

“How does Single Family Room NICU design impact on preterm infants and their parents”?

Bente Silnes Tandberg, Trond Markestad, Renée Flacking,
Kathrine Frey Frøslie, Hege Grundt, Atle Moen



To compare

very **preterm infants**
cared for in
single family room
or a traditional open bay

and their parents
during and after hospitalization



Single family room (SFR) unit



Open bay unit (OB) unit



Private Photo

Previous research

SFR vs OB

Overall positive outcome for

- Infants
- Parents
- Staff

- Bilde av pasient

Some conflicting results



The International Closeness Survey



Australian Critical Care

journal homepage: www.elsevier.com/locate/aucc



Research paper

Parent and nurse perceptions on the quality of family-centred care in 11 European NICUs



Separation and Closeness Experiences in Neonatal Environment (SCENE) research group,
Simo Raiskila MD, PhD student^{a,*},
Liisa Lehtonen MD, PhD^a,
Bente Silnes Tandberg (RN, MNSC)^{b,c},
Erik Normann MD, PhD^d,
Uwe Ewald MD, PhD^d,
Sylvia Caballero MD^e,
Heili Varendi MD, PhD^f,
Liis Toome MD, PhD^{g,h},
Marianne Nordhø MD, PhDⁱ,
Boubou Hallberg MD, PhD^j,
Björn Westrup MD, PhD^k,
Rosario Montirosso Psy D^l,
Anna Axelin RN, PhD^m

^a Department of Pediatrics, Turku University Hospital and University of Turku, Kivimyllykatu 4, S. 20520 Turku, Finland

^b Department of Pediatric and Adolescent Medicine, Drammen Hospital, Vestre Viken Hospital Trust, Norway

^c Department of Clinical Medicine, University of Bergen, Norway

^d Department of Women's and Children's Health, Uppsala University Children's Hospital, SE-75185 Uppsala, Sweden

^e Hospital Universitario Gregorio Marañón, Dept. of Pediatrics, O'Donnell 50, 28009 Madrid, Spain

^f Tartu University Hospital and University of Tartu, Department of Pediatrics, N. Luini 6, 51014 Tartu, Estonia

^g Tallinn Children's Hospital, Clinic of Pediatrics, Tervise 28, 13619 Tallinn, Estonia

^h University of Tartu, Department of Pediatrics, Luini 6, 51014, Tartu, Estonia

ⁱ University Hospital North Norway, N-8038 Tromsø, Norway

^j Department of Neonatology, Karolinska University Hospital, Stockholm, Sweden

^k Department Women's and Children's Health, Karolinska Institute, Stockholm, Sweden

^l Centre for the at-Risk Infant, Scientific Institute, IRCCS Eugenio Medea, Via Don L. Monzè 20, 23842 Bosisio Parini, LC, Italy

^m Department of Nursing Science, University of Turku, 20014 Turku, Finland

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ABSTRACT

Background: Family-centred care (FCC) is a state-of-the-art practice in neonatal intensive care units (NICU) based on its shown benefits on the well-being of both infants and parents. However, there is no systematic knowledge about how FCC is implemented in different European contexts.

Objectives: To describe parents' presence and the quality of FCC from the perspectives of mothers, fathers and nurses in 11 European NICUs.

Methods: A prospective survey was conducted in Finland, Sweden, Norway, Estonia, Spain and Italy. The perceived quality of FCC was measured using 8 text-message questions sent to the parents' mobile phones, one question each day, during the infant's hospital stay. Nurses answered corresponding questions through a Web questionnaire during a 3-month period. The responses were rated on a 7-point Likert scale. Parents who were not present in the unit during the day used a "0" response.

Results: A total of 262 families of preterm infants born before 35 gestational weeks participated in the

REGULAR ARTICLE

Parents' presence and parent–infant closeness in 11 neonatal intensive care units in six European countries vary between and within the countries

Simo Raiskila (simo.raiskila@utu.fi)¹, Anna Axelin², Liis Toome^{3,4}, Sylvia Caballero⁵, Bente Silnes Tandberg^{6,7}, Rosario Montirosso⁸, Erik Normann⁹, Boubou Hallberg¹⁰, Björn Westrup¹⁰, Uwe Ewald⁹, Liisa Lehtonen¹

1. Turku University Hospital and University of Turku, Turku, Finland
2. University of Turku, Turku, Finland
3. Tallinn Children's Hospital, Tallinn, Estonia
4. Tartu University, Tartu, Estonia
5. Hospital Gregorio Marañón, Madrid, Spain
6. Department of Pediatric and Adolescent Medicine, Drammen Hospital, Vestre Viken Hospital Trust, Drammen, Norway
7. University of Bergen, Bergen, Norway
8. O-3 Centre for the at-Risk Infant, Scientific Institute, IRCCS Eugenio Medea, Bosisio Parini, Lecco, Italy
9. Pediatrics, Department of Women's and Children's Health, Uppsala University, Uppsala, Sweden
10. Huddinge Hospital, Karolinska Institutet, Stockholm, Sweden

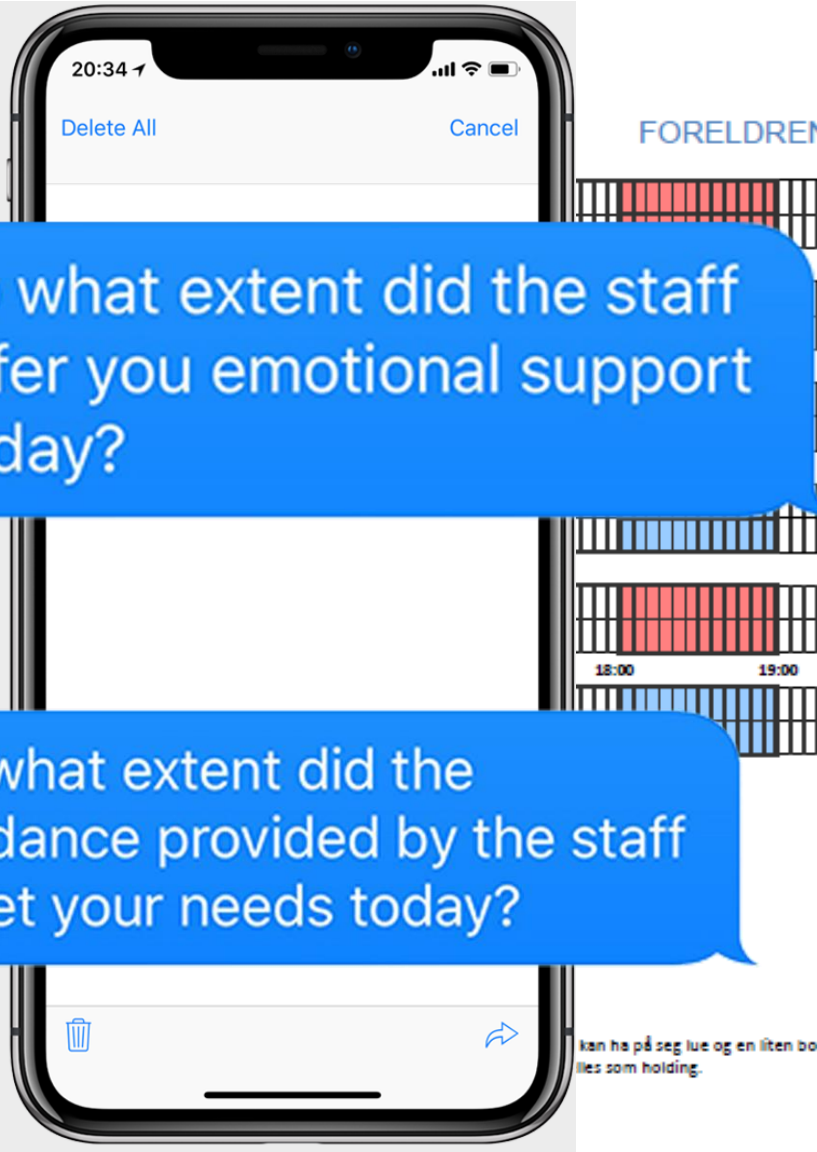
Keywords

Family-centred care, Kangaroo care, Preterm infants, Single-family room parent–infant closeness, Skin-to-skin care

ABSTRACT

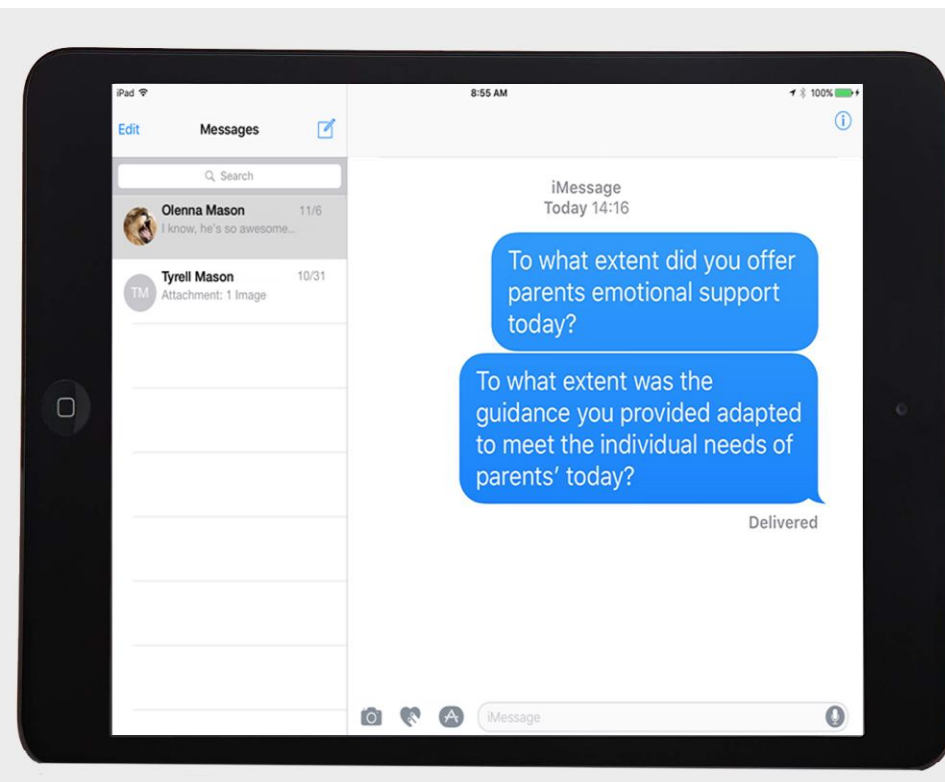
Aim: Little is known about the amount of physical parent–infant closeness in neonatal intensive care units (NICUs), and this study explored that issue in six European countries.

Prospective survey: Family Centred Care practises



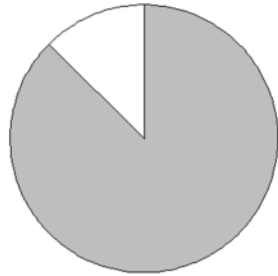
To what extent did the staff offer you emotional support today?

To what extent did the guidance provided by the staff meet your needs today?



Results: Closeness

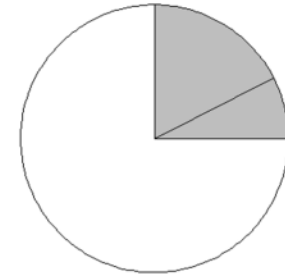
Single
Family
Room
Unit



**Mothers' presence
per 24 h**

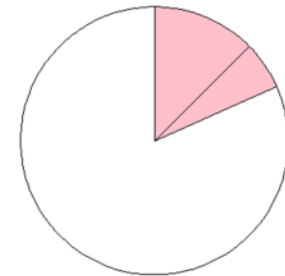
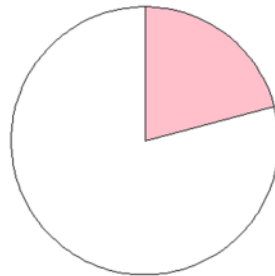


**Fathers' presence
per 24 h**



**Parental (mother+father)
skin-to-skin care per 24 h**

Open
Bay
Unit



Skin-to-skin care INITIATED in SFR ♀ **4 hr** ♂ **3 hr**

Skin-to-skin care INITIATED in OB ♀ **12 hr** ♂ **40 hr**

Results

More participation in medical rounds

More support from nurses

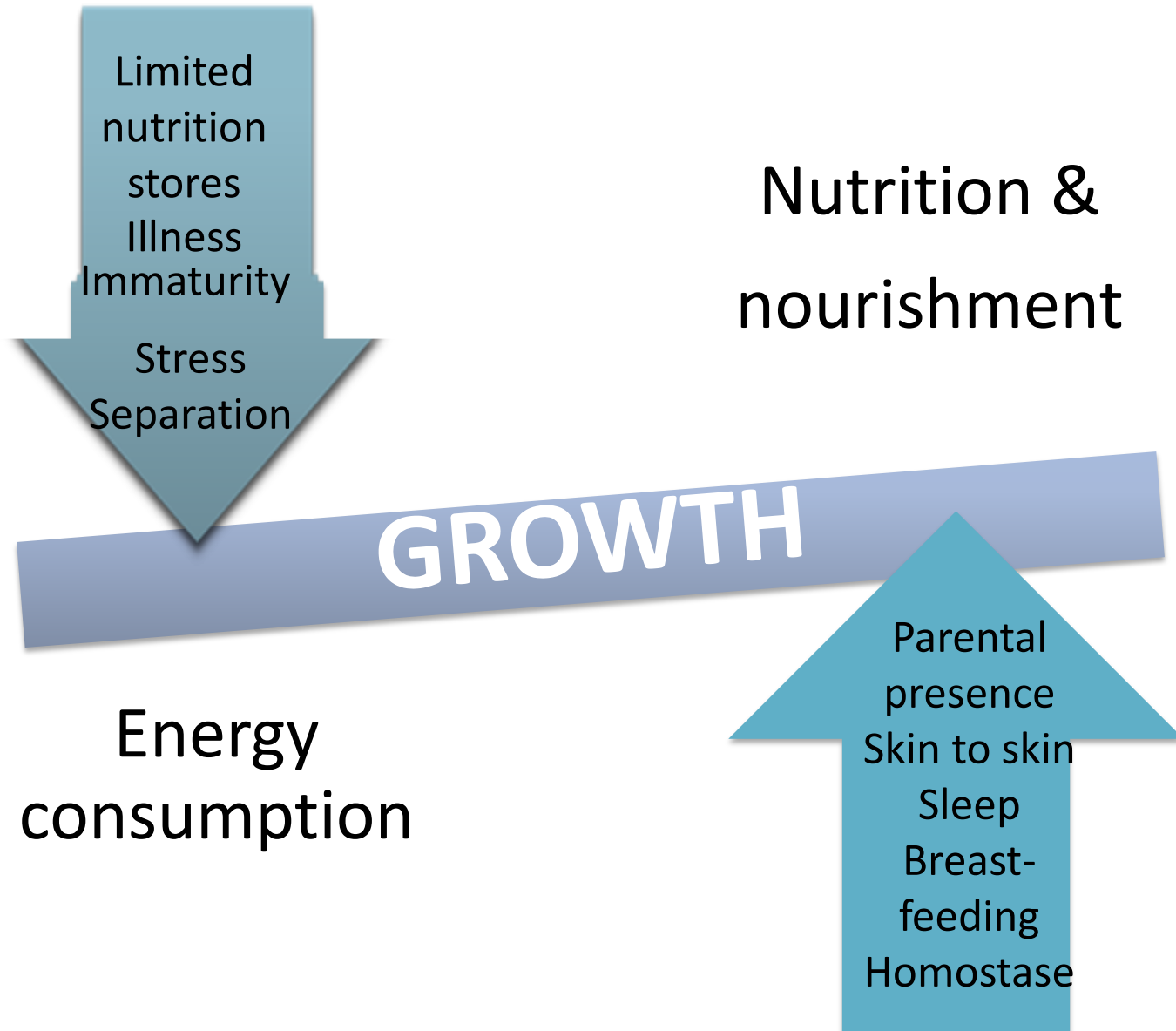


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Parent-Infant Closeness, Parents' Participation, and Nursing Support in Single-Family Room and Open Bay NICUs

Bente Silnes Tandberg, MNsc, RN; Kathrine Frey Frøslie, PhD, MSc; Renée Flacking, PhD, RN; Hege Grundt, RN; Liisa Lehtonen, MD, PhD; Atle Moen, MD, PhD

Speculations on premature growth



Prospective comparison

- Premature infants 28-32 gestational weeks and their parents
- Nutrition protocol
- Registration of:
 - nutrition
 - growth
 - presence and SSC
 - volumes of mothers milk
 - breastfeeding occurrence
 - feeding methods
- Questionnaire

Characteristics of the infants and parents

Variable	SFR unit (n=35)	OB unit (n=42)
Age of mothers, mean (SD)	31 (7)	32 (6)
Age of fathers, mean (SD)	36 (10)	34 (7)
Infants		
Boys/Girls	19/16	15/27
Gestational age, weeks + days (mean)	30 + 5	30 + 1
Twins, n	10 (29%)	18 (43%)
Cesarean section, n	25 (71%)	20 (48%)
PMA ² at discharge, days, mean (SD)	252 (9)	255 (14)
Length of stay, days, mean (SD)	37 (11)	45 (18)

Growth single family room **vs** **open bay**

Table, unpublished

Initiating of breastfeeding

First time mothers express/pump post-delivery,

- SFR unit: mean 8 hours
- OB unit: mean 33

First time attempting breastfeeding at the breast

- SFR unit: mean 72 hours
- OB unit: mean 166 hours

Breast feeding WHO

- Table, unpublished

Exclusive breast feeding

- Table, unpublished

Parents mental Health

- Table, unpublished

Depressed mothers in OB unit

AT DAY 14th

DEPRESSION

EPDS sum score mother, median [Q1, Q3]	8 [6,11]	14[10,15]
Depression symptoms (cut of ≥ 13), n (%)	4 (14%)	16 (52%)
EPDS sum score father, median [Q1, Q3]	6 [3,7]	8 [5,7]
Depression symptoms (cut of ≥ 13), n (%)	1 (4%)	3 (11%)

SFR does not impact

- VPT infants' growth during the first four months corrected age
- breastfeeding occurrence
- mothers milk volumes
- stress, anxiety or attachment after hospitalization

SFR care contributes to

- parental presence
increased early skin-to
skin
- earlier initiation of
pumping and first
breastfeeding attempt
- exclusively breast
feeding by breast

Bilde av pasient

SFR care contributes to

- nursing support and participation in medical rounds
- less depression by mothers from birth to 4 month corrected age
- less stress by both parents during hospitalization



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- The Norwegian Nurses Organization



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- Health care staff at both units
- Bilde av pasient

btandb@vestreviken.no