FAMILY CENTRED CARE IN ITALIAN NEONATAL INTENSIVE CARE UNITS: PARENT EXPERIENCE AND SATISFACTION, A SYNTESIS OF A MULTICENTER STUDY AND PRELIMINARY RESULTS

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INTRODUCTION AND AIMS

Family-Centred Care (FCC) is an approach to plan, deliver and evaluate health care grounded in a mutually beneficial partnership among patients, families, and health care practitioners (1). Parent satisfaction is an indicator of the quality of Family Centred Care (FCC) provided in Neonatal Intensive care Unit (NICU). To evaluate parent experience and satisfaction with FCC in NICU, the Italian version of Empathic-n was developed (2). Family-centred care (FCC) is applied in Italian NICUs in variable ways and not always uniform with international standard, it is important to investigate not only the daily activities of FCC that the health care providers (HCP) put in practice in NICU, but also the activities they consider as necessary, it could be important to identify the organizational or professional variables that are mostly associated with parent satisfaction in NICU. The aim of the study was to describe parent satisfaction with FCC in Italian NICUs with a validated instrument and explore organizational and professional variables associated with parent satisfaction.

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MATERIAL AND METHODS

A cross-sectional multi-centre study design was used. Study participants were parents of infants discharged from 31 Italian NICUs. The included infants had a duration of hospital staying longer than 48 hours. The Italian EMPATHIC-N was used to assess parent satisfaction. The instrument includes 57 items in five domains: Information, Care & Treatment, Parental Participation, Organization and Professional Attitude. The instrument measures also the overall satisfaction through two questions. Moreover the questionnaire contains two questions to evaluate the physicians' and nurses' overall performances (10-point rating scale). The Italian version of Family Centred Care Questionnaire-Revised (FCCQ-R) by Bruce (1997) (5,6) was used to explore HCP's perception of FCC principles applied in daily practice (current scale) or considered as necessary (necessary scale). The 45 items of the questionnaire describe several activities of FCC divided into nine subscales, using a Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree". The study was approved by the Ethics Committee of Bambino Gesù Children's Hospital, that coordinated the study. Participants were informed about the aim of the study and the data collection process, they were informed that their participation in the study was anonymous and voluntary

RESULTS

Parents of 633 infants participated (90% of enrolled parents). They were mostly of Italian nationality (86,8%) and 36% of infants were very low birth weight. The level of parent satisfaction is showed in table 1. The satisfaction resulted correlated with the general experience and the overall score that parents gave to the work of the physicians and nurses. FCCQ-R was completed by 1061 HCPs. Mean value of the subscales ranged from 2.8 to 3.1 for the daily practice (current scale) and from 3.9 to 4.4 for the perception of necessity (necessary scale) (figure 1). The parent satisfaction was associated with the level of necessity of change in FCC issues, as perceived by HCPs (table.2).

Table n.1 Parent satisfaction with FCC in Italian NICU (mean values and SD) 633 parents in 31 NICUs (parents for NICU: mean=20; SD=10.97)

	M	SD	MIN	MAX
I. INFORMATIONS	5.56	.501	2	6
I. CARE & TREATMENT	5.66	.425	3	6
I. PARENTAL PARTICIPATION	5.56	.595	1	6
I. ORGANIZATION	5.65	.432	3	6
I. PROFESSIONAL ATTITUDE	5.55	.488	3	6
1. OVERALL SATISFACTION	5.84	.411	2	6

Figure n.1. Differences between Staff members' Current practices and Necessary perceptions of FCC.

Table 2. Correlation between values of FCCQ-R¹ and EMPATHIC-N² scales

FCCQ-R SUBSCALES	EMPATHIC-N DOMAINS					
	INFORMATION	CARE & TREATMENT	PARENTAL PARTICIPATION	ORGANIZATION	PROFESSIONAL ATTITUDE	GENERAL EXPERIENCE
Family is the constant (CURRENT)	-.064	-.142	.274	.128	.180	-.264
Family is the constant (NECESSARY)	-.086	-.009	.388*	.039	.353	-.104
Parent/professional collaboration (CURRENT)	.116	.038	.331	.135	.161	-.106
Parent/professional collaboration (NECESSARY)	-.303	-.074	.238	.099	.295	.080
Recognition family individuality (CURRENT)	-.040	-.089	.159	.190	.155	.000
Recognition family individuality (NECESSARY)	-.172	-.044	.298	.068	.369*	-.112
Sharing information (CURRENT)	-.085	-.176	.169	.083	.127	-.127
Sharing information (NECESSARY)	-.306	-.181	.131	-.024	.244	-.074
Developmental needs (CURRENT)	-.177	-.294	.224	.027	.130	-.244
Developmental needs (NECESSARY)	-.173	-.014	.296	.036	.406*	-.158
Parent to parent_support (CURRENT)	.083	.068	.504**	.347	.417*	-.002
Parent to parent_support (NECESSARY)	-.039	.109	.343	.135	.462**	-.053
Emotional financial support (CURRENT)	.078	-.012	.369*	.119	.276	-.009
Emotional financial support (NECESSARY)	-.077	.010	.273	.018	.431*	.066
Design healthcare system (CURRENT)	.183	.189	.474**	.219	.240	.092
Design healthcare system (NECESSARY)	-.034	.059	.328	-.008	.363*	-.076
Emotional support for staff (CURRENT)	-.059	.062	.387*	.187	.297	.086
Emotional support for staff (NECESSARY)	-.143	.017	.246	.008	.171	.036

* p<.05, **p<.01. 1) Family Centred Care Questionnaire Revised; 2) EMpowerment of PArents in THe Intensive Care-Neonatology

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Participants at the multicenter study with affiliations:
https://it.surveymonkey.com/r/FCC_Italian_NICUs_study_group

References:
[1] Institute for Patient-and Family-Centered Care, n.d. What is PFCC? [WWW Document]. URL <http://www.ipfcc.org/about/pfcc.html> (accessed 2.3.18).
[2] Dall'Oglio, I., Fiori, M., Tiozzo, E., Mascolo, R., Portanova, A., Gawronski, O., ... & Latour JM. Neonatal intensive care parent satisfaction: a multicenter study translating and validating the Italian EMPATHIC-N questionnaire. Italian journal of paediatrics. 2018;44(1): 5.
[3] Latour, J. M., Duivenvoorden, H. J., Hazelzet, J. A., & van Goudoever, J. B. Development and validation of a neonatal intensive care parent satisfaction instrument. Pediatric Critical Care Medicine. 2012;13(5): 554-559.
[4] Dall'Oglio, I., Mascolo, R., Gawronski, O., Tiozzo, E., Portanova, A., Ragni, A., ... & Latour, J. M. A systematic review of instruments for assessing parent satisfaction with family-centred care in neonatal intensive care units. Acta Paediatrica. 2018;107(3):391-402.
[5] Bruce, B., & Ritchie, J. Nurses' practices and perceptions of family-centered care. Journal of Pediatric Nursing: Nursing Care of Children and Families. 1997;12(4):214-222.
[6] Dall'Oglio, I., Di Furia, M., Tiozzo, E., Gawronski, O., Biagioli, V., Di Ciommo, ... & Raponi, M. Practices and Perceptions of Family Centered Care among Healthcare Providers: A Cross-sectional Study in a Pediatric Hospital. J. Pediatr. Nurs. 2018, <https://doi.org/10.1016/j.pedn.2018.07.015>