

BONDING SQUARES STANDARD OPERATING PROCEDURE NAME		
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1.0 Introduction

This document discusses the procedure of using bonding squares to promote the bonding of mothers and neonates in CHI at Crumlin. Family-Centred Care is nationally and internationally recognised as best practice in supporting the development, learning and well-being of children and families (Shields et al., 2012)(Coyne, 2015). An infant's brain, social, emotional and cognitive development depend on a loving bond and attachment with a primary caregiver (Welch et al., 2015). Anxiety levels in mothers of premature babies are higher than mothers of term babies, at both 14 days and 14 months after delivery. Many parents, especially mothers are at high risk of experiencing depression, anxiety and post-natal stress disorder (PTSD) (Lyndon et al., 2017). Parents of premature or sick neonates can have feelings of fear, helplessness, grief and loss of the 'perfect pregnancy' (Bliss, 2020). Neonatal care can present several challenges for bonding between mother and baby such as:

- Parents only being able to touch their baby through portals in an incubator.
- Their baby connected to multiple lines and apparatuses.
- Constant exposure to lights, monitors and alarms.
- Seeing their baby cry a sound-less cry when ventilated.
- Mothers seeing their expressed breastmilk fed to their baby via a nasogastric tube.
- Fear of their baby-deteriorating while in theatre or on the Intensive Care Unit.

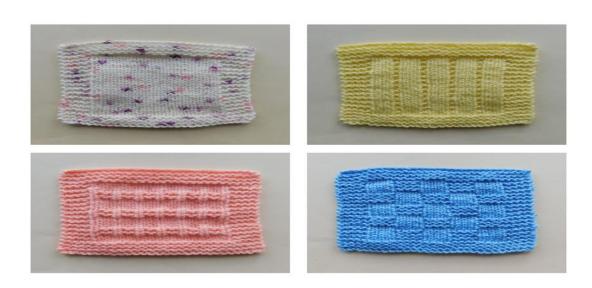
Mothers attempting to bond with their neonate can experience challenges in a hospital setting (Lundqvist et al. 2019).

CHI at Crumlin believe that breastfeeding is the healthiest way for a woman to feed her infant. Staff in CHI at Crumlin support mothers who choose to breastfeed according to the Breastfeeding Policy Statement (Nurse Practice Committee 2018). World Health Organisation (WHO) (2017) recommends exclusive breastfeeding for six months and continued breastfeeding for a minimum of two years; this is inclusive of the consumption of expressed breast milk (EBM). Not all infants are able to feed at the breast for a variety of reasons; hence, mothers may need to express and store their own breast milk for administration enterally (Becker et al. 2012). Breastfeeding can be difficult, particularly for mothers with premature babies; mothers post C-Section and mothers experiencing large amounts of stress due to their baby being unwell in hospital (Casavant et al., 2015).

To encourage bonding and support breastfeeding expressing breastmilk CHI at Crumlin are introducing bonding squares. This SOP will discuss the definition of bonding squares, instructions for use and the obligations and responsibilities of the user.

Bonding Squares are small squares knitted in pairs. One square is placed with a premature or sick neonate and the second square is worn against the mum's skin, usually in her bra. The mother swaps the squares every 12 hours or every time mum visits. Bonding squares are given to a mother whose baby is being nursed on a ward or in intensive care. The bedside nurse will record the use of bonding squares in the nursing notes.

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Bonding Squares help parents and baby to bond through the sense of smell. They can be introduced in cases where physical touch is limited. This is due to the medical needs of the neonate. Bonding squares can help support mothers in expressing breast milk. Exposure to the neonates' scent will enhance feelings of affection between mother and baby, and promote bonding. Pleasant forms of touch or the ability to smell her baby stimulates the mother's secretion of oxytocin and prolactin; help with expressing of breastmilk and emotional bonding (WHO 2017). In the absence of a mother, the father will be given the option of using the bonding squares to aid bonding between the father and baby.

Bonding squares help with the bonding of premature/term neonates, particularly in an incubator. The neonate can smell their mother's scent when she is not there or is unable to have cuddles. The mother can smell the neonate's scent on the square when she is not by the bedside or is unable to hold the neonate. This can provide comfort for both parties.

Bonding Squares are a method of promoting Family Centred Care and supporting mothers in expressing breastmilk. They, also, assist in the neurodevelopment of the neonate, while catering for the emotional needs of the neonate and the mother.

2.0 Definition of Standard Operating Procedure

The term 'Standard Operating Procedure' (SOP) is a way of carrying out a particular course of action and includes operations, investigations, pharmaceutical treatment, examinations and any other treatment carried out.

3.0 Applicable to

All nursing staff caring for neonates in CHI at Crumlin.

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4.0 Objectives of Standard Operating Procedure

- To ensure that all staff on the wards adhere to the SOP.
- To standardize the handling of bonding squares.
- To maintain patient safety.
- To ensure research-based knowledge underpins the use of bonding squares.

5.0 Definitions / Terms

Bonding Square: Two identical 5 \times 5-inch squares, knitted in any colour, pattern or wool. It is important that there are no holes in the pattern or embellishments.

Family Centred Care: is a partnership approach to health care decision-making between the family and health care provider. To encourage families to participate in their child's care.

6.0 Procedures

The Neonatal CNSp team will receive knitted bonding squares. Upon receipt of bonding squares, each pair will be placed in a small bag with a set of instructions for mothers. Instructions include:

- Mothers must wash the bonding squares prior to use,
- Mothers must place one with the neonate while keeping one on the mother's body, commonly placed in the mother's bra,
- Mothers will be required to swap these two squares every 12 hours or when the mother visits,
- Mothers will take ownership and responsibility for the maintenance of the bonding squares.

The neonatal CNSp will give mothers on St. Peter's Ward, St. Nazareth Ward, Children's Heart Centre, PICU 1 and PICU 2 with neonatal populations in the hospital a pair of bonding squares. The neonatal CNSp will explain to the mother the definition and use of bonding squares. If the mother would like to receive a pair of bonding squares, ownership and responsibility of the maintenance of the bonding squares is transferred to the mother. The mother will place one with the neonate and one is kept on the mother's body, commonly placed in the mother's bra. The mother will be required to swap these two squares every 12 hours or when the mother visits.

Bonding Squares have approved by the Infection Control Team in June 2020.

7.0 Implementation Plan

Communication and Dissemination

- SOP will be posted on hospital intranet.
- Hard copies of this SOP available on St. Peter's Ward, St. Nazareth Ward, Children's Heart Centre, PICU 1 and PICU 2.

Training

- Education and training will be delivered on the above wards.
- Education is included in induction packages for new staff.

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8.0 Evaluation and Audit

Evaluation and Audit includes

- Information in relation to the safe management
- Feedback from staff on this SOP to contribute to ongoing SOP development
- Periodic audits of the use of bonding squares.

The operation of the SOP is to be review on a two yearly bases or when indicated by a change in the best practice using the following methods:

✓ Document Audit Tool: the Neonatal CNSp Team as evidence of the review process will collect a record of these monitoring / auditing processes on an annual basis

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