



A CROSS- SECTIONAL STUDY TO IDENTIFY BARRIERS AND FACILITATORS TO SKIN-TO-SKIN CONTACT AFTER BIRTH IN HEALTHY NEONATES IN A TERTIARY HOSPITAL

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ABSTRACT **Introduction:** Skin to skin contact is defined as placing a naked infant onto the bare chest of the mother. It is the standard of care for newborns without any risk factors. Implementation of SSC is inconsistent and far from ideal. **Aims And Objectives:** A quality initiative to identify the barriers to skin to skin in healthy neonates in a tertiary care hospital in Bangalore and ways to overcome them. **Methods:** Residents/postgraduates (PG) from the departments of Obstetrics (n= 20) and Pediatrics (n= 20) and nurses (n= 10) in the labor room (LR) took part in the study. All the participants were given a questionnaire to assess their awareness about skin-to-skin contact, their perspective of barriers and enablers to SSC in our hospital setting. **Results:** All the participants were aware regarding the practice and some benefits of SSC and had practiced SSC some time. The major barriers were lack of personnel and help, time constraint, safety concerns about the baby, interference with routine care of the mother after delivery. Some had an adverse event that occurred previously because of which they were apprehensive, others reported regarding mothers being in pain and not ready to hold the baby. Participants found an hour of skin-to-skin contact impractical and instead practiced it for 15-20 minutes. Additional solutions included having a birth companion, providing antenatal reinforcement for mothers, offering repeated counseling, displaying posters and audiovisual materials in antenatal wards, and ensuring ongoing training for rotating residents and nurses. **Conclusion:** Major barrier to SSC were lack of personnel, safety concerns and lack of time. Antenatal counselling, teamwork and training nurses and residents repeatedly are the key actions to improve the SSC in healthy newborns.

KEYWORDS : Quality initiative, barriers, enablers, healthy newborn care, skin-to-skin contact

INTRODUCTION

Skin to skin contact is placing the newborn directly on the mother's abdomen to maximize surface to surface contact. It is the standard of care for newborns without any risk factors. **SSC helps in early initiation of breastfeeding (EIBF) by one hour after birth** and leads to successful initiation of lactation. EIBF reduces neonatal and infant mortality rate by achieving higher rates of sustained exclusive Breast feeding.

The healthy full-term human infant, placed in SSC after birth, directs himself or herself to the mother's breast and nipple and starts to suckle by about 1 h of age SSC after birth has a positive **impact on bonding and interactions between the mother and her infant** even after one year (Bystrova et al., 2009). SSC has an effect on the mother's sensitivity to her infant and increases self-efficacy in breastfeeding . SSC also increases the chance of breastfeeding at **4 months** (Puig and Sguassero., 2007) and **exclusive breastfeeding at 6 months** (Nagai et al., 2011). Breastfeeding has a host of positive and well-documented health outcomes for mothers and infants, as well as economic advantages (Victora et al., 2016; Rollins et al., 2016)

However, despite its importance, there are several barriers that can prevent individuals from engaging in this vital practice. These barriers may be physical, emotional, cultural, or even logistical, and they can have significant implications for the health and well-being of both infants and adults. (10,11)

One of the most immediate barriers to skin-to-skin contact is medical complications (12) that may arise during childbirth or in the postnatal period.

For new mothers, postpartum depression or anxiety can create emotional distance, making physical closeness feel overwhelming or exhausting. In some cases, parental anxiety or discomfort may also act as a barrier. Some fathers or caregivers may feel unsure or unprepared to participate in skin-to-skin contact, particularly if they lack experience or have misconceptions about its importance. In many cultures, there are traditional beliefs about the roles of mothers and fathers, particularly regarding the emotional and physical care of newborns. In some societies, fathers may be less involved in caregiving duties, which could limit opportunities for skin-to-skin contact. For example, families who are economically disadvantaged may struggle with the resources needed to maintain a healthy and safe environment for their newborn. (12,13)

OBJECTIVES

The aim of the study was to evaluate the perceived barriers and enablers to Skin to Skin contact practice in our hospital.

METHODS

SETTING: The study was conducted in the Vani Vilas Hospital (Bangalore, India), a tertiary care medical college hospital, with a level III neonatal care unit with an average of 1000 deliveries per month. The hospital mainly caters to patients belonging to the lower socio-economic strata and serves as a tertiary referral centre to smaller rural health-care facilities in surrounding areas, particularly referrals of high-risk pregnancies.

Study Design:

A **questionnaire based qualitative survey** was done to assess the Knowledge, awareness regarding SSC in our hospital. The questionnaire included questions regarding awareness, current practice, what makes it difficult to practice SSC addressing the issues about the routine newborn care, maternal reasons, availability of personnel and others.

PARTICIPANTS:

The participants included **50 health care workers**, all of whom were contacted in person and agreed to participate in the study. The health personnel were categorized as: **Obstetric consultants** (n = 2) and **Obstetric residents** (n = 14), **Paediatrics consultants** (n = 2), **Paediatric residents** (n = 24) and **nurses** of the Clean, septic and high-risk **labor room** (n= 8).

PROCEDURE:

Participants selected among the doctors and nurses of department of paediatrics and Obstetrics who have worked in Labour rooms.

Informed Consent taken and explained about study

Questionnaire filled by participants by writing answers to the questions

Answers analysed of all participants

RESULTS

The participants comprised of males (n = 4) and females (n = 46), ranging in ages from 24 to 50 years old with the average years of experience being of 5 years for the consultants of both departments and 2 years for the residents of obstetric and paediatric department. Next figure shows the main barriers challenging the practice of SSC, facilitators suggested by the participants that promote the practice and solutions to the perceived barriers.



BARRIERS:

1. Being understaffed and lack of personnel.

Ours being a centre with high patient load, the nurses answered that they are in a hurry to finish their work, either because they have got more deliveries or more work as they've got admissions coming. The paediatricians on duty have to attend calls from 3 labour rooms and OT. Hence staying with the baby for the entire duration of SSC is not feasible. Whereas the helper and Group D worker who has to clean up is in a hurry to handover the baby to the patient attenders so that they can complete the rest of their work faster. Hence, they all declared that counselling is done only briefly and there is lack of time for following up or motivation of the same.

2. Attitude Of Various Personnel In The LR

The nature of SSC is teamwork and close **inter-departmental co-operation**. Many nurses and residents felt implementing SSC for **one whole hour immediately after birth was almost impossible**. **Disinterest** was a barrier, among all departments. More than logistic issues, the attitude of health care personnel was important.

3. Lack of Awareness

According to the ObG residents, they were not aware of the benefits of SSC to mother and baby and were just told to practice it. Hence it seemed to be less important to them.

Also lack of awareness among the mothers, before delivery, regarding the benefits made them less interested and SSC didn't seem to be important to them according to the residents

4. Fear Regarding The Procedure And Past Adverse Events

Some nurses recalled where 1-2 times the colour of the baby had changed and baby needed to be transferred to ICU. Hence they feared the procedure and were doubtful about the benefits

They also felt some mothers were scared to hold the baby as they felt that the baby might fall

5. Routine care

Some residents felt the procedure intervened in their routine care like extraction of placenta, suturing wound

6. No fixed hospital policy

7. Hygiene issues of placing a newborn on the mother's bare chest in the labor room

FACILITATORS:

Bystander/ Birth companion: person for ensuring the safety of the baby would ensure SSC implementation.

Inter -department Teaching: Training of student nurses, residents, house surgeons repeatedly in every shift every week was perceived as one way of improving the practice

Antenatal Awareness- Explaining the benefits, how it is done and positively reaffirming that baby shall not fall and it is not harmful to the

baby

Some positive events the participants had noticed while they practiced SSC included. They believed that it would make a difference. The main source of knowledge regarding SSC was from the teachings of a dedicated and motivated paediatrician. They noticed there is lot of decreased crying, decreased pain for the mother. The mother is not just concerned about her episiotomy and suturing pain. The baby stops crying and he feels more comfortable when he's on the mother.

The survey also included questions to ask if the participants were accepting of this practice and if they were open to more understanding and awareness about this. All our participants were willing to learn and implement the practice under favourable circumstances.

DISCUSSION

SSC at birth though recommended for all newborns who do not need resuscitation at birth, is not routinely practiced in most settings across India. Implementation of SSC at birth in the dynamic delivery room needs a concentrated combined effort from doctors across the different specialties of obstetrics and pediatrics and the labor room nurses who strive towards ensuring labor is safe for the mother and the baby. The ultimate decision as to whether SSC is to be implemented is predominantly made by the pediatricians as the obstetricians are pre-occupied with the welfare of the mother to ensure safe labor process.

These barriers may be physical, emotional, cultural, or even logistical, and they can have significant implications for the health and well-being of both infants and adults as identified in previous studies. (10,11,12)

The barriers established in our study were broadly under Lack of personnel and time, Lack of awareness, Interference with routine care and previous adverse experiences.

Scovia Mbalinda, et al., in a study - Experience of perceived barriers and enablers of safe uninterrupted skin-to-skin contact during the first hour after birth in Uganda identified that Perceived barriers included medical events, psychosocial issues and standard midwifery practice; Pragmatic barriers included economic constraints in the hospital and community; Enabling events included staff involvement. (14) Alenchery *et al.*, in their study identified that major barriers to SSC were lack of personnel (nurses), time constraint, difficulty in deciding on eligibility for SSC, safety concerns, interference with clinical routines, and interdepartmental issues. Recall of an adverse event during SSC was also a major barrier. They found that most participants considered 1 h as impractical; and promoted 5–15 min SSC. Minor themes were gender bias of the newborn and cultural practices. (15)

Some Of The Enablers Identified Previously Are

When healthcare professionals actively encourage SSC and provide the necessary support

Training healthcare professionals in the importance of SSC and its role in enhancing infant health outcomes is key to increasing its practice in neonatal care settings (16)

Education increases the likelihood of SSC being implemented correctly, especially in the early stages of birth. Studies by de la Fuente *et al.* (17)

role of fathers in supporting the mother and engaging in skin-to-skin contact themselves (18)

Quality assessment studies like this helps us in identifying flaws in our practices and hence also helps us identify how to correct them henceforth. Lack of personnel and time was the most common barrier identified. Providing birth companion during and post delivery, who could be a relative or friend of the mother willing to assist. Training nurses and interns could play role in counselling in labour room and assisting the birth companions. Training and teaching them prior to childbirth about the importance and benefits of skin to skin contact should be done. Second one being lack of awareness, which was also seen among health care personnel. Frequent Group awareness sessions and programs should be conducted for the doctors and nurses in obstetrics And gynecology and paediatric departments in hospitals and medical colleges. Patients and relatives of patient should also be counselled regarding the benefits of skin to skin contact in common language and doubts and misconceptions should be clarified. Next barrier identified was interference with routine care.

The other group was fear due to past experiences. This can be corrected

by carefully interrogating what the previous incidences were and teaching how to avoid the mistakes in technique and patient selection. It is important to identify these barriers and take necessary measures to improve skin to skin contact rates.

The limitations of our study is its small sample size, however we've involved different departments and nursing staff.

CONCLUSION

Implementation of potential solutions will only be successful if there is an understanding of the benefits of SSC as well as by actual practice and demonstration of SSC. A collaborative and dedicated effort by all personnel is needed for successful implementation since care at birth is a multidisciplinary responsibility.

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