



## Presence of parents during invasive techniques in neonatology: A perspective of Spanish professionals<sup>☆</sup>

### Presencia de padres en técnicas invasivas en neonatología: perspectiva de los profesionales en España

To the editor:

Based on quality standards and recommendations for neonatal units and European standards of care for newborn health, institutions should promote and facilitate access of parents to their babies 24h a day and support their participation in newborn care, with parents becoming one of the pillars of the family-centred developmental care model.<sup>1,2</sup> In 2013, the Interterritorial Council of the National Health System of Spain, with the aim of promoting and standardising the humanization of care in neonatal intensive care units, stated that institutions should "ensure that any parent that so wishes is allowed to stay with the child 24h a day and to accompany the child during performance of painful and stressful medical procedures with the aim of reducing their anxiety, as long as it does not interfere with professional care delivery".<sup>2</sup> However, while advances have been made so that parents will no longer be mere spectators, the medical literature shows that there are barriers involving the providers when it comes to the parental presence during invasive procedures, despite evidence that it may be beneficial for parents.<sup>3-6</sup>

The aim of our study was to explore the opinions of health care professionals involved in neonatal care on the presence of parents during invasive procedures, which we defined as those requiring incision of the skin of the neonate (vascular access), introduction of an object in the airway (aspiration, intubation), cardiopulmonary resuscitation and surgery.

To this end, we conducted a prospective cross-sectional and observational study, conducting a survey between April and September 2019 based on online questionnaires submitted to the health care staff (physicians, nurses and nurse technicians) of neonatal units in Spain. The questionnaire asked about the participation of family members in newborn care and the opinions of health professionals on this subject. We distributed the questionnaire through the social networks of the blog *Cuidando neonatos* and the Sociedad Española de Neonatología (Spanish Society of Neonatology, SENeo), and therefore we calculated the sample size without knowing the actual size of the population, estimating that the study would need a minimum of 239 responses to the questionnaire (anticipating losses of 15%). We exceeded this estimate, as we received 650 responses, on which we based the study and its conclusions. We performed the statistical analysis with the software SPSS 20.0.

**Table 2** Results of the nationwide survey on the presence of family members during invasive procedures in the neonatal care units.

Results of the survey	
<i>Participation of family in care delivery</i>	650 (100%)
Kangaroo care	81 (12.50%)
Holding during invasive procedures	2 (0.30%)
Newborn cleaning and feeding	34 (5.20%)
All of the above	533 (82%)
<i>Perceptions of health care providers of how parental presence may impact their performance in care delivery</i>	441 (100%)
Aseptic technique	19 (4.31%)
Increases stress, makes procedure more difficult	160 (36.28%)
Affects concentration, increases the risk of errors	101 (22.90%)
All of the above	161 (36.51%)
<i>Perceptions of health care providers of how parental presence during invasive techniques may affect the parents</i>	558 (100%)
Increases anxiety	39 (6.99%)
Causes stress	30 (5.38%)
Engenders mistrust	54 (9.68%)
All of the above	435 (77.96%)

Source: in house.

Of the total of 650 responses, 66% had been submitted by nurses, 23% by paediatricians and 11% by nurse technicians. When it came to their experience in neonatal care, 66.8% of respondents reported having worked in this setting for more than 5 years. Table 1 presents the results of the study comparing the different professional categories, suggesting that the highest proportion of providers that felt concern about the presence of parents during invasive techniques corresponded to the nurses, independently of the years of experience, and decreasing only in those with more than 5 years' experience. Although 93% of respondents worked in neonatal units open to the family around the clock, only 45% reported the presence of parents during invasive procedures. In addition, 86.3% of respondents considered that parental presence during these procedures could affect the parents, 68.4% that it could affect the neonates, and 64.8% that it could affect health care professionals. When it came to participation of parents, 98.2% reported parental involvement in caregiving (Table 2).

In response to the open-ended question about the improvement that could be made to facilitate active involvement of parents in caregiving and during invasive procedures, the respondents agreed on aspects such as the training and motivation of professionals, the empowerment of the caregiver and the development of guidelines for parents. They stressed the importance of raising awareness among hospital administrators and society to ensure adequate patient-staff ratios, making spaces suitable for family-centred care and having individual rooms available

☆ Please cite this article as: Solaz-García A, Mocholí-Tomás MDL, Vidal LP, Tarvé CD, Navarret RR. Presencia de padres en técnicas invasivas en neonatología: perspectiva de los profesionales en España. An Pediatr (Barc). 2021;94:113-115.

**Table 1** Responses to questionnaire items in the nationwide survey on the presence of family members during invasive procedures in the neonatal care units.

Results	During invasive procedures: Do you feel that parents may question your clinical practices and care delivery?					
	Yes		No		P	
	n	%	n	%		
Years of experience in the Department of Neonatology	< 3 years	98	72.6	36	26.7	< .001
Professional category	3–5 years	56	72.7	21	27.3	
	> 5 years	267	62.5	160	37.5	
	Paediatrician	62	41.9	86	58.1	<
	Nurse/nurse technician	301	71.8	118	28.2	.001
		58	80.6	13	18.1	

Source: in house.

for infants and their families. Among the limitations of the study, we ought to highlight that some participants did not fill out every item of the questionnaire, and therefore some of the responses were incomplete.

In conclusion, our findings show that while most neonatal units in Spain have an open-door policy and actively involve parents in the care of the patients, health care staff still consider that the presence of parents during invasive procedures may affect care delivery with a potentially negative impact. This "presence" is a key element in the pursuit of family-centred care, so we think it is important for institutions to promote the development of protocols and training programmes to support, facilitate and ensure the integration of family members in care delivery and guide the clinical practice of their health care staff.

## Acknowledgments

We want to particularly thank the nurses and nurse technicians working shift 5 in the NICU of the Hospital Universitario y Politécnico La Fe (Valencia), who suggested the performance of this survey. We also want to acknowledge all the professionals that take care of newborn infants in neonatal units across Spain on a daily basis and that have contributed to this survey by completing the questionnaire.

## References

- Unidades de Neonatología. Estándares y Recomendaciones de Calidad. Ministerio de Sanidad Servicios Sociales e Igualdad; 2014.
- European Standards of Care for Newborn Health. <https://newborn-health-standards.org/project/about-2/>.
- Benoit B, Semenic S. Implementing the Baby-Friendly Hospital Initiative in Neonatal Intensive Care Units. JOGNN. 2014;43(5):614–24.

- O'Brien K, Bracht M, Macdonell K, et al. A pilot cohort analytic study of Family Integrated Care in a Canadian neonatal intensive care unit. BMC Pregnancy Childbirth. 2013;13:S12.
- Lee SK, O'Brien K. Parents as primary caregivers in the neonatal intensive care unit. CMAJ Can Med Assoc J J Assoc Medicale Can. 2014;186(11):845–7.
- Power N, Franck L. Parent participation in the care of hospitalized children: a systematic review. Journal of Advanced Nursing. 2008;62(6):622–41.

Álvaro Solaz-García <sup>a,\*</sup>,  
María Dolores Lorena Mocholí-Tomás <sup>b</sup>,  
Lola Pérez Vidal <sup>b</sup>, Cristina Durá Tarvés <sup>b</sup>,  
Rosario Ros Navarrete <sup>c</sup>

<sup>a</sup> Grupo Investigación en Perinatología, Instituto de Investigación Sanitaria La Fe, Hospital Universitario y Politécnico La Fe, Valencia, Spain

<sup>b</sup> Unidad de Cuidados Intensivos Neonatales, Servicio de Neonatología, Hospital Universitario y Politécnico La Fe, Valencia, Spain

<sup>c</sup> Área del Niño, Hospital Universitario y Politécnico La Fe, Valencia, Spain

\* Corresponding author.

E-mail address: [alvarosogar@gmail.com](mailto:alvarosogar@gmail.com) (Á. Solaz-García).

12 November 2019 12 February 2020

<https://doi.org/10.1016/j.anpede.2020.02.013>  
2341-2879/ © 2020 Asociación Española de Pediatría. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).