



How a Hospital Facilitates Skin-to-skin Contact in the Operation Theatre following Cesarean Birth

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Background

The WHO Baby-Friendly Clinical Guidance¹ published in 2018 updates Step 4 of the 10 Steps to Successful Breastfeeding as “facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth”.

Skin-to-skin contact (SSC) is described as the practice where an infant is dried, unclothed, and placed directly on the mother's bare chest or abdomen after birth, both of them covered in a warm blanket and left for at least an hour.¹ This practice facilitates the newborn's rooting reflex and helps to infix the behaviour of searching and suckling at the mother's breast.¹

Evidence shows the practice of SSC after birth benefits both the mother and infant. For the infant, it

reduces the stress of being born, improves its cardiopulmonary dynamics during the early hours after delivery, results in more optimal blood glucose levels, promotes optimal thermoregulation, increases breastfeeding initiation and exclusive breastfeeding leading to earlier successful breastfeeding and reduces crying in the infant.²



For the mother, early SSC leads to earlier expulsion of the placenta, reduces postpartum bleeding, lowers her stress levels and enhances breastfeeding self-efficacy. The contact of the baby with the mother also promotes parenting behaviours, bonding and attachment.²

Skin-to-skin contact after vaginal birth is being practiced in many birthing hospitals. However, **SSC immediately following Cesarean birth in the operation theatre (OT) is not yet a common practice**. Studies reveal that common barriers preventing SSC in the OT include the concerns of: not having immediate access to the mother if there is an emergency, not being able to assess the infant on the mother's chest, having to maintain the sterility of the surgical field, having to safely position the infant while the mother is lying on the OT table and the possibility of the infant developing hypothermia because of the low temperature in the OT.³

In Hong Kong, immediately after Cesarean birth, the infant is usually separated from the mother for basic routine procedures such as measuring body weight, administration of vitamin K & Hepatitis B vaccine and providing incubator care. The duration of mother-infant separation depends on individual hospital's policy. The WHO/UNICEF recommend starting SSC immediately after birth, regardless of the mode of birth.¹ Implementing a practice change for **SSC in the OT following Cesarean birth** is a **key component** of supporting breastfeeding in the Maternity unit.

Strategies for Successful Implementation of SSC in the OT

Engagement of ALL Stakeholders

Success is contingent on **effective teamwork among the multidisciplinary staff**, as well as the **acceptance of mothers and families**. Bringing everyone together to work towards an **agreeable and achievable goal** is crucial.

Setting up a Working Group

A working group on "SSC in the operation theatre following Cesarean birth" is set up. Membership includes obstetricians, anesthetists, pediatricians, midwives, OT nurses, and managers. Based on the latest literature review, members explore, discuss, raise concerns, provide feedback and suggestions on the benefits, challenges, inclusion criteria, staff competency, safety issues, and the change of routine required to achieve this goal. An action plan setting out the various tasks and activities, time frame and the assignment of specific responsibilities is developed.

The Process

Deciding on a Set of Inclusion Criteria for Implementing SSC

To facilitate the implementation of the new initiative, members of the Working Group set the **inclusion criteria for SSC in the operation theatre following Cesarean birth** as follows:

- Uncomplicated elective Cesarean births
- Mothers with regional anesthesia
- Choice of the mother
- Term infants (37 – 42 weeks)
- Infants who are centrally pink and responsive at birth

Formulation of an SSC Protocol

Developing **a protocol** adopting **international evidence-based resources** and **local institutional recommendations** is important to **standardize the practice** of SSC in the OT and **provide a safe guideline** for the team members. Furthermore, it also helps overcome barriers for change, reduce anxiety among members upon introduction of the new model of care and maintain the quality of service.

In order to tailor the protocol to the needs of individual stakeholders, comments on the contents are sought from all relevant staff members once the draft protocol is formulated. After the reviewing process is completed, the protocol will be finalized and piloted.

Enhancement of Staff Competency

A study indicates that if the **staff is well educated** about practice of the new model of care, their **willingness in assisting** in the SSC and **continuing to apply** it in their practice **will be increased**.⁴

Training on supporting breastfeeding equips healthcare staff with knowledge and skills in facilitating effective and safe SSC. This training can be provided in the form of in-service/on-the-job training, local or overseas forums/workshops/conferences and web-based learning. By attending these training activities, healthcare providers will learn the benefits of breastfeeding and the importance of SSC, as well as how to provide consistent breastfeeding messages to parents and facilitate immediate SSC effectively and safely after Cesarean birth, based on the updated evidence. The content of such training should include the introduction to SSC, provision of information to parents in the antenatal period, supervision of SSC, assessment of newborn physiologic conditions such as respiration, perfusion, activity, and position/tone⁵, assistance in the positioning of the mother and infant for comfort and safety, and helping the mother to initiate breastfeeding in the operation theatre.

Enhancement of Antenatal Breastfeeding Education

The antenatal period is a golden opportunity for providing pregnant women and their families with information about the benefits and practical management of breastfeeding which assists them in making informed choice for infant care. In Hong Kong, most of these messages are disseminated and discussed in the antenatal classes.



Evidence shows that a lack of antenatal discussions about SSC is a barrier to initiation of SSC in the operating theatre.⁶ It is therefore essential to provide updated and detailed information on the practice of SSC in the delivery room / operation theatre to expectant parents prior to the birth. Besides, in order to prepare them to get familiar with the baby's weight and how to hold the baby during SSC, dolls weighing 3 kilograms are used in

the antenatal class. The small-group educational sessions and pre-delivery maternity tour/ gathering allow midwives to discuss with parents their feelings or doubts about SSC in the operation theatre, and answer their questions. Expectant mothers are also encouraged to propose a birth plan indicating their preferences during labour and postpartum. This enables staff members to conduct face-to-face or online discussions with them about the benefits and practice of SSC following Cesarean birth. Besides, bilingual online information on SCC is also available to the public who are interested in the hospital maternity service.⁷

Simulation in the OT and debriefing

Once education has been provided to the Maternity and OT staff, the team members lead a **simulation in the OT** to test the **feasibility of the flow of care** and **identify any potential or unforeseen obstacles**. Following the simulation, members are invited to provide input which will be incorporated for further improvement in the actual implementation.

The Implementation

Before launching the new initiative, **all stakeholders**, including administrative, medical, midwifery, nursing and supporting staff and clients are **provided with information about the change** via email, online notifications, flyers, shift handover discussions, meetings and antenatal classes. As such, a smooth flow of service may be maintained and the stakeholders' satisfaction increased.

Way forward

The **implementation** of SSC in the OT **is only a beginning**. To effectively support breastfeeding, **continual monitoring** of SSC rates in the OT, breastfeeding rates, and satisfaction of mother and staff **is essential**.

Key Message:

1. Involving key stakeholders in bringing about a new initiative creates ownership and builds the foundation for success.
計劃新措施時，關鍵人員的參與可引發其認同感，並為實踐奠定成功基礎。
2. Open communication among staff members and their readiness for change are crucial for success.
成功變革有賴工作人員之間的坦誠交流及充份準備。
3. Providing expectant parents with antenatal education and opportunities for discussion on breastfeeding and other mother & baby friendly practices such as early skin-to-skin contact (irrespective of the mode of delivery) is essential.
醫護人員必須為準父母提供產前教育，並與他們討論母乳餵養和實踐母嬰友善的措施，包括以任何方式分娩後，早期肌膚接觸。

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Views expressed in this article are the author's and do not necessarily reflect the opinion or position of the BFHIHKA.

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