Table 2 Breastfeeding support measures, comparison of neonatal intensive care units that participated in 2018 based on BFHI accreditation phase.

BF support measures	At any phase of BFHI accreditation ($n = 29$)	No phase of BFHI accreditation ($n = 36$)	*P*
Training of staff on BF	26 (90%)	22 (61%)	.0098
Antenatal education of hospitalised pregnant women	17 (59%)	15 (42%)	.1775
Initiation of breast milk pumping (<6 hours)	25 (86%)	31 (86%)	.9912
Initiation of enteral feeding (<6 hours)	15 (52%)	12 (33%)	.1378
Protocol for handling of human milk	27 (93%)	27 (75%)	.0549
Freezers in NICU	25 (86%)	32 (89%)	.7454

BF, breastfeeding; BFHI, baby-friendly hospital initiative; NICU, neonatal intensive care unit.

In short, our study, of a national scope, detected significant changes through time. It also identified opportunities for improvement that could help prioritise the particular needs of Spanish NICUs as regards BF support.

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Evaluation of training in emergency medicine of paediatric residents in Spain☆

Evaluación de la formación en urgencias por parte de los médicos internos residentes de pediatría en España

Dear Editor:

In Spain, children and their families make frequent use of paediatric emergency departments (PEDs).[1,2] The Sociedad Española de Urgencias de Pediatría (Spanish Society of Paediatric Emergency Medicine, SEUP) promotes excellence in education in emergency care, demanding that the acquisition of certain competencies and skills by paediatricians-in-training (medical intern-resident programme, MIR) to be guaranteed. In 2012, the SEUP developed an educational curriculum and established training in the context of the MIR as a strategic plan. In 2015, the Research Network of the SEUP approved the performance of a study to assess the training in emergency care received by paediatrics MIR residents in Spain. The primary objective of the study was to analyse the training in emergency care received by paediatrics residents, and the secondary objective was to identify factors associated with an increased satisfaction of MIR residents with the training received.

In the second semester of 2016, we conducted a cross-sectional observational study approved by the Ethics Committee of the Valladolid Oeste Health Area based on survey data obtained through submission of one online questionnaire to the heads of the PEDs and submission of another questionnaire to the paediatrics residents of hospitals members of the SEUP offering MIR residency programmes in paediatrics. We analysed the training received

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Table 1 Level of supervision reported by the heads of the paediatric emergency departments and the medical residents (all residents provided information about the level of supervision in each of the 4 years of residency).

	Year 1		Year 2		Year 3		Year 4	
	Head of PED	MIR residents	Head of PED	MIR residents	Head of PED	MIR residents	Head of PED	MIR residents
Direct bedside supervision for *all* patients	7 (30.4%)	12 (6.1%)	0 (0%)	0 (0%)	0 (0%)	1 (1.0%)	0 (0%)	1 (0.5%)
Direct bedside supervision for *some* patients and review of *all* discharge summaries	13 (56.5%)	122 (61.6%)	3 (13.6%)	11 (5.6%)	0 (0%)	7 (3.5%)	0 (0%)	7 (3.5%)
Direct bedside supervision for *some* patients and review of *some* discharge summaries	0 (0%)	2 (1.0%)	4 (18.2%)	10 (5.1%)	4 (18.2%)	7 (3.5%)	2 (9.1%)	6 (3.0%)
Review of *all* discharge summaries *with no* direct bedside supervision for *any* of the patients	1 (4.4%)	15 (7.6%)	4 (18.2%)	5 (2.5%)	1 (4.6%)	5 (2.5%)	1 (4.6%)	2 (1.0%)
Review of some discharge summaries *with no* direct bedside supervision for *any* of the patients	0 (0%)	13 (6.6%)	0 (0%)	169 (85.4%)	17 (77.3%)	171 (86.4%)	19 (86.4%)	174 (87.9%)
Available for consultation, with no direct bedside supervision	2 (8.7%)	34 (17.2%)	11 (50%)	3 (1.5%)	0 (0%)	4 (2.0%)	0 (0%)	3 (1.5%)
No supervision	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.5%)	0 (0%)	2 (1.0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1.0%)	0 (0%)	3 (0.5%)
Kappa statistic (95% CI)	0.048 (−0.047—0.144)		0.036 (0.003—0.068)		0.176 (0.083—0.268)		0.293 (0.155—0.431)	

Data expressed as *n* (%).
Kappa statistic for the comparison of the answers of department heads and the medical interns, 0.275 (95% CI, 0.237—0.314), with a significant increase with each year of residency.
CI, confidence interval; IQR, interquartile range; PED, paediatric emergency department.

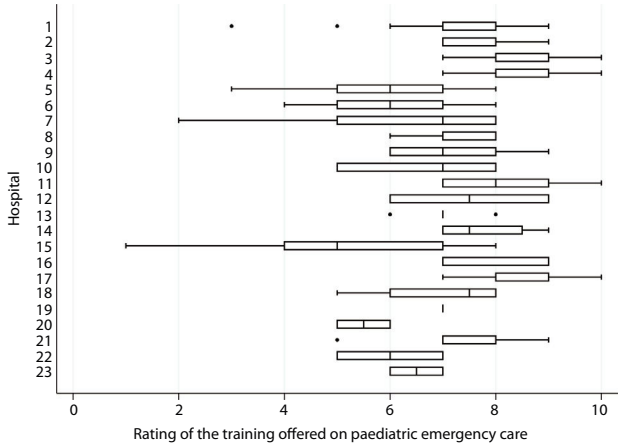

Figure 1 Rating of the training offered in the paediatric emergency department in each hospital.
The training was rated from 0 to 10, with 0 indicating the lowest satisfaction and 10 the highest. The left and right sides of the boxes correspond to the 25th (P25) and 75th (P75) percentiles and the central line represents median. The left whisker indicates the lowest value in the interval P25−1.5 × IQR. The right whisker indicates the highest value in the interval P75 + 1.5 × IQR.

on the subject of emergency care, both during the rotation in the emergency department and in the after-hours urgent primary care setting. We included in the analysis those hospitals for which we received responses from at least 33% of the paediatrics residents. We performed a multivariate analysis to identify the variables associated with greater satisfaction in residents.

We included the responses of the heads of 23 PEDs and 198 MIR residents in those hospitals (year 2, 32.3%; year 3, 37.4%; year 4, 30.3%). Of the 23 department heads, 6 (26.1%) reported that their department had a designated staff member responsible for managing the training programme, 12 (52.2%) that it used quality indicators (QI) to assess the quality of training, and 17 (73.9%) that it had an established training curriculum, while 20 departments (86.9%) performed some form of evaluation of the residents' clinical work. In the PEDs where the department head answered each of these questions in the affirmative, 28.7% of the residents were unaware that there was a designated staff member in charge of training, 70.6% were unaware of the existence of QIs, 42.3% believed there was no established curriculum and 14.8% reported that their performance was not evaluated in any way, respectively. Table 1 shows the level of supervision of the clinical work of MIR residents in participating PEDs. In rating their satisfaction with the training received, the median score given by residents was 7 out of 10 (IQR, 7–8; interhospital range, 5–9) (Fig. 1). Direct supervision at the bedside of the clinical work of the resident (ß: −4.01; 95% CI, −6.75 to −1.27) and awareness of the application of training QIs (ß: 0.9; 95% CI, 0.37 a 1.44) were independently associated with a greater satisfaction of MIR residents with the training received.

In Spain, the training in emergency care of residents in paediatrics is very heterogeneous, and we identified significant areas for improvement. Among the most important are that few PEDs had a designated staff member in charge of the training programme to put forward educational activities to promote the acquisition of skills and competencies specific to emergency care.[3] Furthermore, approximately half of the PEDs did not use QIs to assess training outcomes. On the other hand, the level of supervision offered to residents decreased progressively throughout the residency programme, but not as gradually as would be expected. The association of the level of supervision with the greater satisfaction of MIR residents with their training highlights the importance of bedside teaching. Nevertheless, the residents reported considerable satisfaction with the training received, possibly because they appreciate the efforts devoted to its improvement, such as the educational curriculum developed by the SEUP and accepted and adapted by most of the PEDs affiliated to the society, and because most PEDs carried out some form of evaluation of the performance of the MIR residents. However, it is also important to consider the significant variation between departments in the level of satisfaction of the residents, and the fact that a sizeable percentage of the residents were not aware of the existence of a training curriculum, the specific staff member in charge of training or the use of QIs. There are several limitations to our study. We did not get a response from the head of every PED affiliated to the SEUP, which may have resulted in overrepresentation in the survey of departments with a greater interest in training. Furthermore, not all PEDs of hospitals offering residencies in paediatrics are affiliated to the SEUP, which ought to be taking into account on extrapolating our findings to other emergency departments. However, we believe that the areas in need of improvement identified in our study may be applicable to most PEDs in Spain.

The training received by Spanish MIR residents is widely heterogeneous and we identified several areas that could be significantly improved. The SEUP and the different PEDs should take these findings into account to develop strategies aimed at standardising and improving residency training.

Appendix A.

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All of them submitted the initial questionnaire and collected data for the study in their respective hospitals.

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Clinical features and origin of cases of parotiditis in an emergency department☆

Caracterización clínica y etiológica de los casos de parotiditis en un servicio de urgencias

To the editor:

The mumps virus (MuV), or *Myxovirus parotiditis*, continues to cause sporadic cases and outbreaks of disease. This is associated to the progressive waning of immunity against the mumps component of the measles, mumps, rubella (MMR) vaccine in absence of a natural booster (especially from 10 years after administration of the second dose), the use in the 1993–1999 period of a vaccine that had the Rubini strain, which proved to be less effective, and the presence of pockets of unvaccinated people in the population.[1] In Spain, 10 260 cases were notified in 2017 and 8996 in 2018, a significant increase compared to previous seasons.[2]

Some of the infectious agents other than MuV that may be involved in parotitis as a general clinical presentation include influenza A virus, parainfluenza virus, Epstein-Barr virus (EBV), adenovirus, coxsackievirus, cytomegalovirus (CMV), parvovirus B19, herpesvirus and lymphocytic choriomeningitis virus, as well as gram-positive bacteria, atypical mycobacteria and *Bartonella* species.[3–5] In the paediatric population, these pathogens are probably more frequent causative agents compared to MuV. This, combined with the benign course of most presentations, leads many paediatric health care facilities to make the diagnosis without an aetiological investigation. The aim of our study was to establish the viruses involved in cases of parotitis in our area.

We carried out a retrospective study through the collection of data corresponding to 2 full years (2016 and 2017), including all patients given a diagnosis of parotitis (with swelling of the parotid glands being a requirement for inclusion) in the paediatric emergency department of a tertiary care hospital in Barcelona that manages patients up to age 16 years and based on diagnostic judgment of the paediatrician in charge of the patient. Per hospital protocol, polymerase chain reaction (PCR) tests for detection of MuV in saliva and urine samples were performed in patients with parotitis. Serologic tests were added if blood tests were requested by the paediatrician in charge based on his or her clinical judgment. When it came to serologic testing, in case of negative results of the test for detection of MuV in saliva, molecular methods were used for detection of influenza A and B virus, respiratory syncytial virus A/B, adenovirus, metapneumovirus, coronavirus nl63/OC43/229E, enterovirus, rhinovirus, parainfluenza virus, EBV and CMV. Mump viruses were characterised by partial sequencing of the small hydrophobic (SH) gene.

We identified 169 cases of symptomatic acute parotitis (0.21% or paediatric emergency visits). The median age of the patients was 7.7 years (range, 11 months-16.8 years).

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