

## The role of the school nurse in the care of children with ASD: Systematic review

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### Abstract

**Objective:** to describe the role of school nurses in the care and support of people with Autism Spectrum Disorder (ASD), as well as the interventions carried out to promote health in its broadest sense. **Methods:** A narrative review of the literature in various databases. Articles published since 2015 in Spanish, English, or Portuguese were selected. **Results:** The total number of studies included was n=13. The results were classified according to the specific competencies of the school nurse since they are those that are most closely related to the demands and requirements that students have in the educational environment. **Conclusions:** school nurses have a great role worldwide in the care of students with ASD, offering the necessary care to these children and their families and carrying out educational programs adapted to their needs to improve their quality of life.

**Keywords:** Autism Spectrum Disorder. Careful. School nurse. Intervention. Health.

### Introduction

Autism Spectrum Disorder (ASD) represents one of the main neurodevelopmental disorders.<sup>1</sup> According to the World Health Organization (WHO)<sup>2,3</sup>, autism is defined as a chronic neurological dysfunction with a strong genetic basis, characterized by difficulties in social interaction and communication, among other characteristics. To diagnose ASD, all three areas integrated within deficits in social interaction and communication (socio-emotional reciprocity, nonverbal communication, and the development, maintenance, and understanding of relationships) must be affected, along with a restricted repertoire of behaviors and interests, according to DSM-5.<sup>1,4,5</sup>

Early identification of ASD is crucial, as various studies suggest symptoms are often recognized between 12-24 months of age.<sup>6,7,8</sup> The global prevalence of ASD is approximately 1 in 100 children, varying based on geographical, socioeconomic, and ethnic factors.<sup>9</sup> Treatment should aim to enhance social and communication development while reducing symptoms to improve quality of life<sup>10</sup>. Cognitive-behavioral therapy stands out as an effective form of treatment, especially in childhood.<sup>11</sup>

In the educational field, it is essential to consider the educational needs of children with ASD<sup>12</sup>. Today's diversity creates specific demands for school services, requiring time, energy, and knowledge to ensure the best possible quality of life for each child.<sup>13</sup> The presence of school nurses in educational centers is critical to ensuring the comprehensive care of students. However, their presence is not widely established in regular schools in Spain. Furthermore, the regulation of school nursing varies between autonomous communities, leading to inconsistencies in care.<sup>14,15</sup>

Internationally, countries such as England, France, and the United States have consolidated the role of school nurses in the educational field. However, in Spain, legislation regarding this figure and its specialization within the profession is scarce.<sup>16</sup> A school nurse is defined as the nursing professional who works in educational centers, detecting, planning, and executing health interventions to increase the capacities of individuals and the school community.<sup>17</sup>

For these reasons, school nurses are essential for the psychoeducational development of all students, especially considering the rising prevalence of children with ASD.<sup>18</sup> Their presence ensures comprehensive and optimal care, improving

quality of life.<sup>19</sup> This study aims to describe the role of school nurses in the care and support of people with ASD, as well as the interventions carried out to promote health in its broadest sense.

## Methods

A narrative literature review was designed between November 2022 and February 2023. The search was conducted across seven databases (Web of Science, Scopus, Dialnet, LILACS, PubMed, Cuiden, and Cinahl), using descriptors based on MeSH and DeCS terminologies, with Boolean operators and truncations.

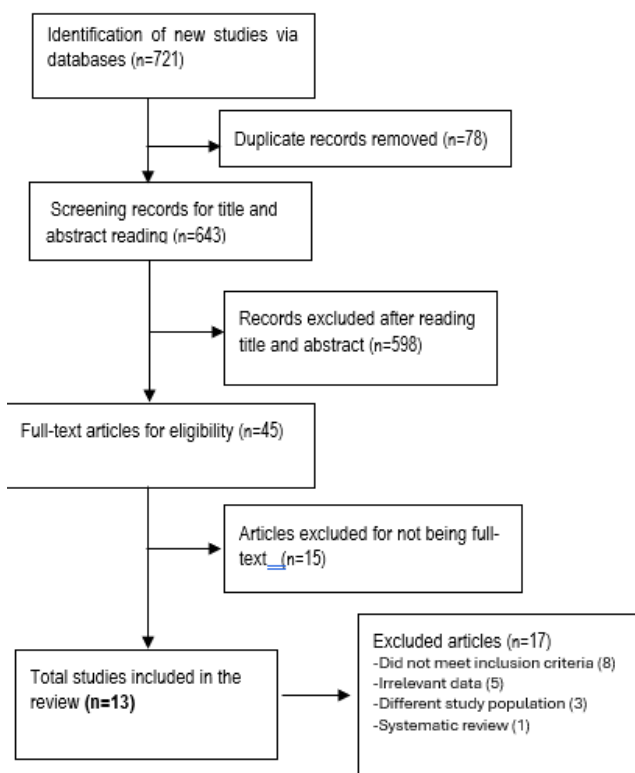
Inclusion criteria were established to select studies published since 2015 in Spanish, English, or Portuguese, with full-text access. Studies involving parents, children with ASD, teachers, students in contact with children with ASD, or nurses were included. After removing duplicates, titles and abstracts were evaluated to select the most relevant ones, accessing full texts and conducting a critical reading to ensure methodological quality and compliance with inclusion criteria. Finally, 13 articles were selected.

Methodological quality was assessed using STROBE criteria for quantitative studies, the AGREE II tool for clinical practice guidelines (CPG), and the criteria by Elliot et al. for qualitative studies.<sup>20</sup>

## Development

The selection of 13 articles followed the described methodology, represented in the flow diagram (Figure 1). An exhaustive analysis of the included articles synthesized the results, focusing on four fundamental competencies:

Figure 1. Flow diagram of the study selection process



1. *Providing comprehensive care to the child, adolescent, and family:* School nurses are indispensable for providing holistic care, addressing the biopsychosocial needs of children with ASD and their families. In most schools, teachers are responsible for providing healthcare when needed. However, given the new demands for inclusive student health, teachers lack the necessary training, underscoring the urgency of incorporating school nurses in our country.<sup>21</sup>

Several studies emphasize the importance of specialized caregivers for children and adolescents with ASD, arguing that the presence of school nurses would improve their quality of life and promote their inclusion in school.<sup>22,23</sup>

Aligned with this, both the National Institute for Health and Care Excellence (NICE) and various authors advocate for protocolized and professionalized interventions to support families and caregivers of people with autism, from childhood to adulthood, to provide holistic care that meets the needs of children with ASD.<sup>25</sup>

Guidelines for Clinical Practice have been developed to improve these children's quality of life in school settings, focusing on aspects such as nutrition, hygiene, and anxiety management, recognizing school nursing as an indispensable resource in the health care of children with ASD. These guidelines also promote early development of cognitive-behavioral activities, communication skills, and active participation.<sup>26-28</sup> However, despite these guidelines, a notable absence of sexual education for these children has been identified, an essential component for their comprehensive development.<sup>29</sup>

2. *Assessing the impact of schooling and establishing a therapeutic relationship:* It is important to establish a solid therapeutic relationship between the school nurse and the child with ASD to create a trusting environment where the child feels safe.

Research by Baker et al. suggests that school has a significant impact on the health and educational outcomes of students with special needs, such as children with ASD.<sup>30</sup> These children may require special care that affects their access to equitable educational opportunities. The author warns that children with ASD risk academic failure if their health needs are not met, which could have significant social repercussions, as academic success influences future health, economic status, and overall well-being throughout life.

Other authors support this argument and ensure that a unique environment must be created to guarantee appropriate teaching to the fullest extent. Their studies highlight the need for the presence of a school nurse to provide confidence, security, and tranquility to students with ASD.<sup>23,31</sup> Establishing a suitable therapeutic relationship with these children is crucial to fostering an inclusive and tolerant environment, emphasizing the school as a health-promoting setting.<sup>14</sup>

3. *Effectively administering treatments for health problems with a biopsychosocial vision:* Children diagnosed with ASD may have comorbidities with other disorders and require medical treatments. School nurses are responsible for administering necessary medication to these children and providing the specific care they need, including therapies.

Research has supported the vital role of school nurses in controlling and managing symptoms in these children. Improving the quality of life for these children and their parents is one of the main reasons to advocate for integrating school nurses into the educational system, highlighting at the same time the lack of knowledge about ASD among teachers.<sup>32-34</sup>

Despite this, several authors point out the need to train school nurses with the necessary resources to offer comprehensive and effective care to students, emphasizing the understanding of comorbidities associated with ASD and the need to have a biopsychosocial view of the individual.<sup>35-36</sup> This training will enable them to understand the specific characteristics, behaviors, and symptoms presented by children with ASD, as well as their future expectations, with special emphasis on aspects related to their daily routine.<sup>37,38</sup> Nursing must demonstrate flexibility and adaptability to meet each child's individual needs.<sup>39</sup>

4. *Evaluating their chronic process or disability, the necessary care, and available social resources and support:* Research highlights the importance of assessing the various processes experienced by children with ASD throughout their lives and the need to provide individualized care and adopt a multidisciplinary approach.<sup>16,40</sup> The critical role of the school nurse in providing specific care for these children, as well as supporting parents in understanding their children's needs, is emphasized.<sup>41</sup>

In view of this, it becomes essential to guide education in the care of children diagnosed with ASD within the school environment, adopting personalized approaches and making use of available resources. Support from health and education professionals is crucial to minimize the challenges families face, facilitating a comprehensive support network that involves both children and their parents. Additionally, it is fundamental to ensure access to a specialized educational network and social services that enable children with ASD to develop their abilities while providing the support families need.<sup>42</sup> Various studies have shown how the implementation of visual aids, anticipation

of situations, and the establishment of personal connections serve as key strategies in this context, aiming to promote inclusive development in children with ASD.<sup>22,28</sup> Regular evaluations of children with ASD are necessary to identify potential related issues and provide adequate support to both the children and their parents or guardians.<sup>40</sup>

## Conclusions

The results of our research confirm that school nurses play a fundamental role in the care and support of children with ASD, as highlighted in the four specific competencies analyzed. These professionals provide comprehensive care to children with ASD and their families, elevating these students' quality of life and promoting their educational inclusion.

It is essential to emphasize that schooling for children with ASD can significantly impact their health and educational outcomes. Therefore, establishing a strong therapeutic relationship between the school nurse and the child with ASD is crucial. This bond creates an environment of trust and security within the school setting, enabling adequate support for the specific health needs of these children.

School nurses are responsible for administering the necessary treatments to address health problems derived from ASD and conducting periodic evaluations to identify potential health complications. To carry out this work, school nurses must be properly trained and specialized in ASD, possess updated and verified knowledge, and thus provide quality care.

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