

HOW DO NUMBER PREGNANCY AND DELIVERY PROBLEMS AND MOTHERS' PSYCHOLOGICAL HEALTH INFLUENCE ROOMING-IN TIME? A STUDY OF ITALIAN MOTHERS

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BABY CARE IN THE MATERNITY WARDS

OVERVIEW

Historical overview

- When hospitals became the predominant sites for birth in industrialized countries (early 20th century), separation of mothers and babies became widely practiced
- Belief was that placing the infant in the hospital nursery after birth allowed the mother to sleep and rest and the baby to be protected from infections
- Newborns were cared for in hospital nurseries and mothers in postnatal wards
 - Babies were brought to their mothers for feeding
 - Remained in the hospital nursery until discharge.

FROM BABY WARDS TO ROOMING-IN



Current Practice: Rooming-in

- **Rooming-in:** During hospitalization after the birth, baby and mother stay together in the same room at night and day in the hospital
- Promoted by WHO/ UNICEF baby friendly hospital initiative (BFHI, 1991) and by the American Academy of Pediatrics
- The recommendation of WHO *encourages an entire 24 hours of staying together.*
- Developed to avoid any adverse psychological consequence on the mother–child relationship and to promote breastfeeding

Rooming-in *pros*

- Placing the infant in close proximity to the mother **enables the mother to respond** in a timely way whenever her infant shows sign of readiness to feed
- Many institutions have now started to keep the mother and the baby in the same room with the aim to **promote skin-to-skin contact** (Serpero *et al.*, 2013)
- Uninhibited mother-infant interaction and close contact **promotes bonding**, encourages demand breastfeeding and results in more efficient infant suckling that are all essential in the regulation of breast-milk production (Jaafar, Lee, Ho, 2012) and **higher rate of breastfeeding** (Switzerland and Taiwan national longitudinal surveys: Forrester-Knauss *et al.*, 2013; Chiou *et al.*, 2014)

Rooming-in measured effects

- Rooming-in has shown effects on:
 - a lower incidence of breast engorgement and milk stasis (Wilde 1999)
 - better infant weight gain due to less energy consumption from crying during early infancy (Yamauchi 1990)
 - lower incidence of neonatal diarrhea (Mustajab 1986)
 - Significant reduce of hyperbilirubinaemia (Suradi 1998)



THE PRESENT STUDY

SANT'ANNA HOSPITAL ROOMING-IN STUDY



Sant'Anna Hospital R-in study

- Sant'Anna Hospital in Turin
 - an Italian excellence in the obstetrical-gynecological field
 - high number of annual deliveries
- Despite the 24hours rooming-in is applied since 2004, *some mothers still tend to refer to the nursery*
- Aim of the study → to help professional understanding women's choice of R-in
 - Any difference on medical and psychological aspects?

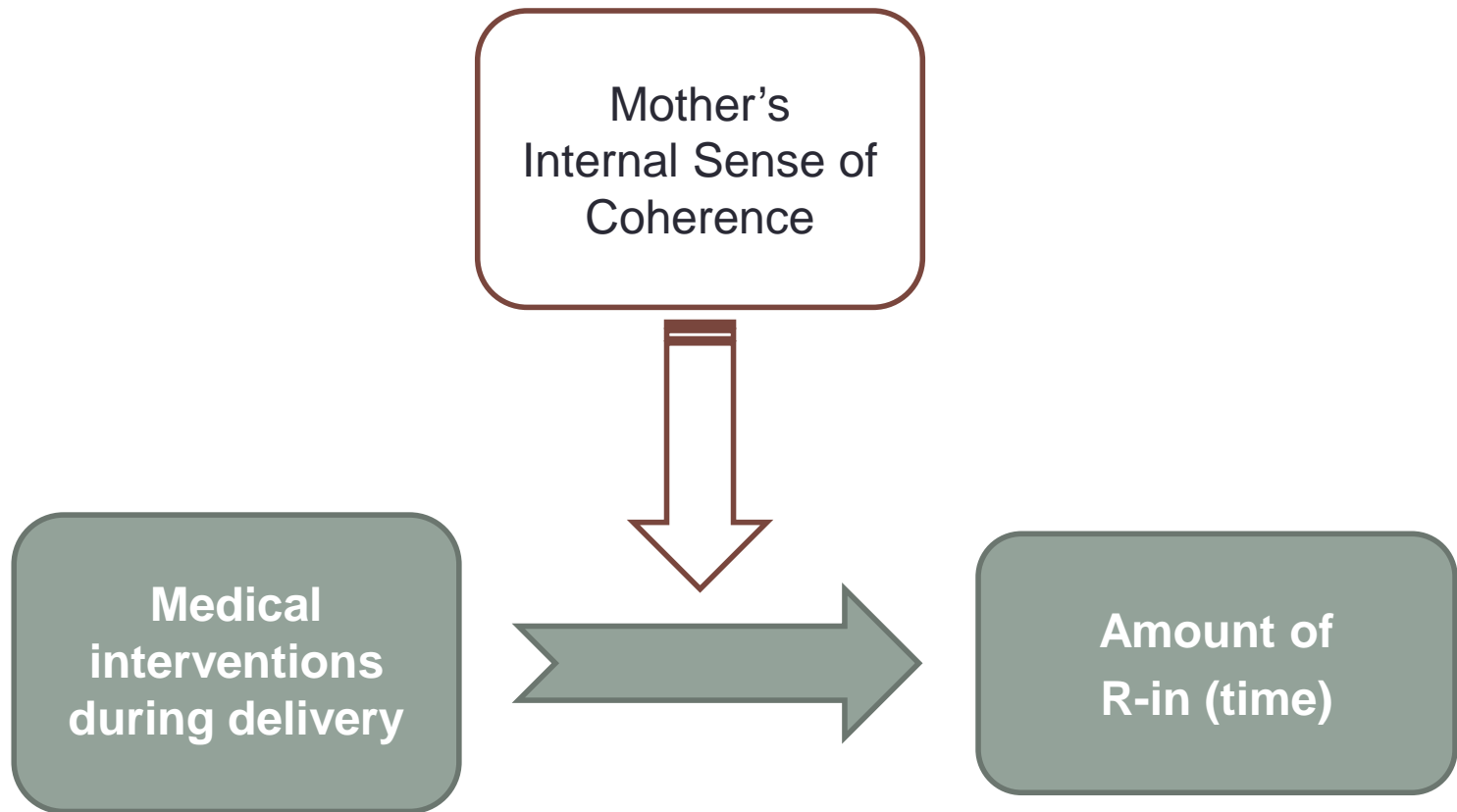
Sant'Anna Hospital R-in study

- Variables investigated:
 - **Medical history issues:**
 - Cesarean delivery and anesthesia (as risk factors for applying R-in)
 - Early mother-baby contact
 - Parity: first-time-moms feel less competent and confident
 - **Psychological aspects:**
 - Desired/planned pregnancy enhancing the wish for contact and care (semi-structured interview)
 - High Sense of Coherence could help managing the birth event (Antonovsky, 1993)
 - Secure-autonomous mothers are more prompt and willing for this new experience of motherhood (ECR: Brennan, Clark & Shaver, 1998; AQS: Feeney, Noller & Hanrahan, 1994)

METHOD

SANT'ANNA HOSPITAL ROOMING-IN STUDY

Aim of the present study



Procedure

- Mothers recruited with the help of nurses (indicating the amount of time the mothers applied R-in) 2 to 5 days after delivery
 - In case of Caesarian delivery, the first night after delivery was not taken into account for nursery referrals
- No complications about mother's or child's health

Measures

- **Sense of Coherence Scale** -SF (Antonovsky, 1987) → 13-items self reports questionnaire evaluating individual sense of coherence. defined as a stable modality of perceiving and interpreting life events. 3 subscales:
 - Comprehensibility (cognitive component)
 - Manageability (instrumental component)
 - Meaningfulness (motivational component)
- Questionnaire on «Birth path» including questions about prenatal class. delivery. rooming-in and breastfeeding
- Medical records:
 - Type of delivery (Caesarian vs natural)
 - Analgesia (none, epidural, general)
 - Surgeries (none, episiotomy, laceration's suture. ecc)

Sample

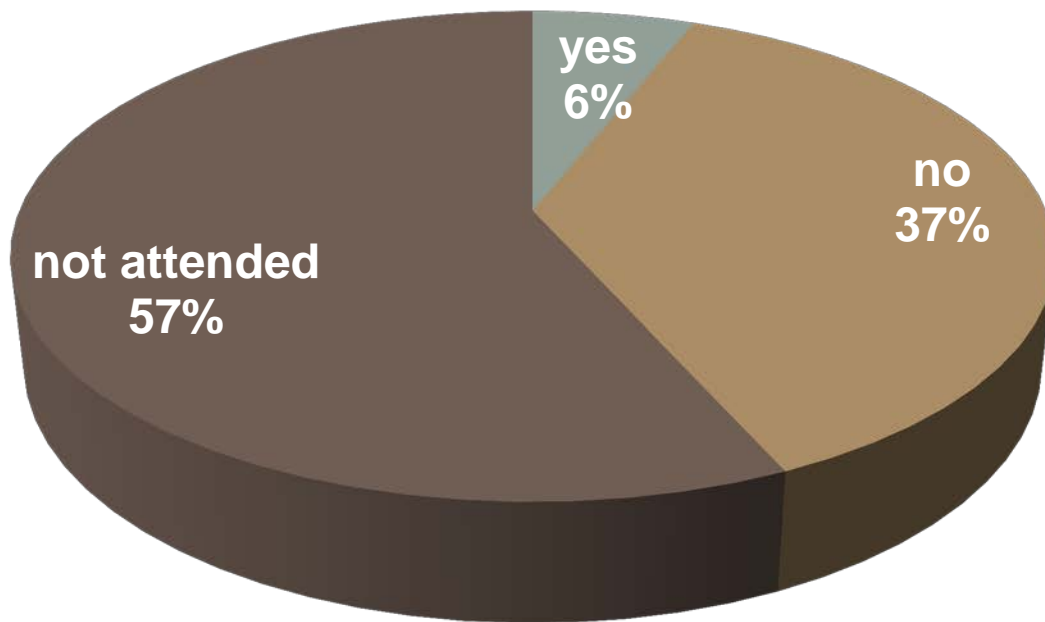
- 67 mothers
 - who gave birth at the Sant'Anna Hospital
 - all living in Turin, a large industrial city located in the northwest region of Italy
 - ages 24-43 (M = 33.65. SD = 4.28)

Sample socio-demographics

	Frequency
	Mean (Std Dev)
Age	33.65 (4.28)
Nationality	
Italian	63
Other	4
Educational Level	
Middle School	12
High School	24
University	31
Marital Status	
Married	55
Common law	12
Primiparous	
Yes	33
No	34
Attended Prenatal course	
Yes	29
No	17
Number of meetings	3.06 (4.42)

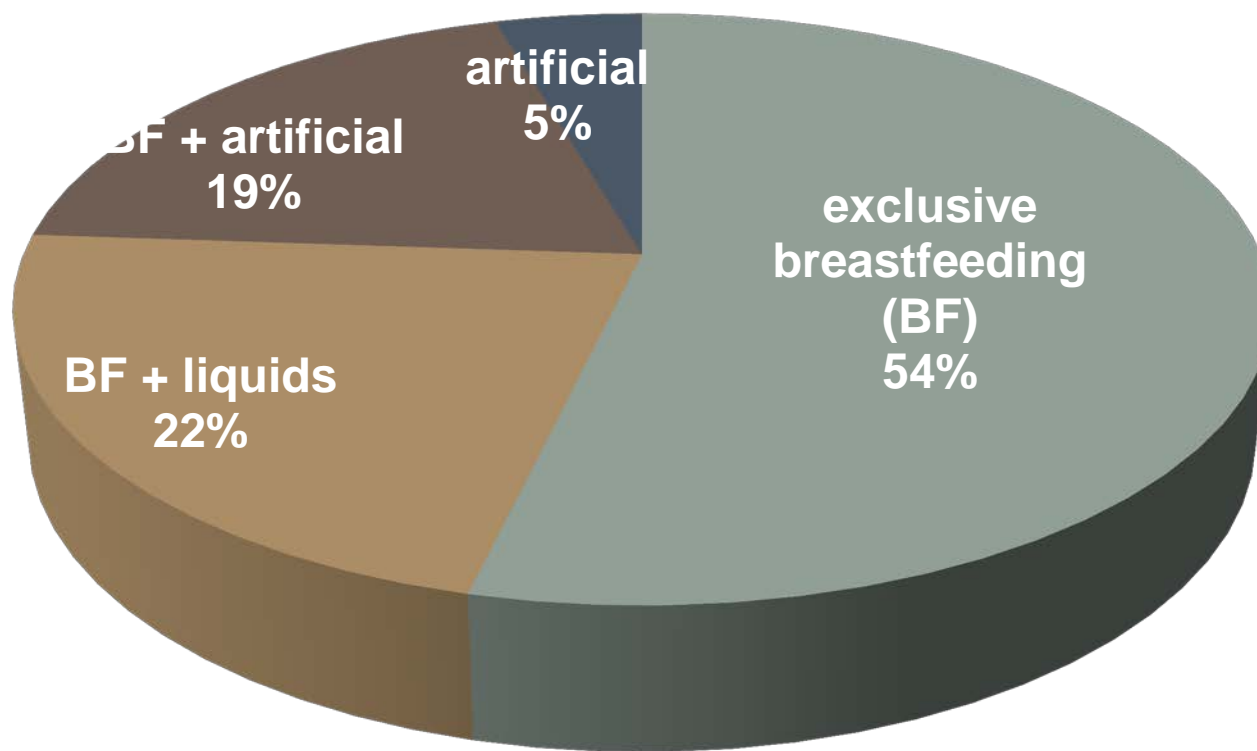
Rooming-in perception

Received information about rooming-in during pre-natal class



Rooming-in perception

Feeding type during recovery



Rooming-in use: Self Report vs. Nurse Report

Mothers' reports		Nurses' report			Total
		day & night	only day	Other (reduced referral to nursery)	
day & night	N	29	6	2	37
	%	43.3%	9.0%	3.0%	55.2%
only day	N	2	28	0	30
	%	3.0%	41.8%	0.0%	44.8%
Total	N	31	34	2	67
	%	46.3%	50.7%	3.0%	100.0%

DATA ANALYSES AND RESULTS

SANT'ANNA HOSPITAL ROOMING-IN STUDY

Data Analysis

- Multiple logistic regressions were used to explore linear associations between medical interventions during delivery, three Sense of Coherence (SoC) scales and the extent of rooming-in
- In addition we used multiple logistic regressions to explore potential moderating influence of a mother's SoC on the association between number of problems experienced during pregnancy and medical interventions during delivery, and rooming in.
- Age and educational level were used as control variables in this study.

Results – multiple logistic regression

Coefficients ^a						
	B	S.E.	Wald	df	Sig.	Exp(B)
SoC comprehensibility	-.034	.074	.205	1	.650	.967
SoC manageability	-.072	.069	1.119	1	.290	.930
SoC meaningfulness	-.007	.080	.008	1	.927	.993
Medical interventions (Sum)	-.069	.067	1.038	1	.308	.934
Age	-.009	.066	.017	1	.896	.992
Education Level	.277	.351	.622	1	.430	1.319
Constant	2.290	3.052	.563	1	.453	9.873

a. Dependent Variable: **Nurse reported rooming-in**

Results – multiple logistic regression

Coefficients ^a						
	B	S.E.	Wald	df	Sig.	Exp(B)
SoC comprehensibility	-.039	.079	.238	1	.626	.962
SoC manageability	-.169	.077	4.829	1	.028	.845
SoC meaningfulness	.013	.080	.027	1	.868	1.013
Medical interventions (sum)	-.196	.076	6.668	1	.010	.822
Age	.043	.070	.387	1	.534	1.044
Education Level	-.138	.364	.143	1	.705	.871
Constant	3.864	3.317	1.357	1	.244	47.639

a. Dependent Variable: **Mothers' self report rooming-in**

Results

- Greater indications of problems during the delivery (summing up Caesarian delivery and surgery) ($\beta = -.20$, $p < 0.01$) were associated to lower amounts of time a mother spent rooming-in
- Moreover, greater indications of manageability (SoC) ($\beta = -.17$, $p < 0.05$) were associated to lower amounts of time a mother spent rooming-in
- No moderation effects were identified.

CONCLUSIONS AND FUTURE DIRECTIONS

SANT'ANNA HOSPITAL ROOMING-IN STUDY

Conclusions

- The extent of R-in is linked to medical interventions in the delivery room
- Mothers who feel they can better manage life events, tend to use R-in less frequently
- R-in constitute a great opportunity for mother-child health and relationship, but it cannot be imposed (Rice, 2000, Dharamraj *et al.*, 1981)

Future Directions

- Comparing, among mothers who did not apply R-in 24H, interviews' contents (subjective and attachment issues)
- Enhancing nurses' positive attitude: stressing the importance of not forcing R-in

THANK YOU FOR YOUR ATTENTION!

Any questions and comments?

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