**Application of KMC in Sweden**

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Aim: To describe the application of KMC in Sweden from different aspects.

Method and sample: A questionnaire specially developed for this purpose was sent by mail to all Swedish hospitals where neonatal care (intensive and intermediate) is provided (n=43). Responses were obtained from 21 units.

Results:

*Level of care and admissions:* Thirteen hospitals provided intensive care and six hospitals provided intermediate care (two hospitals did not respond). The latest number of annual admission was reported by 11 h hospitals and ranged from 224 to 629 infants.

*Staffing:* The number of physicians/unit ranged from 2 to 25, nurses from 14 to 61. Among them 303 had specialist education in pediatric nursing and 10 in neonatal intensive care. Seventeen were midwives. The majority were practical nurses/children’s nurses (n=939). Several other professionals were also working in the units: 21 dieticians, 20 physiotherapists, 5 biomedical technicians, 3 occupational therapists, and 16 speech therapists. In 16 units a social worker assisted families. In 10 units, both families and staff had access to support by a psychologist. Twelve units had staff serving as lactation consultants. Ten units reported support by a clergyman, and four units by parents of NICU graduates.

As staff attitudes to KMC depend both on knowledge and experience, one possible explanation related to the predominance of practical nurses in the staff, can be lack of knowledge of benefits with KMC found in extensive research. Lack of practical training of new staff members may also explain the situation.

*Facilities: Nurseries:* Single care rooms (nurseries) were most common, and were found in 18 units. Fifteen units had double rooms. Two units had nurseries with two beds, and six units had open bay nurseries with 4 beds. *Parent rooms.* Eight units offered parents single rooms, and 14 had double rooms. In the majority of the units (n=13) parents could provide their babies’ care in their own room/same room as the baby. Seven units offered parents a room close to the unit, or at some distance. Patient hotels were available at 13 hospitals. In 9 units, parents had access to a bed/recliner at their baby’s care space. In 14 units parents could take a shower and do their laundry, and there was parent lounge. *Other facilities:* Seventeen units had a special room for meetings with parents, and 11 had a special room where parents could spend some time when their child had died.

*Breast milk, breastfeeding:* Only one unit had a separate breastfeeding/milk expression room. In the others this could take place where the mother preferred. In all units, mothers could breastfeed, have a breastpump and express milk/have access to a breast pump in the same room as their infant. Fourteen units had their own milk bank in the unit, and 8 also a special milk bank in their hospital. Six units reported access to a milk bank at another hospital.

*Parent meals:* In all units parents could heat their meals, and in 11 units they could prepare their meals. Three units offered one parent meals free of charge, and one unit two parents. In all units parents could store their food, and – except in one unit, they had access to a refrigerator and freezer.

*Caregivers:* The majority (n=17) accepted substitutes designated by the family as caregivers.

*KMC:* Sixteen units had written KMC guidelines. At 17 units parents were offered oral information before the infant’s birth and written information afterwards; at 12 units parents only received written information before. KMC was introduced in the delivery unit/operating theatre in 17 units. At 17 units stable infants are transported skin-to-skin to the unit after birth.

In 7 units KMC is introduced in the delivery unit/operating theatre also when the infant shows signs of physiological sensitivity.

*Criteria for introduction:* There is a wide variation in lowest PMA when KMC can be introduced (23-31), which can only partly be explained by differences in medical resources. It may be interpreted as lack of knowledge about relevant research.

*Continuous KMC* is actively encouraged at 17 units.

*Restrictions in KMC application daytime was* only reported from two units, explained by too many infants requiring care in the nursery, and lack of space. *Restrictions during nights* was reported from three units. Explanations were that the mother‘s needs of sleep, and when the infant is intubated.

*Stabilization of instable infants* in the nursery while the infant remains skin-to-skin was reported by 8 units.

*KMC providers:* In addition to mothers, fathers/partners were accepted in all units, and grandparents in 20 units. 19 units confirmed that parents are free to designate whoever they want, and 18 units accepted other persons. Only 3 units had restrictions in number of KMC providers: 2-3 persons.

*KMC clothing:* 19 units offered parents tube tops etc. free of charge. At 11 units parents continue KMC at home after early discharge.

*Early discharge:* 15 units had a program for early discharge.

*Infant criteria for early discharge* were

* Above all stable respiration and circulation
* 34-35 weeks
* Discontinued monitoring
* Stable temperature without assistance, or: with KMC/clothes/ warm mattrass.
* Infant growth adequate
* Started reduction of milk volume given by tube
* Feeding strategy
* Full oral feeding
* Stable b-glucose.

*Parent criteria:*

* At least one parent is at home, at least one parent fluent in Swedish/English,
* A non-smoking environment
* Stable social situation
* Confident providing care, tube/cup feed, able to verify position of feeding tube, feed
* Completed CPR training, know where to turn in case of problems
* Home of their own, telephone
* Come to unit on a regular basis, able to come any time of the day
* Access to car/transport to go to unit,
* Max 100 km to hospital – live inside the county boundaries

Conclusions: The low response rate (about half) is a limitation However, as this document was compiled some time to the conference, there may be additional information to report at the workshop. Some responses seemed to have been given in a haste, which can explain the diversity in responses. At the same time, there are certain differences in staff attitudes to KMC, especially regarding required infant maturational level at introduction of KMC, and support of continuous KMC, and early discharge. Nevertheless, the responses support the conclusion that Swedish NICU professionals have a very positive attitude to KMC. The assessment of the results should also take into account that a generous national insurance renders it possible for parents to be together with their infants/children in hospital, on leave from work with an allowance, which helps them enter their parental role early.