

"The Kangaroo Mother Program at Uong Bi Hospital, Vietnam".

Dr. Nga Nguyen

A. The development of Kangaroo Mother Program

The Kangaroo method had applied in pediatric department at Uong Bi Hospital, since 1985

It was one appropriate method and has been very useful for treatment and care of low birth weight infants. Sometime it has also applied for other new- borns, especially hypotemperature babies.

In 1996 we had studied KMP from Bogota. It is complete benefit program for both infant and mother. Therefore we had applied KMP at Uong Bi hospital. With a lot of helps, especially Infants ET Development Organization in France, PMC ISS_ - Wordlaboratory, Kangaroo Foundation, Santafé de Bogotá, Colombia. Kangaroo unit was built since April2, 1997 and The KMP have conducted in Uong Bo Hospital, Vietnam.

Place of Kangaroo Unit:

Kangaroo unit placed inside hospital, but separated with the in-patient buildings. It is near the gate of hospital so it is quite favourable for the mothers and infants coming for follow-up of health. It is a small hose with 3 main rooms. Two rooms for Kangaroo mother-child pairs and one room for the examination.

Staffs of Kangaroo Unit:

There are staffs: 2 pediatrician, 3 nurses, but we have to work both in pediatric department and Kangaroo unit.

The main activities of Kangaroo Mother Program

- 1. Early applies to Kangaroo method in Neonatal Unit.***
- 2. To treat and care of LBW infants at Kangaroo unit.***
- 3. To follow up the health of LBW infants until 1-2-3 years old***

B. The Activities of KMP

1. Early applying Kangaroo Mother Program in Neonatal Unit

Integration of Kangaroo method in neonatal unit as soon as possible for low birth weight infants and Hypotemperature infants.

Eligibility criteria for Kangaroo infants at Kangaroo unit.

- Weight < 2000 gr.***
- To have overcome any concomitant pathology.***
- To weight had gained 15 – 20 gr. Per day.***
- To have complete Clinical record.***
- To have parents (Either mother or father) able to deal with Kangaroo Rules.***

- *To have written acceptance of the Kangaroo method from the parents.*

Discharge criteria of Kangaroo Unit

- *Able to feed by suction.*
- *To have an appropriate sucking – swallowing co-ordination.*
- *The weight gains 15 g/kg/day.*
- *The mother can continue to care of infants with Kangaroo rules at home.*

The rules of medical follow-up

1. Frequency of the consults:

1.1 During in-patient of Kangaroo unit:

The LBW infants: to be examined and nurses every day.

The mothers: to be trained on Kangaroo position, breast feeding, avoiding infection for infant and hygiene for both mother and her child.....

2. After discharge from Kangaroo unit:

Weekly: Until the infant reaches 40-41 gestation week.

Monthly: Up to 3 months corrected age.

Every two months: Until 12 months of corrected age.

Every three months: Until 24 months of corrected age.

2. Consultation's objectives:

Observation of child's weight evolution, length and head circumference.

Check on vaccination and immunization.

Early detection of any problems, which require the helps: acute respiratory infection, diarrhea, anaemia; malnutrición... or particularly problems needing physiotherapy or ophthalmology.

Discussion with the mother about how to continue to take care of her child on their situation: breast feeding; other foods; drugs; continuing of relation-ship between mother and child....

Encourage the mothers talking to each other on taking care of their infants at home.

B. The Implementation of KMP

1. Early applying KMP in neonatal ward

- *Start Kangaroo method the infants as soon as possible, specially premature/ LBW infants or hypotemperature infants.*

- Star to request the mother or father to involve into KMP.

3. Treatment and care of LBW infants in Kangaroo unit

The infants entering Kangaroo unit:

- Average age: 7.4 days. There are 17 infants coming in the first day. It is good for reducing the cross-infection.
- Average gestation age of infants: 34 weeks 3 days.
- Weight: 1670gr.
- Sex: The boy is 79 (59.0 %) and the girl is 55/134 (41.0 %).
- Kangaroo position: most of time
- Breast feeding: 100 %. The weaning time is 12 months.

Mother's involvement in KMP:

- In neonatal unit: mother (85 %), father (5 %), grandmother and relatives (10 %)
- In kangaroo unit: mother 100 %.
- At home: mother 100 %.
- Breast-feeding: 100 %. After 3 moths there is only one mother given formular milk because she have heart failure to be treated in the hospital.

The mother always has some one to help her to take care of the child at home:

- The father: 48/134 (35.6 %).
- The grandmothers: 72/134 (54.1 %).
- Relatives: 14/134 (10.4 %).

The mother situation is still difficult in some areas:

There are 62/134 (46.3 %) mothers who are farmers, living far away from hospital. (Table 3).

3. Medical follow- up

- Examination and immunization for the Kangaroo infants.
- Discuss and help the mother to continue the rules of KMP (Kangaroo Position & Breast Feeding).
- Try to attract the fathers, grandmothers involving the KMP.
- Try to help the poor mothers as much as we can.

- Special examination – INFANIB: we haven't done yet.

1. Training Kangaroo method/ KMP

Training or introducing the Kangaroo method and KMP to the hospital managers, doctors, nurses... who came to study in Uong BI Hospital.

Table 1: The general information of Kangaroo infants in Kangaroo unit:

Sex Total

Boy Girl NO %

Total 79 (59.%) 55 (41 %) 134

Address

UONG BI Town 21 21 42 31.3

DONG TRIEY district 13 13 26 19.4

YEN HUNG district 9 11 20 14.9

H.BO district 7 2 9 6.7

HALONG 12 7 19 14.2

CAM PHA town 14 1 15 11.2

Other district in QN 2 0 2 1.5

Other Province 1 0 1 0.7

Transfer place of the LBW infants

UB hospital & CHS 49 43 92 38.7

Province Hospital 30 12 42 31.3

Table 2: Comporting the weight with other information of Kangaroo infants.

Birth weight group

100-1499gr 1500-1999gr >2000gr No %

Total 28 87 19 134

1. Sex

Boy 17 49 13 79 59.0

Girl 11 38 6 55 41.0

2. Address

UB,DT,YH district 18 58 12 88 65.7 Others districts 10 29 7 46 34.3

3. Gestational age (weeks)

29-30 2 1 0 3 2.2

31-32 12 12 1 25 18.7

33-34 10 31 7 48 3.0

35-36 3 30 9 42 31.3

37-43 1 13 2 16 11.8

4. Place of transperance

UB and CHS 12 63 17 92 68.7

Other districts 16 24 2 42 31.3

5. Nutrition method

Suction 4 16 7 41 30.6

Breast milk by tube 15 23 3 27 20.1

Suction + tube 9 48 9 66 49.3

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Table 3: The Kangaroo mother situation.

Birth weight group Total

<1500gr 1500-2000gr >2000 No %

Total 28 87 19 134

1. Age**<20 5 9 2 16 11.9****21-25 13 44 11 68 50.7****26-30 7 17 2 26 19.4****31-35 1 8 3 12 9.0****>35 2 9 1 12 9.0****2. Education level****Illiterate 1 0 0 1 0.8****Primary school 12 28 10 50 37.6****Secondary School 5 26 4 35 26.3****High School 9 31 4 44 33.1****University 1 1 0 2 1.5****3. Occupation****None 8 8 1 17 12.7****Farmer 11 43 8 62 46.3****Worker 3 16 7 26 19.4****Other occupation 6 20 3 29 21.6****4. Number of children****First child 15 43 8 62 46.3****Second child 12 38 10 60 44.8****Third child 1 6 0 7 5.2****5. Antenatal care****None 0 6 0 0 4.5****One time 3 8 1 12 9.0****Two times 15 34 6 55 41.0****Three times 9 30 10 49 36.6****>Tree times 1 9 2 12 9.0****6. Tetanus vaccine****None 1 14 2 17 12.7****One time 6 12 2 20 14.9****Two times 21 61 15 97 72.4****7. Economy situation****Hungry 0 2 0 2 1.5**

Poor 8 25 8 41 30.6

Average 20 60 11 91 67.9

Rich 0 0 0 0 0

8. Married status

None 0 5 0 5 3.7

Married 28 82 19 129 96.3

B. The Comment

1. Advantage

- The hospital leaders had understood and supported a lot for the KMP. For example: giving the hospital guess house for Kangaroo unit, to buy the refrigerator, beds, tables, chairs for mothers and staffs...
- The Kangaroo staffs (1 doctor and 1 nurse) had trained on The KMP in Colombia.
- There of five Kangaroo staffs are the members of Research Center of Child Psychology (NT of Nguyen Khac Vien). Therefore we always apply the psychological knowledge for KMP.
- We had organized two training courses for all the doctors, midwives, nurses of pediatric department and obstetric department:

* The Kangaroo Mother Program (January, 1997)

* The counseling on breast feeding (February, 1998)

- Establishing the Kangaroo unit (a little Kangaroo house): April 2, 1997.
- Having the supports from Infants ET Development Organization in France, Programa Madre Canguro ISS- World Laboratory, Fundación Canguro, Santafé de Bogotá, Colombia. For example: training, the doctor and nurse in Colombia; giving the drugs electric scale, computer for KMP at Uong Bi hospital.
- The mothers in our area have very good practice on breast-feeding and they don't be influence very much from formula milks.
- The hospital staffs in general and Kangaroo staffs are always supporting for KMP.

2. Disadvantage

2.1. Lack of information and communication

About KMP in health care system from Ministry of health. Therefore there are only two hospitals in Viet Nam (Uong Bi and TU DU) have been conducting KMP. It seems almost the community health staffs do not know about Kangaroo method, so the newborn babies are often sent to hospital with more severe status and hypotemperature.

2.2. The perception of the people:

* The premature or low birth weight infants have high mortality.

* They can survive if they are treated in incubator.

* They often think that try to keep health for mothers after delivery, so they

Often send the baby alone to hospital. Therefore number of mother involve

KMP is less in neonatal ward than in Kangaroo unit.

* The people do not know about Kangaroo method, so they don't believe very

Much on the result.

2.3. The Mother:

- Have the same general perception

Most of them are young, having the first child, low education level, living far from hospital... Difficult in early applying KMP in neonatal ward or coming back to follow-up the health...

- The mothers are farmers or very poor have very difficulties in living and follow up the KMP.

2.4. The weather:

- Is not is summer (30-35 degree) then the mothers are sweating more than so they keep the infant in Kangaroo position not as much time in winter.
- It is cold and high humidity so the infant often have hypotemperature.

2.5. The staff of KMP:

- Have to work both in neonatal ward and Kangaroo unit. We have to care3 about cross-infection to the infants.
- There is no neurologist, physiologist so we haven't examined the INFANIB yet for Kangaroo infant.
- We haven't done home visit for Kangaroo mothers who have drop- out.

2.6. Lack of some drugs, vaccines, and equipments:

2.7. Administration:

The KMP is belong to pediatric department, and we don't have any budget, so some time it is difficult to help the mother.

E. Conclusion:

The KMP is a science appropriate program for children and it has great human emotion. It needs to be concerned from deference branches and social organization associations in the country and in the world.

It needs to organize the Kangaroo Foundation in Viet Nam, then this Foundation can expand the KMP for the country.