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School Nursing Practice in Education settings in Spain

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SCHOOL NURSING PRACTICE IN EDUCATION SETTINGS IN SPAIN

Abstract

School nurses and pediatric nurses play vital roles in providing healthcare for children and adolescents in educational and healthcare settings. School nurses operate within educational institutions, serving as caregivers and facilitating communication between the school, families, and the healthcare system. These professionals closely collaborate with pediatric nurses. The primary objective of this study was to examine the state of school nursing in Spain. The research comprised 27 nurses, including 18 school nurses and 9 pediatric nurses, chosen through theoretical sampling. These nurses participated in in-depth interviews as part of the data collection process. Grounded theory, following Charmaz's process, was employed for data analysis. The findings underscore the nurses' call for their mandated presence and regulation in all Spanish educational institutions to address contemporary health challenges and ensure inclusive education.

Keywords: child health; chronic disease; community health nurse; educational needs assessment; healthy lifestyle; grounded theory; pediatric nursing; school nursing.

INTRODUCTION

In educational settings such as Early Childhood Education, Primary Education, Compulsory Secondary Education, Baccalaureate, or Vocational Training, students aged 3 to 18 may require nursing interventions for special educational needs related to physical, emotional, or social health, highlighting the need for constant nursing support during the school day (Álvarez et al., 2018). Despite the recognition of various nursing specialties by the Spanish Royal Decree 450/2005, school nursing is not officially accepted as a specialty, unlike pediatric nursing, which is practiced in healthcare settings (Arrue-Gerra et al., 2023). The National Association of School Nurses (NASN) highlights the role of

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2
3 the school nurse in safeguarding students' health, fostering development, and promoting
4 academic success (McDermott et al., 2018; McCabe et al., 2019). The Madrid Association
5 of Nursing in Educational Centers (AMECE, 2010) underscores the necessity for school
6 nurses to be proficient in pediatric and family/community nursing, stressing
7 comprehensive care provision and effective communication with students, teaching staff,
8 and healthcare professionals (Ayuso et al., 2019a).

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17 School nurses play a crucial role in delivering comprehensive care to students,
18 overseeing health management within schools, and developing teaching, research, and
19 inter-professional skills. They routinely identify students with specific needs and
20 intervene early to prevent health issues from impacting academic success. Through
21 individualized assessments, they determine optimal support and appropriate educational
22 approaches (Ruiz & Ruiz, 2022). According to a Health Survey conducted by the Spanish
23 National Institute of Statistics (INE, 2022), 57,718 students aged 0 to 14 experienced
24 health problems or chronic diseases in the last year. Common conditions included chronic
25 allergies, asthma, diabetes, tumors, epilepsy, behavioral and mental disorders, and
26 permanent injuries. Approximately 15% of schoolchildren in Spain face chronic health
27 issues, highlighting the need to integrate health into schools (Rodríguez-Almagro et al.,
28 2018). The role of the school nurse is of paramount importance in caring for students with
29 chronic diseases, given the imperative to provide specialized care in evolving educational
30 settings (Lack & Kinser, 2020). Medical requirements may affect students' attendance
31 and academic performance, impacting their interactions with teachers and peers
32 (Rodríguez-Almagro et al., 2018; Yoder, 2020). Thus, nurses play a vital role in
33 developing self-management skills in students with chronic diseases throughout the
34 educational stages (Charlucien-Koech et al., 2021).

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3 The school nurse serves a vital function in improving students' well-being,
4 especially those with chronic conditions like diabetes and asthma (An et al., 2022;
5 McCabe et al., 2019). They adapt to diversity, provide consistent care, and focus on
6 anticipatory guidance (Oliveira et al., 2018). Following standardized protocols like the
7 Clinical Practice Guidelines is essential, with nurses collaborating with other health
8 professionals to develop and implement them (McCabe, 2020). Moreover, school nurses
9 facilitate family reconciliation, acknowledging the challenges families face in balancing
10 work and caring for their children (Gathercole, 2019). Their role is highly valued not only
11 by families of chronically ill children, but also by those who appreciate the safety they
12 bring to the classroom. Parents consider school nursing indispensable when enrolling
13 their children, recognizing its significance in ensuring student well-being (Martínez-
14 Santo et al., 2019).

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31 Despite the reality of students' needs, it is noteworthy that teachers, who lack
32 formal training or expertise in this domain, are often tasked with providing healthcare in
33 mainstream schools (Rodríguez-Almagro et al., 2018). Teachers highlight that the
34 training they have received falls short of preparing them to address the health needs of
35 the student population, both healthy minors and those with illnesses (Pestaner et al.,
36 2022). In the study conducted by Rodríguez-Almagro et al. (2018), it was emphasized
37 that 56.6% of teachers expressed concerns regarding the well-being of students suffering
38 from chronic diseases. Furthermore, it was observed that over half of these educators had
39 not undergone any health training and deemed the presence of a school nurse in
40 educational institutions as crucial. According to the teachers, more than 60% of students
41 had encountered dizziness and trauma necessitating health care intervention (Rodríguez-
42 Almagro et al., 2018). Additionally, in Lack and Kinser, (2020) study, teachers revealed
43 instances of students with chronic health issues in their classrooms. The primary
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3 apprehensions voiced by teachers included assuming additional responsibilities and
4 concerns about causing harm to students (Gathercole, 2019). Teachers are ill-equipped to
5 handle technical responsibilities such as medication preparation and administration, and
6 they lack the expertise to address students' day-to-day health needs (Pestaner et al., 2022).
7
8 Students with chronic illnesses require the attention of qualified professionals capable of
9 assessing, monitoring, and treating their health conditions (Gathercole, 2019). It is
10 recommended that nurses take on the task of educating teachers and students on health-
11 related topics, encompassing wound care, vaccination, first aid, mental health, substance
12 abuse, sex education, and dietary habits (Charlucien-Koech et al., 2021).
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17 Health Education (HE) emerges as a strategy for improving students' lifestyles by
18 fostering a school environment dedicated to promoting healthy habits (McCabe, 2020;
19 Gathercole, 2019). This approach contributes to students and families adopting and
20 managing healthy habits within educational settings, and establishing vital connections
21 among the health system, educational institutions, and minors' environments throughout
22 their schooling (Rodríguez-Almagro et al., 2018). According to the World Health
23 Organization (WHO, 2023) and the Spanish Youth Institute (INJUVE, 2019), there has
24 been an increase in health problems among young people, affecting their quality of life.
25 These problems include accidents leading to disabilities, violence, mental health
26 disorders, substance abuse, sexually transmitted diseases, unplanned pregnancies,
27 nutritional deficiencies, and lack of physical activity (INJUVE, 2019). Despite the
28 significance of these findings, resources in Spain are not adequately allocated to instill
29 healthy habits addressing societal health problems. Studies in Spain, such as those by
30 Arrue-Gerra et al. (2022), Martínez-Santo et al. (2019), and Rodríguez-Almagro et al.
31 (2018), underscore the necessity of teaching these healthy habits and starting them early,
32 utilizing active methodologies that connect educational centers with the community and
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3 the health system, rather than relying solely on theoretical seminars (Hopkinson & Petty,
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5 2022).
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8 Despite efforts to incorporate HE across various subjects, the transversal approach
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10 has proven ineffective in delivering comprehensive training and promoting healthy
11
12 practices (Arrue-Gerra et al., 2022). The primary challenges arise because these
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14 interventions are sporadic, are isolated from other curriculum elements, are perceived by
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16 teachers as irrelevant to the curriculum, face constraints of time and resources for
17
18 effective instruction, and are often facilitated by unqualified professionals (Martínez-
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20 Santo et al., 2019; Rodríguez-Almagro et al., 2018). INJUVE (2019) reports that 50% of
21
22 STI diagnoses occur in individuals aged 15 to 24, with high rates of gonorrhea,
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24 chlamydia, and HIV. Additionally, 300,000 youths suffer from eating disorders starting
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26 before age 14. Globally, 1 in 6 adolescents aged 10-19 is overweight, while over a quarter
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28 of 15–19-year-olds engage in heavy episodic drinking, and 4.7% of 15–16-year-olds use
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30 cannabis (WHO, 2023). Currently, attention to mental health, particularly self-esteem and
31
32 affective relationships, is crucial for emotional well-being (Macyko, 2022). WHO (2023)
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34 notes that over half of adult mental health issues begin around age 14. Efforts should
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36 focus on comprehensive, integrated HE programs to address these multifaceted health
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38 challenges effectively. In Spain, while various regional initiatives exist, there is no
39
40 permanent regulation established requiring HE in educational centers, except for special
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42 education needs centers where students require more acute healthcare akin to nursing
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44 homes (Ayuso et al., 2019a). In contrast, school nursing has been firmly institutionalized
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46 in several Eurozone countries for over 50 years, contributing significantly to enhanced
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48 school health plans (Martínez-Santo et al., 2019).
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56 The overarching objective of the study was to assess the state of school and
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58 pediatric nursing in Spain. The specific objectives were: (1) to investigate the views of
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3 school and pediatric nurses regarding their abilities and responsibilities; and (2) to gain
4 insight into the healthcare services offered by school nurses within educational settings.

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7 The research inquiries formulated were: What is the present state of school nursing in
8 Spain? What healthcare services are available to minors within educational institutions?
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10 How are the educational and healthcare requirements of children and adolescents
11 addressed within the educational setting? What kind of care do students receive within
12 educational facilities throughout the school day?
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19 **METHODOLOGY**

20 **Research design**

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22 The chosen design is rooted in the constructivist approach of grounded theory
23 (Charmaz, 2005, 2006). According to this methodology, individuals actively shape both
24 the phenomenon under investigation and the research process through their actions.
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26 Additionally, the design acknowledges the impact of historical, social, and situational
27 conditions on these actions, along with the researcher's active involvement in data
28 collection and analysis (Charmaz et al., 2018).
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37 **Participants**

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39 Interviews were conducted with 27 Spanish nurses utilizing "Theoretical
40 Sampling" in alignment with the research's objectives. The inclusion criteria were defined
41 as school and pediatric nurses. This selection was guided by the observed variation in the
42 presence of school nurses across various autonomous communities (CGE, 2021).
43
44 Furthermore, participants were required to be actively engaged in Spain and involved in
45 the social and health care of minors during the data collection phase. To ensure
46 confidentiality, an alphanumeric code replaced the names of all participants. It was crucial
47 to assess the clinical experience of nurses in caring for minors across various professional
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3 roles to comprehend their caregiving responsibilities and their interactions with the
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5 educational team.
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7 8 **Procedure** 9

10 After receiving an affirmative report from the Ethics Committee of the University
11 of Burgos (No. 071/2020), the authors gathered data through in-depth interviews. These
12 interviews were facilitated by an online recruitment advertisement posted on the Official
13 College of Nursing and the bulletin board of the Madrid Association of Nursing in
14 Educational Centers (AMECE) from October 2022 to October 2023. The interviews took
15 place at participants' chosen times, utilizing Microsoft Teams or Zoom, with a preference
16 for written communication and face-to-face interactions when feasible. Conducting direct
17 interviews enhances communication with the interviewee. Nevertheless, considering the
18 context and the convenience of providing interviewees with greater temporal flexibility
19 through written responses, we have opted, based on the preference of the majority of
20 participants (Amri et al., 2021), to carry out a combination of written and oral interviews.
21 While this written data collection method has limitations in capturing nonverbal and
22 paralinguistic cues, these drawbacks will be offset by the benefits of spoken interviews
23 (Gül et al., 2022).
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42 Participants provided consent for audio recording during interviews. We
43 employed semi-structured, open-ended questions aligned with existing literature
44 (Martínez-Santos et al., 2019; Oliveira et al., 2018; Rodríguez-Almagro et al., 2018). An
45 interview guide was crafted to assess the present state of Spanish school nursing. This
46 guide encompassed the following sections: 1) Demographic information; 2) Regulations
47 and work competencies of school nurses; 3) Professional performance in the school
48 context; and 4) Professional recognition and obstacles. Field notes were meticulously
49 recorded throughout the interviews. The duration of the interviews ranged from 45 - 70
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3 minutes. Data were collected until theoretical saturation was reached, indicating that no
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5 new categories or themes emerged. According to Hennink and Kaiser's (2021) research,
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7 thematic saturation is typically achieved with 9 to 17 interviews. In our study, saturation
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9 occurred within the first 14 interviews with the foundational elements for the categories
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11 evident by the tenth interview. However, additional cases were examined to enhance the
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13 development of concepts and theoretical propositions. One of the authors transcribed the
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15 recordings, and the other two authors cross-checked them with the transcripts.
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19 **Data analysis**

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21 The data were analyzed by three authors who are university lecturers with diverse
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23 educational backgrounds, specializing in nursing, therapeutic pedagogy, and social
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25 education. The intention was that the qualifications and experiences of the researchers
26
27 would enhance communication with the nurses and contribute to enriching the data
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29 analysis process (Gül et al., 2022). The data analysis method comprised three stages:
30
31 initiation, focus, and theory, as outlined by Charmaz (2006, 2008, 2017) and Charmaz
32
33 and Thornberg (2021). In the first phase, the researchers formulated an initial coding
34
35 framework through reflection on the collected dataset. The data underwent analysis, with
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37 a focus on identifying similarities and differences. The coding process involved capturing
38
39 the first concept that surfaced during the procedure, continuously comparing it with the
40
41 posed questions, and scrutinizing how it was expressed, by whom, and for what reasons.
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43 In the second phase, we established categories based on the most significant codes
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45 identified in the initial stage (Charmaz, 2006, 2017). Subsequently, during the final stage,
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47 codes were conceptualized, and themes were derived through continuous comparisons of
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49 codes, categories, and data annotations (Charmaz & Thornberg, 2021). The primary focus
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51 of this analysis centered on the role played by nurses in juvenile care within school
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53 settings, contributing significantly to the enhancement of the health of young individuals
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3 throughout their academic years. Upon identifying the final four themes, rigorous reviews
4 were conducted, and the researchers collaborated to define, name, and reach a consensus,
5 striving to uphold criteria such as credibility, originality, resonance, and usefulness
6 (Charmaz, 2005, 2006).
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10 11 12 **RESULTS**

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14 To enhance the diversity of participant experiences and enrich the data, the sample
15 comprised 18 school nurses and 9 pediatric nurses from distinct autonomous communities
16 in Spain. The mean age of participants was 39.6 years, with an average of 8.3 years of
17 work experience in the care of minors (refer to Tables 1 and 2).
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24 During the interviews with school nurses (SN) and pediatric nurses (PN), the
25 following topics were addressed: 1) professional profile; 2) intervention with families and
26 students; 3) professional recognition and assessment; 4) facilitators and obstacles to
27 implementing nursing practices in educational centers. The research objectives and
28 questions posed were successfully addressed, and the main results are subsequently
29 presented. To access the Spanish translations, please refer to the supplementary materials.
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37 38 **Professional Profile: Types of Functions and Competencies - Educational,** 39 40 **Guidance, Health, and Healthy Practices.**

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42 All school nurses unanimously acknowledge their responsibility for various types
43 of care within educational institutions. The primary functions they reported undertaking
44 included assistance, management, research, food control, health education, and the
45 monitoring of students, with a particular focus on those with chronic diseases. They strive
46 to deliver comprehensive and individualized care, consistent with the inclusion principle:
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54 *“There are various functions to oversee, notably the management of allergic*
55 *children, a demographic that is particularly prevalent in the realm of cooking and,*
56 *dietary considerations. Responsibilities encompass monitoring prescribed medications*
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3 *and, emergency medication for children undergoing chronic treatment. Your role extends*
4 *to health education and conducting workshops focused on nutritional labeling. I provide*
5 *direct assistance to children who come in when they are unwell, and I also manage the*
6 *care of chronic patients. I engage in conversations with families, coordinating support*
7 *for chronic patients to promote their maximum self-care and independence while at*
8 *school. Together with families, we ensure that the child does not perceive themselves*
9 *solely as a chronic patient, but rather as an integral part of the school community” (SN).*

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19 Families and teachers lack knowledge regarding the nurse competencies:

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21 *“It's regrettable that the broader public is unaware of the valuable contributions*
22 *made by nurses, and I'm not referring solely to school nurses. The dearth of awareness*
23 *results in schools placing greater emphasis on directives from public authorities rather*
24 *than heeding the expertise offered by the nurses working with institutions” (SN).*

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30 Pediatric nurses provide care for infants and children from the newborn stage
31 through adolescence or puberty, up to the age of 16 years.

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35 *“We oversee health check-ups for well children. During these examinations, we*
36 *conduct weight and height measurements to ensure proper growth. Additionally, for*
37 *younger children, we provide health education to parents, and as the children mature, we*
38 *extend this education directly to them. Not only do we focus on preventing illness, but we*
39 *also prioritize health promotion, proper nutrition, cultivating healthy lifestyle habits,*
40 *accident prevention, mitigating digital technology addictions, promoting oral health, and*
41 *preventing obesity. Additionally, our clinic provides comprehensive sex education from*
42 *a young age, fostering awareness that empowers individuals to understand and take*
43 *ownership of their bodies. Furthermore, we implement a program dedicated to identifying*
44 *and addressing child abuse or mistreatment. Our services extend to emergency care and*
45 *pathology, collaborating closely with pediatricians” (PN).*

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3 Regarding to the legal regulations governing the profession, a school nurse
4 elucidated the challenges involved in coordinating efforts among the relevant Ministries
5 involved in this healthcare, including the Ministry of Health, Ministry of Education and
6 Vocational Training, Ministry of Social Rights and Agenda 2030, Ministry of Inclusion,
7 Social Security and Migration, and the Ministry of Equality. The uncertainty of
8 employment within the sector, as emphasized by school nurses, amplifies feelings of
9 being undervalued and unsupported by relevant entities. Additionally, a school nurse
10 pointed out that school nurses are present during students' school hours, providing crucial
11 support for their academic performance. According to a school nurse, in the past,
12 community and pediatric nurses attended to children with chronic illnesses, but their
13 services were limited to Health Centers and homes.
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28 *"Prior to the existence of nurses, children who were seriously ill died earlier and*
29 *died at home. Nobody considered that they had the right to attend a school"* (SN).
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33 Interviewed nurses stressed the need for regulations defining pediatric school
34 nurse's duties as primary healthcare provider.
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37 *"The presence of a pediatric school nurse is essential, as they have much to*
38 *contribute to every school. Currently, however, such a role does not exist. Right now,*
39 *since the school nurse does not exist as such, if a school nurse had to go to the school to*
40 *visit a child, the nurse assigned to that child would go. The figure of the school nurse*
41 *would be very important, the children with pathologies would be better attended and the*
42 *teachers would not find themselves in the situation of assuming responsibilities that are*
43 *not theirs. Finally, we take care of pediatric children who require intermediate or*
44 *intensive care. My duties do not fall under those of a school nurse"* (PN)
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3 *“Another obstacle is that we are not covered at the legal level and of course if we*
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5 *do not do them so that nothing happens to us, then we do nothing. This is unregulated*
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7 *and it is a disaster” (SN).*
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10 **Intervention with families and learners: Individually or in groups.**

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12 Frequent and seamless communication is maintained with families. Pediatric and
13
14 school nurses are aligned on the need for exemplary communication and coordination.
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16 The school nurse is highly regarded by family members within educational settings,
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18 fostering a relationship of trust. The physical presence of school nurses within the center
19
20 enhances accessibility for families, allowing for proposed interventions that are deemed
21
22 beneficial for students. Conversely, pediatric nurses offer individualized care, addressing
23
24 specific cases during consultations at health centers. Group interventions led by pediatric
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26 nurses typically arise from center requests rather than direct appeals from family
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28 members.
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33 *“I have successfully forged strong connections with those families, a bond rooted*
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35 *in utmost trust. I firmly believe that establishing such trust is the key to ensuring parents'*
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37 *peace of mind and, in turn, imparting that sense of security to their children. Yes, I*
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39 *actively engage in the school for mothers and fathers whenever they request my*
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41 *involvement. Additionally, when it becomes essential to address a significant topic on an*
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43 *individual basis, I arrange meetings with the families alongside the tutor. I am also*
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45 *responsible for creating informative guides for specific scenarios, such as dealing with*
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47 *obesity or providing guidance on nail care. I collaborate with them comprehensively,*
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49 *assisting to enhance the well-being of their children” (SN).*
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53 *“Typically, children with chronic conditions necessitate specialized care*
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55 *administered by their parents. When admitted to my unit, they often find themselves in*
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57 *situations requiring either intensive or palliative comfort care. Our usual approach*
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3 *involves collaborative teamwork with the parents, providing guidance, and*
4 *accommodating their preferences, while also respecting their routines and habits” (PN).*
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8 Pediatric nurses emphasize that their responsibilities encompass therapeutic
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10 treatments administered in clinical settings. These treatments, which may be deemed
11
12 invasive and non-ambulatory, could necessitate the hospitalization of children. Such
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14 interventions can heighten the complexity of decision-making regarding the child's health
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16 in relation to the severity of their condition, as highlighted by a pediatric nurse.
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18 Consequently, these challenges may impede the bonds with family members.
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21 *“Indeed, we acknowledge that there are times when others associate us with*
22 *unpleasant situations and may not agree with our approach” (PN).*
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26 The school nurses affirm that their presence and intervention provide reassurance
27
28 to family members, as they themselves convey. Moreover, school nurses elaborate on the
29
30 enduring nature of care, emphasizing that therapeutic treatment can evolve into a
31
32 prolonged relationship throughout the entire school stage. The responsibilities of the
33
34 school nurse are consistently oriented within the educational center, encompassing
35
36 preventive measures, the promotion of healthy habits, emergency care, and the treatment
37
38 of students requiring special attention. Should a more specialized intervention be
39
40 necessary, this professional will be responsible for referring individuals to the
41
42 corresponding specialist.
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45 *“Performing this task for the well-being of their*
46 *children is akin to the role of a teacher, instilling a sense of reassurance in them by*
47 *placing us at the forefront” (SN).*
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51 **Professional recognition and appraisal: Psychosocial risk factors and their**
52 **impact on health, specifically in relation to burnout.**
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56 School and pediatric nurses assert that both families and teachers greatly
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58 appreciate their work, particularly in supporting students with chronic diseases. However,
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3 they also highlight the absence of economic stability and professional recognition. This
4
5 issue disproportionately impacts school nurses compared to pediatric nurses. This is
6
7 because the field of pediatrics enjoys recognition among nursing specialties, while school
8
9 nursing lacks similar acknowledgment (Pediatric nurses said).

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12 *“Generally, I believe that families appreciate my work in a positive manner,*
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14 *particularly those with students facing chronic illnesses, as they experience a heightened*
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16 *sense of security when their children are at school.” (SN).*

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19 In turn, school nurses, such as those designated as school nurses, emphasize the
20
21 importance of recognition from the teaching staff. In many instances, educators may lack
22
23 the knowledge on how to respond, feel uncertain, and may be unwilling to undertake
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25 nursing responsibilities within the school setting. This reluctance stems from the
26
27 perception that such tasks fall outside their professional competencies, and they may not
28
29 possess the qualifications for providing this care. Contrastingly, pediatric nurses do not
30
31 highlight the recognition from teachers, as their interactions with educators are sporadic.

32 33 **Facilitators and obstacles to implementing the nurse's work in schools**

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36 The nurses interviewed identified several key challenges, including burden of sole
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38 responsibility, time constraints, resource limitations, and legislative gaps as challenges.

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41 *“I find myself in solitude, often compelled to make life-and-death decisions due to*
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43 *the absence of a doctor or a colleague. This responsibility is immense, especially in the*
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45 *presence of individuals who lack proper hygiene and barely manage to avoid fainting*
46
47 *when witnessing an epileptic seizure. The infirmary is a room within the school; however,*
48
49 *it is not integrated or coordinated with any specific department” (SN).*

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52 *“When you wish to collaborate with them, I comprehend that coordinating the*
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54 *transportation of children entails considerable effort. However, when engaging in*
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56 *activities that involve parents and children requiring visits to the health center, I believe*
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3 *it would be more convenient to conduct within an educational center. Not only*
4 *individuals with chronic pathologies should receive education, but also others. Numerous*
5 *interventions require delivery by trained professionals" (PN).*
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10 The school nurses believe that the standardization of protocols and adherence to
11 good clinical practice guidelines in educational centers would enhance their effectiveness.
12
13 Currently, there is a lack of protocols for action, making their work challenging.
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17 *"There are currently no protocols in place within the Navarre Department of*
18 *Education or the Department of Health regarding the proper care of children with*
19 *chronic illnesses and how to effectively coordinate with teachers. This issue requires*
20 *regulatory attention" (SN)*
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26 Another aspect pointed out by pediatric and school nurses is the absence of a
27 connection between the health and education systems, which complicated access to minor
28 records. Furthermore, there is a significant disparity in resources between public and
29 private schools, with the provision of school nursing services in private centers viewed
30 as an enhancement in educational quality. However, due to the absence of regulation,
31 funding is not allocated uniformly to all educational centers.
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40 *"To underscore the significance of the school nurse in public schools, it is*
41 *noteworthy that private schools have long recognized the importance of this role" (PN).*
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45 *"We possess limited information about children with pathologies; they are*
46 *required to provide either the medical report or the vaccination schedule. [...] It is*
47 *imperative for this practice to be regulated in Spain, as it has been in place for many*
48 *years in other countries" (SN).*
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54 Pediatric and school nurses emphasized the pivotal role of nursing professionals
55 in clinical and school settings amid the COVID-19 pandemic, highlighting their
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3 importance to teachers and families. This accentuates social networks as vital for
4
5 improving accessibility, dissemination, and knowledge transfer in school nursing.
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8 *“On my Instagram, I engage in comprehensive health education, addressing*
9
10 *various pediatric subjects such as diseases, childcare, hygiene, development, nutrition,*
11
12 *and sleep. I believe I contribute significantly to health education in these areas”* (PN).
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15 *“A glaring example pertains to the past two years, wherein the monitoring of*
16
17 *adherence to COVID prevention measures has been prominent”* (SN).
18

19 **DISCUSSION**

20
21 The objective of this study was to assess the state of school and pediatric nursing
22
23 in Spain, advocating for their inclusion in all educational institutions and recommending
24
25 the establishment of regulatory measures designating them as specialized nursing roles.
26
27 The results indicate that school nurses take on health care and health-related
28
29 responsibilities within schools. These findings align with the results obtained by Arrue-
30
31 Gerra et al. (2022) and the Spanish General Nursing Council (CGE, 2021), who highlight
32
33 the diverse training profiles encompassing both general nurses and those specialized in
34
35 emergency, school, community, and pediatrics. Nonetheless, similar to our study, Álvarez
36
37 et al. (2018) and Ayuso et al. (2019a) emphasize the importance of standardizing the
38
39 professional profile of school nurses to ensure consistent care and safety for students in
40
41 educational settings. To achieve this, as suggested by Ayuso et al. (2019b), it is imperative
42
43 to establish legislation for the role of the school nurse, standardizing the training and
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45 competencies required for entry into this profession. Nurses devoted to school healthcare
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47 emphasize the existing legal gaps within their profession, as well as the disparities in
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49 recognition and allocated resources among autonomous communities.
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56 A more detailed analysis shows school nurses prioritize family interaction,
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58 enhancing student benefits. Pediatric nurses assist schools selectively, emphasizing
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3 school nurse-family engagement. The results align with other research (An et al., 2022;
4
5 Alvarez et al., 2018), indicating that school nurses primarily encounter accidents and
6
7 isolated episodes of exacerbated chronic diseases (An et al., 2022). Nevertheless, Arrue-
8
9 Gerra et al. (2022) emphasize that interventions are typically brief, resolved within the
10
11 school setting in the presence of nursing, and predominantly occur during class breaks
12
13 and recess. Furthermore, Hopkinson and Petty (2023) have demonstrated, as suggested
14
15 by the nurses interviewed in this study, that the school nurse's presence enhances the
16
17 detection of health problems. Consequently, this leads to early interventions, thereby
18
19 preventing the onset of health comorbidities, as indicated by pediatric nurses.
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24 School and pediatric nurses stress their vital roles but lament lack of state
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26 recognition and economic stability, underscoring school nursing's non-specialty status.
27
28 Gathercole (2019) and Lack & Kinser (2020) underscore that the school nurse is not only
29
30 esteemed by families and teachers, but also plays a role in alleviating stress and anxiety.
31
32 This results in a decrease in episodes of chronic diseases exacerbation, such as asthmatic
33
34 crises, and permits the children's participation in extracurricular activities. There are
35
36 aspects highly valued for family members. Consistent with the narratives of interviewed
37
38 nurses, Macyko (2023) emphasized that educational institutions supported by nurses in
39
40 addressing bereavement due to the loss of family members during the COVID-19
41
42 pandemic witnessed enhancements in both students' academic expectations and
43
44 psychological well-being. However, Yoder (2020) pointed out that the presence of nurses
45
46 is linked to reduced absenteeism and time away from class but does not necessarily
47
48 correlate with academic performance. This perspective is nuanced, considering that the
49
50 studies analyzed primarily focus on short-term academic outcomes.
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56 Numerous studies have underscored that effective communication between
57
58 teachers and school nurses enables the identification of student behaviors that may be
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2
3 indicative of underlying mental health needs. This collaborative approach also enhances
4 connectivity, thereby promoting student safety (Pestaner et al., 2022). As revealed in
5 these interviews, the role of the school nurse is evolving into that of an agent of
6 educational innovation in health-related matters. These professionals employ active
7 methodologies to impart knowledge in areas such as first aid, donation, and sexuality.
8 Their practical perspective, derived from socio-health training, contributes to the
9 development of more health-conscious societies (Martínez Santos et al., 2019).

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These findings align with previous studies conducted in the Spanish context, as indicated earlier (Arrue-Gerra et al., 2022; Ayuso et al., 2019b; Rodríguez-Almagro et al., 2018). Arrue-Gerra et al. (2022) highlights the limited opportunities for providing health education due to time constraints and insufficient support from the school team. It is noteworthy that, despite the absence of regulations in Spain concerning the role of school nurses, countries like the United States and the United Kingdom, where this practice has been established for several years, face similar challenges (An et al., 2023; Hopkinson & Petty, 2022; McDermott et al., 2023). In the process of establishing the role of the school nurse in Spain, it is imperative to consider these areas for improvement. This consideration is essential to prevent the recurrence of similar errors, thereby enabling an effective response to the challenges that may arise (Arrue-Gerra et al., 2022). Moreover, it is noted that school nurses have the potential to engage in more preventive tasks given their training and preparedness. They could play pivotal roles in facilitating the development of self-management skills during the pediatric health transition to adulthood. Nevertheless, the study by Charlucien-Koech et al. (2021) emphasizes that a significant number of school nurses fail to fulfill this function due to a lack of tools, connections with the health system, and appropriate spaces. Consequently, they often find themselves focusing on providing ad hoc emergency care.

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3 School nurses are absent in Spanish schools despite a nationwide decline in
4 healthy habits among children and adolescents (Rodríguez-Almagro et al., 2018). To
5 resolve this issue, it is imperative to enact legislation establishing permanent regulations
6 governing the presence of school nurses (Ayuso et al., 2019a). Charter and private
7 educational institutions in Spain provide school nursing services to ensure student well-
8 being and safety, a hallmark of quality that attracts families and boosts enrollment
9 (Martínez-Santo et al., 2019). The benefits from the presence of school nurses are
10 substantiated by data derived from continuous student health monitoring, which informs
11 the development of Evidence-based School programs tailored to address health
12 challenges (Ayuso et al., 2019b; Pestaner et al., 2022).

26 **IMPLICATIONS FOR PRACTICE**

28 The implications of this study carry significant consequences for nursing practices
29 in Spain, particularly regarding school and pediatric nurses. Recognizing the distinct yet
30 interdependent roles played by these professionals is crucial for optimizing healthcare
31 delivery to children and adolescents. First and foremost, there is a compelling need to
32 advocate for the mandatory presence of school nurses in all Spanish educational
33 institutions. This advocacy represents a pivotal step towards ensuring comprehensive
34 healthcare support for students, aligning with a holistic approach to well-being.
35 Moreover, the study emphasizes the importance of recognizing school nursing as a
36 specialized field. Integrating this recognition into healthcare policies and legal
37 frameworks is vital, as it validates the unique skills and responsibilities of school nurses
38 and promotes standardized practices. Collaborative efforts between school and pediatric
39 nurses are critical for effective healthcare provision. Actively fostering and supporting
40 collaboration between these two specialties, through the establishment of communication
41 channels and protocols, are essential for enhancing the continuity of care. Additionally,
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3 the study underscores the necessity for formal regulation and mandates governing the
4 practice of school nursing. Policymakers and relevant authorities should consider
5 incorporating legal frameworks that define the scope of school nursing practice, ensuring
6 clarity in roles, responsibilities, and standards. Finally, nurses and educators should
7 collaboratively address contemporary health challenges within educational settings,
8 promoting inclusive education and developing strategies that cater to diverse health
9 needs. By implementing these recommendations, the school nursing profession can
10 significantly contribute to enhancing healthcare services in educational settings in Spain.

21 **LIMITATIONS AND FUTURE STUDIES**

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24 In terms of the limitations of this study, it is essential to underscore those arising
25 from the absence of a non-random sampling procedure. It is plausible that the attitudes of
26 voluntary respondents might have been more favorable compared to those of non-
27 participants. A potential avenue for further research could involve complementing the
28 findings with longitudinal studies that elucidate the influence of nurses in the school
29 environment. This could be accomplished by tracking the progress of both healthy
30 students and those with chronic pathologies, assessing their personal development over
31 time. Additionally, it would be pertinent to replicate the study and corroborate the
32 information with input from nurses, teachers, and students who have availed themselves
33 of these services, in order to discern the evolution of their roles and the educational and
34 health impact thereof. In future studies, it would be interesting to explore the comparative
35 benefits and drawbacks of different nursing models across all countries through
36 interviews that provide valuable information about the role of school nurses.

53 **CONCLUSION**

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56 It is essential to highlight that no comparable studies have been conducted to
57 address these issues. The provided information presents a precise overview of the status
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3 of school nurses in Spain. School nurses warrant acknowledgment, appreciation, and
4 national-level regulation. Their efforts not only lead to cost savings within healthcare
5 systems but also play a pivotal role in upholding and fostering the health of the Spanish
6 school population.
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Table 1. Characteristics of school nurses (SN) interviewed.

Participants	Age	Educational Stage	Type of Center	Location	Time working in the center.
SN1	51	Special Education Needs	Public	Denia (Alicante)	14 years
SN2	33	ECE/CPI/CSE/HSB	Private	Asturias	1 year
SN3	35	ECE/CPI/CSE/HSB	Privado	La Nucía (Alicante)	2 years
SN4	47	ECE/CPI/CSE/HSB	Charter	Barcelona	22 years
SN5	28	ECE/CPI/CSE/HSB	Private	Pamplona	1 and 3 months
SN6	37	CSE	Public	Toledo	10 years
SN7	24	ECE/CPI/CSE	Charter	Barcelona	2 months
SN8	32	ECE/CPI	Private	Canarias	4 years
SN9	43	Special Education Needs	Public	Ferrol (Galicia)	14 years
SN10	30	Nursery/ECE/CPI	Public	Cataluña	2 years
SN11	55	CPI/CSE	Several educational centers (Public, Charter and Private)	Barcelona	18 years
SN12	62	Special Education Needs/ECE/CPI	Public	Palma de Mallorca (Islas Baleares)	39 years
SN13	27	ECE/CPI/CSE/HSB/VT	Public	Pedreguer (Alicante)	1 year
SN14	42	ECE/CPI	Private	Bétera (Valencia)	12 years
SN15	40	ECE/CPI/CSE/HSB	Charter	Coruña (Galicia)	2 years
SN16	40	ECE/CPI/CSE/HSB/VT	Charter	Santander	2 years
SN17	46	Special Education Needs	Public	Andorra (Teruel)	9 years
SN18	53	2 years old classroom ECE/CPI/CSE/HSB	Charter	Bilbao	10 years

* ECE: Early Childhood Education, CPI: Compulsory Primary Education, CSE: Compulsory Secondary Education, HSB: High School Baccalaureate, VT: Vocational Training

Table 2. Data from pediatric nurses (PN) interviewed.

Participants	Age	Working in	Time working
PN1	29	Health center (Burgos)	2 years
PN2	44	Health center (Burgos)	7 years
PN3	28	Hospital (Navarra)	6 years
PN4	30	Online and in-home consultation (Barcelona)	7 years
PN5	49	Health center (Burgos)	1 year
PN6	46	Health center (Benidorm, Alicante)	25 years
PN7	30	Hospital (Burgos)	2 years
PN8	44	Health center (Burgos)	1 year
PN9	46	Hospital (Burgos)	10 years

ANNEX I. SOCIODEMOGRAPHIC DATA AND INTERVIEW QUESTIONS

1. SOCIODEMOGRAPHIC DATA

Genre:

Age:

Education (Do you have any nursing specialty, do you work as a school nurse, have you completed any master's degree or expert that you consider relevant to point out):

Where and how many years have you been a nurse in childcare? Also indicate where you have practiced and where you are currently practicing (school, health center, hospital, etc.):

Observations: (If you consider any relevant detail that we have not asked you related to your education and nursing practice, you may indicate it below).

2. INTERVIEW QUESTIONS

Please answer the following questions based on your professional experience in the care of school-age children. You do not have to answer all the questions because you may consider that you have answered them in previous questions and those in smaller print are indicative of the large question they support. There are no good or bad answers, since, through these answers we intend to know the criteria of experts in school and pediatric nursing.

Question 1. What is your role as a nurse in the care of school children and in particular with students with chronic illnesses or disabilities? By roles we mean the responsibilities, duties, activities, and tasks that you perform as a school, pediatric or community pediatric nurse in your job performance.

Answer 1.

Question 2 Do you think that children who have chronic illnesses or disabilities have difficulties within the school system? To what extent can the school nurse and pediatric nurse respond to those needs? Do you think there is a relationship between the school nurse and the pediatric nurse?

Answer 2.

Question 3. Have you cared for children with DM, and can you specifically describe any case or action you have taken that you would advise families and teachers regarding the schooling of children with Diabetes Mellitus?

Answer 3.

Question 4. In the case of chronically ill children, how do you intervene with them and their families? Do you think that going to school can affect their academic performance, their relationships with others...? By intervention we refer to the

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5 actions, actions or protocols that you have followed in the performance of your nursing
6 care adapted to the care of these chronically ill children.
7

8 *Answer 4.*
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11 **Question 5. In general, do you feel professionally recognized/valued in your**
12 **workplace?** How do you think you are valued by your families? How do you think you
13 are valued by the teaching staff (early childhood, primary, secondary, etc.) and other
14 professionals (therapist, psychologist, doctor, etc.)?
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16

17 *Answer 5.*
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21 **Question 6. Can you describe any Health Education intervention or educational**
22 **program that you follow in the framework of your work?** By intervention we mean
23 actions or actions in relation to wound care management, vaccination, bandages, first aid
24 teaching, mental health education, drug use, sexual education, eating habits, training to
25 other professionals (teachers, administrative, etc.), etc. that you carry out in the school
26 center.
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28
29 *Answer 6.*
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33 **Question 7. What kind of obstacles have you encountered in your work center,**
34 **particularly with children?** Can you describe specifically any complex situation that
35 has occurred in the school center, especially with children, family members, teachers or
36 other professionals, such as problems of training, competence, negligence, coordination,
37 lack of time, etc.?
38

39 *Answer 7.*
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43 **Question 8. What would you like to highlight about the figure of the school nurse?**
44 How many nurses do you think would be necessary in schools and how do you consider
45 the existing health resources of schools?
46

47 *Answer 8.*
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51 **Question 9 Are there any further comments you would like to add?** If you consider
52 any relevant detail that we have not asked related to the work of the nurse in the school,
53 you can indicate it below:
54

55 *Answer 9.*
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58 **Thank you very much for your cooperation, we will be in touch.**
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ANEXO I. DATOS SOCIODEMOGRÁFICOS Y PREGUNTAS DE LAS ENTREVISTAS

1. DATOS SOCIODEMOGRÁFICOS

Género:

Edad:

Formación (Tiene alguna especialidad enfermera, trabaja de enfermera escolar, ha realizado algún máster o experto que considere relevante señalar):

¿Dónde y cuántos años lleva ejerciendo como enfermera en la atención de menores?
Indica también dónde los ha ejercido y dónde lo ejerce actualmente (colegio, centro de salud, hospital, etc.):

Observaciones: (Si considera algún detalle relevante que no le hayamos preguntado relacionado con su formación y ejercicio enfermera puede indicarlo a continuación).

2. PREGUNTAS DE LAS ENTREVISTAS

A continuación, responda a las siguientes preguntas teniendo en cuenta su experiencia profesional en la atención de los menores escolarizados. No tiene que responder a todas las preguntas porque a lo mejor considera que las ha respondido en preguntas anteriores y las que están en letra más pequeña son orientativas de la pregunta grande a la que apoyan. No hay respuestas buenas o malas, ya que, a través de estas respuestas pretendemos conocer el criterio de los expertos en enfermería escolar y pediátrica.

Pregunta 1. ¿Cuál es su función como enfermera en la atención de menores escolarizados y en particular con el alumnado con enfermedades crónicas o discapacidades? Por funciones nos referimos a las responsabilidades, obligaciones, actividades y tareas que realizas como enfermera escolar, pediátrica o comunitaria en pediatría en su desempeño laboral.

Respuesta 1.

Pregunta 2 ¿Cree que los niños que tienen enfermedades crónicas o discapacidades tienen dificultades dentro del sistema escolar? ¿En qué medida la enfermera escolar y pediátrica puede responder a esas necesidades? ¿Cree que hay relación entre la enfermera escolar y la enfermera pediátrica?

Respuesta 2.

Pregunta 3. ¿Ha atendido a menores con DM? ¿Puede describir específicamente algún caso o alguna actuación que haya llevado a cabo y que aconsejaría a familiares y docentes en relación con la escolarización de menores con Diabetes Mellitus?

Respuesta 3.

Pregunta 4. En el caso de los menores con enfermedad crónica ¿cómo interviene con ellos y con sus familias? ¿Usted piensa que a los niños que tienen enfermedades

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5 **crónicas el ir a la escuela les puede afectar a su rendimiento académico, a sus**
6 **relaciones con los demás...?** Por intervención nos referimos a las acciones, actuaciones
7 o protocolos que has seguido en la realización de tus cuidados enfermeros adaptados a la
8 atención de estos menores con enfermedades crónicas.
9

10 **Respuesta 4.**

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12 **Pregunta 5. En general ¿se siente reconocida/valorada profesionalmente en su centro**
13 **de trabajo?** ¿Cómo piensa que las familias le valoran? ¿Cómo piensa que el profesorado
14 (docentes de infantil, primaria, secundaria, etc.) y otros profesionales (terapeuta,
15 psicólogo, médico, etc.) le valoran?
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18 **Respuesta 5.**

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20 **Pregunta 6. ¿Puede describir alguna intervención que realice de Educación para la**
21 **Salud o programa educativo que sigas en el marco de tu trabajo?** Por intervención nos
22 referimos a las acciones o actuaciones en relación con el manejo de la cura de heridas, la
23 vacunación, los vendajes, la enseñanza de primeros auxilios, la educación en salud mental,
24 el consumo de drogas, la educación sexual, los hábitos alimentarios, la formación a otros
25 profesionales (docentes, administrativos, etc.), etc. que realices en el centro escolar.
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27

28 **Respuesta 6.**

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30 **Pregunta 7. ¿Con qué tipo de obstáculos se ha encontrado en su centro de trabajo?**
31 **¿Particularmente con los menores?** ¿Puedes describir específicamente alguna situación
32 compleja que se haya dado en el centro escolar, en especial con los menores, los
33 familiares, docentes u otros profesionales como problemas de formación, competencia,
34 negligencias, coordinación, falta de tiempo, etc.?
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37 **Respuesta 7.**

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39 **Pregunta 8. ¿Qué le gustaría destacar de la figura de la enfermera escolar?** ¿Cuántas
40 enfermeras cree que serían necesarias en los centros educativos y cómo considera los
41 recursos existentes de los centros escolares en materia de salud?
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44 **Respuesta 8.**

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46 **Pregunta 9 ¿Hay alguna observación más que quieras añadir?** Si consideras algún
47 detalle relevante que no le hayamos preguntado relacionado con la labor de la enfermera
48 en la escuela, puedes indicarlo a continuación:
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51 **Respuesta 9.**

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54 **Muchas gracias por su colaboración, estamos en contacto.**
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SUPPLEMENTARY MATERIAL

Original Spanish transcripts accompanied by English translations organized by Themes

1. Professional Profile: Types of Functions and Competencies - Educational, Guidance, Health, and Healthy Practices.

“There are various functions to oversee, notably the management of allergic children, a demographic that is particularly prevalent in the realm of cooking and dietary considerations. Responsibilities encompass monitoring prescribed medications and, emergency medication for children undergoing chronic treatment.

Your role extends to health education and conducting workshops focused on nutritional labeling” [Original Spanish Transcrip: “Hay muchas funciones: el control de niños alérgicos, que hay muchos, sobre todo en el tema de cocina, la dieta y alimentario, el control de medicación pautada, de emergencia o medicación de niños con tratamiento crónico. Llevas todo el tema de Educación para la Salud, aparte de desarrollar tú talleres de etiquetado nutricional”] (SN).

“I provide direct assistance to children who come in when they are unwell, and I also manage the care of chronic patients. I engage in conversations with families, coordinating support for chronic patients to promote their maximum self-care and independence while at school. Together with families, we ensure that the child does not perceive themselves solely as a chronic patient, but rather as an integral part of the school community” [Original Spanish Transcrip: Asistencia directa, los niños vienen cuando se encuentran mal y la gestión de crónicos, hablo con las familias, coordino la asistencia a los crónicos para que dentro del colegio tengan el máximo de autocuidado e independencia. Intentamos con las familias que el niño no se sienta como un crónico, que sea uno más del colegio”] (SN).

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“It's regrettable that the broader public is unaware of the valuable contributions made by nurses, and I'm not referring solely to school nurses. The dearth of awareness results in schools placing greater emphasis on directives from public authorities rather than heeding the expertise offered by the nurses working with institutions” [Original Spanish Transcrip: “Es una lástima que la población en general no conoce el trabajo que hacemos las enfermeras y no estoy diciendo escolares. El desconocimiento lleva a que el colegio exige más en lo que le dicen las entidades públicas que de lo que le pueda decir la enfermera que está trabajando en ese centro y tiene conocimientos específicos”] (SN).

“We oversee health check-ups for well children. During these examinations, we conduct weight and height measurements to ensure proper growth. Additionally, for younger children, we provide health education to parents, and as the children mature, we extend this education directly to them” [Original Spanish Transcrip: “Nos encargamos de hacer las revisiones de salud del niño sano y en estas revisiones les pesamos, les medimos, vemos que van creciendo adecuadamente y aparte, cuando son más pequeñines les damos Educación para la Salud a los padres y según van creciendo, a los niños también”] (PN).

“Not only do we focus on preventing illness, but we also prioritize health promotion, proper nutrition, cultivating healthy lifestyle habits, accident prevention, mitigating digital technology addictions, promoting oral health, and preventing obesity. Additionally, our clinic provides comprehensive sex education from a young age, fostering awareness that empowers individuals to understand and take ownership of their bodies. Furthermore, we implement a program dedicated to identifying and addressing child abuse or mistreatment. Our services extend to emergency care and pathology, collaborating closely with pediatricians” [Original Spanish Transcrip:

“Prevención ya no solo de la enfermedad, sino que trabajamos desde la salud,

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5 *correcta alimentación, hábitos de vida saludables, prevención de accidentes,*
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7 *prevención de adicciones a las tecnologías digitales, salud bucodental, prevención de*
8
9 *la obesidad. En la consulta también se hace abordaje de la educación sexual desde*
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11 *que son pequeños concienciándoles/as de que los cuerpos le pertenecen a uno.*
12
13 *También hacemos el programa de detección de abuso o maltrato infantil. Atendemos*
14
15 *las urgencias y también en la patología colaborando con el pediatra”]* (PN).

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18 *“Prior to the existence of nurses, children who were seriously ill died earlier and*
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20 *died at home. Nobody considered that they had the right to attend a school”*
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22 *[Original Spanish Transcrip: “Antes que no había enfermera, los niños que estaban*
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24 *graves se morían antes y morían en casa. Nadie se planteaba que tenían el derecho a*
25
26 *asistir a un colegio”]* (SN).

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30 *“The presence of a pediatric school nurse is essential, as they have much to*
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32 *contribute to every school. Currently, however, such a role does not exist. Right now,*
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34 *since the school nurse does not exist as such, if a school nurse had to go to the school*
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36 *to visit a child, the nurse assigned to that child would go. The figure of the school*
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38 *nurse would be very important, the children with pathologies would be better*
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40 *attended and the teachers would not find themselves in the situation of assuming*
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42 *responsibilities that are not theirs. Finally, we take care of pediatric children who*
43
44 *require intermediate or intensive care. My duties do not fall under those of a school*
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46 *nurse” [Original Spanish Transcrip: “La figura de una enfermera pediátrica escolar*
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48 *es fundamental porque tiene mucho que aportar en cada centro. Ahora mismo, como*
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50 *la enfermera escolar no existe como tal, si una enfermera escolar tuviera que ir al*
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52 *colegio a visitar a un niño, iría la enfermera asignada a ese niño. La figura de la*
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54 *enfermera escolar sería muy importante, los niños con patologías estarían mejor*
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56 *atendidos y los profesores no se verían en la situación de asumir responsabilidades*
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58 *que no les corresponden. Por último, nos ocupamos de los niños pediátricos que*
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5 *requieren cuidados intermedios o intensivos. Mis funciones no corresponden a las de*
6 *una enfermera escolar] (PN).*

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9 *“Another obstacle is that we are not covered at the legal level and of course if we do*
10 *not do them so that nothing happens to us, then we do nothing. This is unregulated*
11 *and it is a disaster”[Original Spanish Transcrip: “Otro obstáculo es ese, que no*
12 *estamos cubiertas a nivel legal y claro si no las hacemos para que no nos pase nada,*
13 *entonces no hacemos nada. Esto está sin regular y es un desastre”] (SN).*

21 **2. Intervention with families and learners: Individually or in groups.**

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24 *“I have successfully forged strong connections with those families, a bond rooted in*
25 *utmost trust. I firmly believe that establishing such trust is the key to ensuring*
26 *parents' peace of mind and, in turn, imparting that sense of security to their children”*
27 *[Original Spanish Transcrip: “He conseguido crear un vínculo con esas familias, un*
28 *vínculo lo más estrecho posible de confianza porque creo que es la única manera de*
29 *que los padres estén tranquilos y transmitan esa tranquilidad a sus hijos”] (SN).*

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37 *“Yes, I actively engage in the school for mothers and fathers whenever they request*
38 *my involvement. Additionally, when it becomes essential to address a significant topic*
39 *on an individual basis, I arrange meetings with the families alongside the tutor. I am*
40 *also responsible for creating informative guides for specific scenarios, such as*
41 *dealing with obesity or providing guidance on nail care. I collaborate with them*
42 *comprehensively, assisting to enhance the well-being of their children” [Original*
43 *Spanish Transcrip: “Sí, participo en la escuela de madres y padres cuando me lo*
44 *piden, cuando es necesario tratar algún tema importante de forma individual nos*
45 *reunimos el tutor/a y yo con las familias. También elaboro guías informativas para*
46 *determinados casos como sobrepeso o cuidado de uñas, por ejemplo. Colaboro con*
47 *ellas en todo lo que necesitan para mejorar el cuidado de sus hijos/as”] (SN).*

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5 “Typically, children with chronic conditions necessitate specialized care
6 administered by their parents. When admitted to my unit, they often find themselves in
7 situations requiring either intensive or palliative comfort care. Our usual approach
8 involves collaborative teamwork with the parents, providing guidance, and
9 accommodating their preferences, while also respecting their routines and habits”
10 [Original Spanish Transcrip: “Generalmente los niños crónicos tienen cuidados
11 especiales que llevan a cabo los padres, cuando ingresan en mi unidad vienen en
12 situaciones donde requieren cuidados intensivos o paliativos de confort. Solemos
13 trabajar en equipo con los padres, instruyéndolos y haciendo las cosas un poco a su
14 manera, respetando sus hábitos”] (PN).

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28 “Indeed, we acknowledge that there are times when others associate us with
29 unpleasant situations and may not agree with our approach” [Original Spanish
30 Transcrip: “Positivamente, aunque somos conscientes de que en ocasiones nos
31 relacionan con situaciones desagradables y tal vez no estén de acuerdo con la
32 manera de hacer alguna cosa”] (PN).

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“Performing this task for the well-being of their children is akin to the role of a
teacher, instilling a sense of reassurance in them by placing us at the forefront”
[Original Spanish Transcrip: “Como un trabajo necesario para el cuidado de sus
hijos. Al igual que lo es un docente. Al tenernos en el centro se quedan tranquilos”]
(SN).

3. Professional recognition and appraisal: Psychosocial risk factors and their impact on health, specifically in relation to burnout.

“Generally, I believe that families appreciate my work in a positive manner, particularly those with students facing chronic illnesses, as they experience a heightened sense of security when their children are at school” [Original Spanish

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Transcrip: “En general pienso que las familias valoran mi trabajo de manera positiva, en especial las familias de alumnos con enfermedades crónicas ya que se sienten más seguras cuando los niños están en el colegio”] (SN).

4. Facilitators and obstacles to implementing the nurse's work in schools.

“I find myself in solitude, often compelled to make life-and-death decisions due to the absence of a doctor or a colleague. This responsibility is immense, especially in the presence of individuals who lack proper hygiene and barely manage to avoid fainting when witnessing an epileptic seizure” [Original Spanish Transcrip: “Estoy sola y tengo que decidir cosas a vida o muerte a veces porque no tengo ni médico ni a otra compañera. Es muchísima responsabilidad y rodeada de gente que no es sanitaria que bastante hace con no desmayarse cuando ve una crisis epiléptica”] (SN).

“The infirmary is a room within the school; however, it is not integrated or coordinated with any specific department” [Original Spanish Transcrip: “La enfermería es una habitación que está en el colegio, pero no está engranada ni coordinada en ningún departamento”] (SN).

“When you wish to collaborate with them, I comprehend that coordinating the transportation of children entails considerable effort. However, when engaging in activities that involve parents and children requiring visits to the health center, I believe it would be more convenient to conduct within an educational center” [Original Spanish Transcrip: “Cuando quieres trabajar con ellos... yo entiendo que es mucho el traer y llevar niños, pero al final trabajar algo tanto con los padres como con los hijos teniéndolos que traer al centro de salud... Por eso creo que es más fácil trabajarlo desde un centro educativo”] (PN).

“Not only individuals with chronic pathologies should receive education, but also others. Numerous interventions require delivery by trained professionals” [Original

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5 *Spanish Transcrip: “No sólo se debería educar a los que tienen patologías crónicas*
6 *si no al resto también. Hay muchas intervenciones que se deberían impartir por*
7 *profesionales formados”]* (PN).

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11 *“There are currently no protocols in place within the Navarre Department of*
12 *Education or the Department of Health regarding the proper care of children with*
13 *chronic illnesses and how to effectively coordinate with teachers. This issue requires*
14 *regulatory attention” [Original Spanish Transcrip: “No hay protocolos en el*
15 *Departamento de Educación de Navarra ni del de Salud, de cómo atender a los niños*
16 *con enfermedades crónicas, cómo coordinar con los profesores... Esto hay que*
17 *regularlo”]* (SN).

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21 *“To underscore the significance of the school nurse in public schools, it is*
22 *noteworthy that private schools have long recognized the importance of this role”*
23 *[Original Spanish Transcrip: “Recalcar la importancia de la enfermera escolar en*
24 *los centros públicos, ya que en los privados hace ya tiempo que cuentan con esta*
25 *figura”]* (PN).

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39 *“We possess limited information about children with pathologies; they are required*
40 *to provide either the medical report or the vaccination schedule. [...] It is imperative*
41 *for this practice to be regulated in Spain, as it has been in place for many years in*
42 *other countries” [Original Spanish Transcrip: “Tenemos una mínima información de*
43 *los niños que tienen patologías, se les pide el informe médico o el calendario de*
44 *vacunas. [...] Es necesaria que esa figura esté regulada en España. Lleva*
45 *muchísimos años en otros países”]* (SN).

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55 *“On my Instagram, I engage in comprehensive health education, addressing various*
56 *pediatric subjects such as diseases, childcare, hygiene, development, nutrition, and*
57 *sleep. I believe I contribute significantly to health education in these areas”*
58 *[Original Spanish Transcrip: “Pues a través del Instagram que tengo realizo una*
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5 *labor de Educación para la Salud súper extensa y trato muchísimos temas*
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7 *relacionados con la pediatría, tanto de enfermedades, de puericultura, de higiene, de*
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9 *desarrollo, de alimentación, de sueño. Creo que por ahí tengo una gran labor en*
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11 *cuanto a divulgación sanitaria de estos temas”] (PN).*
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15 *“A glaring example pertains to the past two years, wherein the monitoring of*
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17 *adherence to COVID prevention measures has been prominent” [Original Spanish*
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19 *Transcrip: “Un ejemplo muy obvio es el de estos dos últimos años, vigilando el*
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21 *cumplimiento de las medidas de prevención en el contexto COVID”] (SN).*
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