can monitor the infant and give oxygen or even ventilation may be preferable to a long wait.*

It is unacceptable for a small infant to arrive cold at a hospital because a transport incubator was not available when KMC could have been used.

44-40 HOW IS KANGAROO MOTHER CARE GIVEN DURING TRANSPORT?

Usually the mother gives KMC. However, a nurse or member of the transport staff can also give KMC if the mother is not well enough or is not moved with the infant. Even the father or grandmother could provide KMC during transport. Every effort must be made to keep the mother and infant together. Some KMC training is needed by the transport staff.

44-41 WHAT ARE THE ADVANTAGES OF USING KANGAROO MOTHER CARE FOR TRANSPORT?

Delays are avoided, as there is no need to wait for a transport incubator. This is particularly important when moving low birth weight infants to a level II or III hospital. It is also very useful when moving well low birth weight infants back to the referral hospital. This avoids many of the problems arranging transport.

44-42 WHAT STAFF ARE NEEDED TO SUPERVISE KANGAROO MOTHER CARE DURING TRANSPORT?

KMC is usually given by the mother when transporting infants. She needs to be supervised by a member of the ambulance staff or an accompanying nurse. Usually the ambulance staff alone are able to supervise KMC during transport.

44-43 CAN KANGAROO CARE BE SAFELY USED IN A PRIVATE CAR?

Yes. It is best if the mother sits in the back seat and wears a seat belt. Only the hip belt should be used. The seat belt should not be placed over the infant but between herself and the infant. The infant can be tied to the mother's chest with a towel. Make sure that the infant's airway is open.

CASE PROBLEMS

CASE 1

A mother attending antenatal care says that she has read about KMC in a magazine and wants to know how this is done. The clinic staff is unable to help her as they have no experience of KMC.

1. Who should be able to advise her about KMC?

All the staff members at the clinic should know about KMC. The staff who care for her at the antenatal clinic must give her the information that she needs. Giving information on KMC is an important part of antenatal care. Videos are a very useful way of teaching pregnant women about KMC.

2. How can the public be informed about KMC?

Through the schools, radio and TV, newspapers and magazines, and health care facilities.

3. Which family member often influences a woman's decision to use KMC or not?

The grandmother. The whole family should support a mother giving KMC.

4. When should a pregnant woman first be told about KMC?

At the start of her pregnancy as soon as she books for antenatal care. There is a chance for every pregnant woman that she might deliver preterm and need to give KMC.

CASE 2

The mother of a 1500 g newborn infant visits the nursery. Her infant appears healthy and is being nursed in an incubator. The nursery staff ask the mother whether she is willing to give KMC during the times that she visits her infant.

1. Is this infant not too small to be given KMC?

No. Most small infants can be given KMC, especially if they are healthy and stable.

2. For how long should the mother give KMC during her visits?

For the whole of the time that she visits her infant. The more time she spends giving KMC the better.

3. Could her partner also give KMC?

It is important to encourage bonding between the infant and both parents. Therefore, the father should also have an opportunity to give KMC. This will also help him understand and support the mother when she gives KMC.

4. What special facilities are needed to give KMC in the nursery?

All that is needed is a comfortable chair. It is best if the mother is able to give KMC beside the incubator.

CASE 3

The matron of a maternity hospital calls a meeting of her staff. She is keen to start a KMC ward as the well baby nursery is grossly overcrowded. She asks how KMC can be given by mothers already living at the hospital to be near their infants. She also needs to know what equipment will be required and whether this will be very expensive.

1. Will a KMC ward help to solve the problem in this nursery?

Overcrowding is a very common problem in hospital nurseries. The overcrowding, with the resultant stress on the staff and high rate of infection, will be greatly improved if a KMC ward is started.

2. What space will be needed for a KMC ward?

A space for the mothers to sleep, a living area where they can eat and relax, and toilets and showers.

3. Will a special area have to be built for a KMC ward?

A room will be needed where mothers and their infants can stay together. One of the rooms previously used for mothers of infants in the nursery could probably be converted into a KMC ward.

4. What furnishing are required?

Simple beds, comfortable chairs, lockers for clothes, and tables and chair for meals.

4. What nurses will be needed for the KMC ward?

An experienced and enthusiastic nurse will be needed to supervise the mothers. Staffing is far less than that required in a well baby nursery.

5. Will establishing a KMC ward not be very expensive?

Some funding will be required to start the KMC ward. Thereafter, the savings to the hospital will be greater than the running costs.

CASE 4

The young mother of low birth weight infant gave intermittent KMC while visiting her infant in the nursery. Later she stayed with her infant for 5 days in a KMC ward. At discharge the infant was healthy, breast feeding well and gaining weight. The infant's discharge weight was 1750 g. On the day after discharge she was asked to attend the local well baby clinic.

1. Is it wise to discharge an infant with such a low weight?

It is safe to discharge this infant provided that it is healthy, feeding well, gaining weight and receiving KMC.

2. How often should the infant receive KMC at home?

All the time, both day and night. Someone else reliable can give KMC if the mother needs a break.

3. When should the infant be taken to the clinic?

On the day after discharge and then three or four times a week until a weight of 1800 g is reached. Thereafter, weekly visits are usually adequate.

4. When can ambulatory KMC be stopped?

When the infant reaches 2500 g.

CASE 5

A mother is transferred to a level II hospital on the day after delivery for investigation of a heart murmur noted during labour. Her well 1700 g infant is not moved with her as the transport incubator is broken. She is very upset about being separated from her newborn infant.

1. What is incorrect about the management of this mother and infant?

They should not have been separated. The infant should have been moved with the mother.

2. How could the infant have been kept warm during transport?

The mother could have given KMC.

3. What could have been done if the mother was very ill?

A nurse or ambulance driver or her partner or the grandmother could have given KMC.

TEST 44

Please choose the one, most correct answer to each question or statement.

- 1. What is a kangaroo mother care policy?**
 - a. An exam that enables nurses to be registered as KMC specialists.
 - b. Hospital regulations which force all mothers to give KMC.
 - c. An agreement which promotes KMC in a hospital.
 - d. Guidelines which explain how KMC should be practiced.

- 2. Which women should know about kangaroo mother care?**
 - a. All pregnant women.
 - b. Only women who are at high risk of delivering a preterm infant.
 - c. Only women who are booked to deliver in hospital.
 - d. Only primigravid women.

- 3. Who often has the most influence on a woman who is deciding whether or not to give kangaroo care at home?**
 - a. The paediatrician in charge of the nursery.
 - b. The nurse at the local clinic.
 - c. Her own mother.
 - d. Her neighbours.

- 4. When should mothers first be told about kangaroo mother care?**
 - a. From the start of antenatal care.
 - b. From 28 weeks when the fetus is viable.
 - c. During the last month of pregnancy.
 - d. As soon as the infant is born.

- 5. What is a kangaroo mother care support group?**
 - a. Specially trained nurses who help mothers give KMC.
 - b. Social workers who support mothers giving KMC at home.
 - c. A group of mothers who have themselves given KMC and are willing to help other mothers.
 - d. A community group who raise funds to build KMC wards in hospitals.

- 6. How should the infant be kept in position during kangaroo mother care?**
 - a. A special garment is needed.
 - b. A blanket is used to keep the infant on the mother's back.
 - c. Usually the mother's shirt or blouse is tucked into a belt or trousers.
 - d. By raising the head of the bed.

- 7. Who should take the infant out of the incubator for kangaroo mother care?**
 - a. Only the doctor.
 - b. The nurse.
 - c. Either the doctor or the nurse.
 - d. The mother.

8. How should the infant be monitored during kangaroo mother care?

- a. With an apnoea alarm.
- b. A nurse must observe the infant while the mother is giving KMC.
- c. Usually no monitoring is needed.
- d. the infant's temperature, breathing and heart rate must be recorded every 30 minutes.

9. Which infants should not be given kangaroo mother care?

- a. Infants in incubators.
- b. Infants who are having recurrent apnoea.
- c. Infants who are not breast feeding yet.
- d. Infants who weight less than 1250 g.

10. What special facilities are needed to give kangaroo mother care in the nursery?

- a. An overhead radiant heater.
- b. A comfortable chair.
- c. A special side ward which is kept warm.
- d. A bed.

11. What feeds are usually given to low birth weight infants during kangaroo mother care?

- a. Breast milk.
- b. Clear feeds only (water or 5% dextrose).
- c. Soya formula.
- d. Preterm formula.

12. What is a lodging ward?

- a. A ward where mothers can stay during the last weeks of pregnancy.
- b. A post natal ward.
- c. A ward where mothers can stay to be near to their infants who are still in the nursery.
- d. A ward where mothers and infants can stay together.

13. What is a kangaroo care award?

- a. A special side room where mothers can give KMC while visiting their infants in the nursery.
- b. A ward where mothers and infants can stay together day and night.
- c. A nursery where infants in incubators can be given KMC.
- d. An antenatal ward where mothers are taught about KMC.

14. What facilities are needed for a kangaroo care ward?

- a. Incubators and chairs.
- b. Beds for the mothers and incubators for the infants.
- c. Beds for the mothers and cots for the infants.
- d. Beds for the mothers.

15. What staff are needed for a kangaroo care ward?

- a. Nurses to observe and help feed the infants.
- b. A nurse to supervise the mothers.
- c. A doctor and nurses treat clinical problems.
- d. No staff are needed as the mothers can care from themselves and their infants.

- 16. When can an infant be discharged home for kangaroo mother care?**
- a. When the infants weight reaches is 2000 g.
 - b. When the weight is 1800 g.
 - c. When the infant is gaining weight.
 - d. When the infant is feeding well, the mother is confident and follow up arrangement are made.
- 17. How expensive is it to run a kangaroo care ward?**
- a. Expensive as the staff salaries have to be paid and the equipment has to be bought.
 - b. Expensive as the mothers have to be fed.
 - c. Cheap as staff are not needed and the mothers go home at night.
 - d. Much cheaper than keeping infants in the nursery.
- 18. What is ambulatory kangaroo mother care?**
- a. KMC that is given in the intensive care unit.
 - b. KMC that is given in an ambulance.
 - c. KMC that is given while the mother walks around, especially at home.
 - d. KMC that is given by the nursing staff.
- 19. How often should infants receiveing kangaroo mother care at home be brought to the clinic for a check up?**
- a. Twice a day for the first week.
 - b. It depends on the infant's weight.
 - c. Once a week until the infant is 1800 g.
 - d. Only when the first immunizations should be given.
- 20. Who can give kangaroo mother care during transport in an ambulance?**
- a. Only the ambulance personnel as they have ben specially trained.
 - b. Only a nurse.
 - c. The mother.
 - d. Kangaroo care should not be used in an ambulance.

ANSWER SHEET FOR PRETEST 44

Date: .../.../...

Name:

Student Number:

Please circle the one most correct answer to each question or statement:

1. a b. c. d.
2. a b. c. d.
3. a b. c. d.
4. a b. c. d.
5. a b. c. d.
6. a b. c. d.
7. a b. c. d.
8. a b. c. d.
9. a b. c. d.
10. a b. c. d.
11. a b. c. d.
12. a b. c. d.
13. a b. c. d.
14. a b. c. d.
15. a b. c. d.
16. a b. c. d.
17. a b. c. d.
18. a b. c. d.
19. a b. c. d.
20. a b. c. d.

ANSWER SHEET FOR POST TEST 44

Date: .../.../...

Name:

Student Number:

Please circle the one most correct answer to each question or statement:

1. a b. c. d.
2. a b. c. d.
3. a b. c. d.
4. a b. c. d.
5. a b. c. d.
6. a b. c. d.
7. a b. c. d.
8. a b. c. d.
9. a b. c. d.
10. a b. c. d.
11. a b. c. d.
12. a b. c. d.
13. a b. c. d.
14. a b. c. d.
15. a b. c. d.
16. a b. c. d.
17. a b. c. d.
18. a b. c. d.
19. a b. c. d.
20. a b. c. d.

CORRECT ANSWERS TO TEST 44

The sections indicate from which part of the unit the questions were taken. For each question that was answered incorrectly, please re-learn the corresponding section.

QUESTION	CORRECT ANSWER	SECTION
1	c	44 - 3
2	a	44 - 5
3	c	44 - 5
4	a	44 - 8
5	c	44 - 9
6	c	44 - 12
7	d	44 - 15
8	c	44 - 16
9	b	44 - 16
10	b	44 - 19
11	a	44 - 21
12	c	44 - 23
13	b	44 - 24
14	d	44 - 27
15	b	44 - 28
16	d	44 - 30
17	d	44 - 31
18	c	44 - 33
19	b	44 - 37
20	c	44 - 40