## KANGAROO MOTHER CARE IS GOOD NEWS!

by Dr. Nils Bergman For more information, go to www.kangaroomothercare.com

Mothering today has become a daunting task. There is a huge amount of information out there on all aspects of birth, pregnancy, breastfeeding, and mothering. There is always the latest fashion on birth technique or on child rearing, and the fashion changes regularly. Whatever you do, someone will tell you to do it some other way. Kangaroo Mother Care (KMC) restores to mothers their true ownership of their newborns, and it restores to newborns their birth right – their right to the best start in life! Kangaroo Mother Care is good news!

Kangaroo Mother Care works like magic, because it is based on basic biological principles. There are several of these principles, and they all fit together. Describing them does not need any special order, but I trust the following is clear.

Firstly, mothers have within their hindbrains a program of behavior, which will ensure the well-being of their newborn babies. You might like to call this "instinct" or "intuition." Modern science tends to use these words disparagingly. That is a mistake. Mothers, if left to their own hearts, will almost invariably do the right thing for their newborns. This doing the right thing should not be dismissed it should be recognized and encouraged.

Secondly, newborn babies are fully developed newborns when they are born. They are not fully developed adults, or even toddlers, obviously. But as newborns, they are fully developed, and their behavior is appropriate for that stage of their lives. The stage of development is there to ensure their own well being and good health. To us as adults, they seem helpless, they seem fragile and in need of medical care, but that is mainly because we have made them helpless.

This is because ... thirdly ... the fully developed behavior that newborns have when they are born is completely dependent on them being in the right place. The right place for a newborn is with mother, on mother's chest to be more precise. In this place, every single undrugged and undisturbed newborn will make sure that it has the best start to life. It will kick and crawl to the nipple all on its own. It will latch on and suckle. In doing so, it will impress and endear itself forever on mother, who will make sure it gets the best love and care thereafter. I like to call this bonding.

The fourth principle – and remember they are not in any particular order – is that the basic instinct a mother has for a newborn is to hold her baby. There is nothing else a mother must do or needs to do or ought to do. Just HOLD. And, when held, baby will breastfeed. Here-in lies a great secret. You will read volumes on how you should breastfeed your baby. Read carefully, you must not breastfeed your baby. You must hold your baby, and your baby will breastfeed. Your baby knows how to do this. Even if born prematurely at 28 weeks, babies are born knowing how to breastfeed. And, mothers giving birth know how to hold their babies to their hearts (where, as chance will have it, there is a breast nearby!)

A fifth point: this ability the baby has is a fragile thing. It can easily be disturbed. Drugs during labor will sabotage baby's capability. But the very worst thing, the COMPLETE DISASTER, for a newborn baby, is to be separated from mother at birth. There is nothing worse. Not only is the behavior to start breastfeeding prevented, but a completely different behavior comes from the newborn's brain. The brain recognizes that a potentially deadly thing has happened: if the source of life is not restored, the newborn believes it will die. Therefore, it cries. This crying is designed to melt mother's heart, and get her running back to hold her baby. But, if mother does not come back, the baby's body runs out of energy to cry any more, and the baby's brain says, "now I am near death's door." Huge amounts of stress hormones are released that slow down the heart rate and lower the temperature. The baby does this to conserve energy for prolonged survival, hoping against hope that mother will come back to hold baby. When this kind of separation is prolonged and repeated, permanent harm and injury follow. Separation makes baby helpless!

From a technical point of view, KMC has some components which are helpful to understand.

Kangaroo position is "maternal-infant skin-to-skin contact." This should start at birth and be continuous until such a time as baby decides it is ready to move on!

Kangaroo nutrition is "exclusive breastfeeding," and is the baby's right and choice. With the kangaroo position, this is easy for mothers: remembering that baby breastfeeds! If there is frequent and prolonged separation, feeding baby can be sheer torture and hell.

Kangaroo support lastly, means just that. We should provide every kind of support to ensure that mothers and newborn babies are NEVER SEPARATED.

This applies to every single baby. Should the baby be premature, this is even more important, not less important. In this situation, we can add whatever technology we have to support the mother and baby, but we ADD them, which means "NEVER SEPARATE." What KMC does for the full term baby is actually to continue the pregnancy, in a kind of way. The mother's chest is designed to do this. If the baby is premature, continuing the pregnancy is even more important, obviously. Mother and newborn should be regarded as a single unit - I like to use the term "dyad" to express this.

This single unit – the mother-infant dyad – confers amazing and positive effects on the baby. Firstly, on the mother's chest, the baby's temperature is perfectly controlled, far better than the most modern incubator. In fact, even in a warm incubator, a separated baby has a one degree Celsius lower temperature than a KMC baby, the effect of separation stress. Another amazing feature is called "thermal synchrony." If the baby is cold when starting kangaroo position, the mother's body temperature will spontaneously increase within a few minutes by two degrees Celsius, to warm her baby. And the opposite is also true, a mother's core temperature will fall by one degree to cool an overheated baby. The end result is a stable temperature for the baby.

Similar findings are found with the heart rate and the breathing rate. In an incubator, these are erratic and variable from moment to moment. In KMC, they stabilize immediately, and the end result is a slight increase in oxygen saturation. Premature babies in incubators have a breathing pattern called "periodic breathing," which the textbooks describe as normal for their development, and due to the immature brain. This breathing pattern disappears as soon as an incubator baby is placed in skin-to-skin contact. From KMC, we now know that the periodic breathing is, in fact, caused by high levels of stress hormones following separation.

The skin-to-skin contact provided by KMC actively stimulates the baby's "vagal system." This is the nervous system to the stomach and all the automatic metabolic functions of the body. The result is that premature babies on KMC grow at a significantly faster rate, even with the same amount of food given to an incubator baby. For premature infants, this vagal stimulation is important, as it causes the lung to produce "surfactant," which otherwise might need to be provided at huge cost. Another vital system that is stimulated is the immune system: babies receiving skin-to-skin contact in the first few days of life will have far fewer infections during the next twelve months, and even longer. These are just a few of the effects on the baby!

On mother, there are equally important effects. Mothers bond wonderfully with their babies, and they become empowered to care for them. Mother's supply of milk is greatly increased, and her ability to breastfeed is extended for many months. With ongoing regular breastfeeding, cholecystokinin is released in the mother, which acts as a sedative, preventing tiredness and exhaustion. Skin-to-skin contact also stimulates the mother's vagal system. Her immune system and her recovery from labor and pregnancy are speeded up.

On hospitals, the effects are sometimes even more dramatic. Staff morale often improves greatly. KMC produces huge cost savings, from a number of factors. First, babies grow faster, and therefore have a shorter hospital stay. Second, they have far fewer complications, and far fewer long term sequelae, so cost of care is hugely reduced.

The separation that is standard practice in our Western culture is generally well-intentioned, but, nevertheless, the worst thing to do. There will occasionally be sick newborns who need resuscitation and intensive care, but this can be provided with mother present and even with baby on mothers chest! But in the normal course of events, it is simply bad medical practice to unnecessarily separate mothers and newborns.

There is a lot of good science and solid research behind this statement, enough to fill a book. But it is not too important for a mother to know WHY this works. In her heart, every mother knows this is true, and that it does work.

Kangaroo Mother Care is good news. It represents a rediscovery of basic natural birth processes, and restores to mothers and babies the best start to life. "Never separate mother and newborn!"

Dr. Nils Bergman lives in Capetown, South Africa, with his wife and three children. He is Medical Superintendent of the Mowbray Maternity Hospital and five Midwife Obstetric Units. He developed and implemented Kangaroo Mother Care with midwife, Agneta Jurisoo, for premature infants. This resulted in a 500% improvement in survival of Very Low Birth Weight babies. KMC is now the official policy of care of prematures in the hospitals of the Western Cape province. Dr. Bergman has developed two videos to explain KMC. The first is "Kangaroo Mother Care II - Restoring the Original Paradigm for Infant Care and Breastfeeding" This video explains why KMC works. The second, shorter video "Kangaroo Mother Care – Rediscover the Natural Way to Care for Your Newborn Baby" summarizes the principles of KMC, and shows mothers and health workers HOW to do it. This is especially important for premature babies, where there are some important practical details.