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NOVIA

Nurses' role in Caring for Children with Autism in hospitals admitted for somatic reasons to reduce suffering

A scoping review

Alexis Tan

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Author: Alexis Tan

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Supervisor(s): Irén Vikström-Dahl

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Abstract/Summary

Autism Spectrum Disorder (ASD) is a condition where individuals with this condition have communication and social interaction disabilities. These individuals are both seen through their lack of proper communication skills or combined with behavioral disorders that affect them throughout their lives. Children, in particular, are greatly impacted by this condition due to their underdeveloped coping skills and reduced ability to communicate their pain or suffering, especially when admitted for hospitalization for somatic reasons. The review is about the challenges pediatric nurses have when encountering children with autism who are hospitalized for medical or surgical reasons. The aim of this review was to map the existing literature and evidence-based practices for children with ASD. Its purpose was to aid nurses in practice to gather knowledge and evidence-based strategies based on guidelines so that nurses can better serve the specific needs of autistic children. Searching for guidelines was critical so that nurses in caring for these children with ASD more effectively and ease the suffering of these children with ASD. The research method selected for this study was a scoping review, in order to survey literature already written about the subject. This document assessed seven publications using appropriate methodological writing guidelines to produce reliable conclusions. Two nursing guidelines were found to answer one of the two research questions in this review. Communication, safety and security, proper endorsement and preparation for ASD patients' comorbidities for good healthcare quality, and training and experience for nurses were the main themes that emerged from the inductive analysis done for this review. It was determined that there is a need for evidence-based standards in order to provide effective care for children with autism spectrum conditions. There is a limited amount of research available on the most effective nursing techniques. But with adequate guidelines and training, and knowledge of a child's individual needs, there may be ways to address these challenges effectively, modifying the nurses' care plan for these ASD children. Findings are inconclusive but knowledge can be drawn from this review, for future use in guidelines and regulations making especially concerning the care of children with ASD.

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Language: English   Keywords: Nursing care, Autism, Children, Guidelines, Caring

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1. Introduction

According to the Centers for Disease Control and Prevention (CDC, 2018), statistics revealed that one out of every forty-four children is diagnosed with autism spectrum disorder (ASD) in the United States. This disorder is characterized by deficits in social communication and social interaction, which are often impaired in this condition. The presence of a wide range of restricted, repetitive behaviors is apparent in this disorder (Brown & Elder, 2014). A study also says that the growing number of ASD diagnoses shows that the number of children with ASD is also growing (Underwood, DelPozo-Banos, Frizzati, John & Hall, 2022).

Also, about 7.6 million people around the world have this illness, which means that one in every 160 people has ASD (WHO, 2013). And in Finland, data from the World Population Review statistics (2022) shows that autism rates are at 1:142 children born. Autism (ASD) is thought to be caused by a mix of genes and unknown environmental factors (Hallmayer et al., 2011). However, no single cure has been identified for ASD. To fulfill the individual requirements of patients, diverse therapy, including interdisciplinary techniques, is often used (Gupta, 2015). Given the diversity of ASD patients' requirements, the care must be based on practical scientific evidence, which is crucial for nurses to know to provide quality care.

Incidentally, ASD diagnoses are rising at an alarming rate for unclear reasons, be it due to a true increase in the disorders or because of more advanced testing and classification methods (Queisser, Fairley, Suttle, & Hotaling, 2016). Because the number of people being diagnosed with ASD keeps going up, nurses need to be ready to meet the special health needs of this group. It was estimated that the potential exists for a primary care health professional to see about 11 out of every 1,000 children performing their duties. (Will, Barnfather, and Lesley, 2013) It was stated that nurses in a variety of nursing practice areas will interact with these patients in most healthcare system settings (Gardner, Suplee, & Jerome-D'Emilia, 2016). Similarly, the importance of nurses along with doctors, being members of multidisciplinary teams, is crucial when dealing with individuals with ASD, whereas this points to the reality that all nurses need to be knowledgeable about ASD, regardless of their practice setting (Igwe, Ahanotu, Bakare, Achor, & Igwe, 2011).

In the articles gathered, those with ASD children were referred to as "patients" not because of their disorder but because of the diverse conditions that they were being treated for during hospital admissions. The method used for this research was a scoping review method where articles and studies were gathered from relevant databases in aiding to find knowledge already out there about nursing care means and guidelines.

The personal motivation for this review grew from the researcher's experiences volunteering in public hospitals in the Philippines, which shed some light on some of the difficulties nurses encounter in providing care to ASD children in pediatric wards. Thus, addressing the following concerns, the researcher has taken an interest in this topic to be able to understand the plight of nurses and eventually work on caring for these young patients with ASD here in Finland. Furthermore, providing nurses with knowledge for future guidelines and additional research in developing a care plan that specifically addresses the needs of young children with ASD in the future. Therefore the aim of this review was to map the existing literature and evidence-based practices for children with ASD. Its purpose was to aid nurses in practice to gather knowledge and evidence-based strategies based on guidelines so that nurses can better serve the specific needs of autistic children.

2. Background

The concept of autism spectrum disorder (ASD) was determined as a type of neurodevelopmental health condition characterized by prevalent shortfalls in social interaction and communication, in addition to the existence of rigid and repetitive behaviors that influence an individual's function and development (Grant & Nozyce, 2013). ASD is often diagnosed in the early years of life. Nonetheless, ASD is a group of disorders that were previously thought to have solely psychiatric manifestations. Later, it was found that this disorder causes several physical and medical symptoms that were hard to spot and treat because the symptoms were hard to tell apart and the individual with this disorder typically doesn't communicate properly. Treatment and diagnosis of additional medical conditions were difficult to identify due to behavioral concerns. Particularly with children who are still developing their communication skills and are more vulnerable to

symptoms of this disorder such as communication issues, behavioral instability, and sensory discomfort. (Celia, Freysteinson, & Frye, 2016) There is no known cause or cure for this condition, which affects people from many different cultures, social classes, and parts of the world. Some studies suggest that one out of every 160 children born has this illness, however, there is presently no credible worldwide estimate due to a lack of information in many regions of the world (Hossain et al., 2017).

Consequently, according to the American Psychiatric Association, the ASD diagnosis was conceptualized as a spectrum because children and individuals can have a wide range of skill deficiencies and levels of disability; however, there are common characteristics that are frequently observed among people who have ASD (Garvey, Avenevoli, & Anderson, 2016). Communication problems are a common and very noticeable sign of ASD. Individuals who have ASD can have a spoken language, however, they may have difficulties initiating or maintaining a conversation, and unable to use the language of their peers, or may have limited speech, which impacts the child's ability to interact socially with others. (Hudson, Nicholson, Kharko, McKenzie, & Bach, 2021)

2.1. Neurodevelopment Disorder among patient care

The 5th edition of the Diagnostic and Statistical Manual of Mental Disorders says that neurodevelopmental disorders are marked by impairments in personal, social, academic, or occupational functions that start early and get worse over time (DSM-5). Neurodevelopmental diseases are health problems mostly related to the nervous system and how the brain works. The American Psychiatric Association explains that these disorders can include, intellectual deficiency, speech disorders, attention deficit or hyperactivity disorders, specific learning impairment, motor disorders, along with ASD. These health problems may be discovered early in childhood or youth. Although symptoms associated with neurodevelopmental abnormalities vary as children get older, some may become persistent. Clinicians say that diagnosing and treating neurological development issues may be difficult. Treatment may include a variety of approaches, including professional counseling, drugs, home-based programs, and school-based activities. (Roehr, 2013)

2.2. Autism Spectrum Disorder (ASD)

The American Psychiatric Association defines autism spectrum disorder (ASD) as a "neurodevelopmental condition marked by difficulties with social communication and social interaction, as well as limiting, repetitive patterns in behaviors, interests, and activities." The word "spectrum" is used to describe the health condition because the severity and size of ASD symptoms, and the person's abilities and degree of function, can vary. ASD symptoms in children include a wide range of features, ranging from moderate deficiencies to severe deficits or complete cessation of activity. (Palacio-Ortiz, Londoño-Herrera, Nanclares-Márquez, Robledo-Rengifo, & Quintero-Cadavid, 2020) Still, ASD is a difficult disorder that has no limits and affects how people do in their daily lives. Some people with ASD need a lot of help with basic things like communicating and making friends. Healthcare challenges and needs also vary from individual to individual.(Calderoni, 2022)

2.3. Diagnosis, Testing Age, and the Main characteristics of the disorder

The extensive diagnosis of ASD in young children is quite challenging. Especially given the age and stage of development of these children, clinicians concentrate their efforts on the severity of ASD symptoms, their pattern and development, underlying genetic variables, cognitive capacities, and other relevant factors, like genetic or medical, to utilize as diagnostic criteria. The infant-toddler checklist is used to screen young children for ASD. It is thought that screening should be used to find these kids early so that they can get treatment right away, which could help them do better. Definitive testing can be performed as early as 24 months. But because this disorder is diagnosed based on symptoms, there are some problems when ASD symptoms show up later in life, after a child is 2 or 3 years old. (Crais & Watson, 2014)

In addition, the Autism Diagnostic Observation Schedule-2 (ADOS-2) is a commonly used, standardized observational evaluation for autism categorization. The ADOS-2 includes a variety of exercises designed to elicit social interactions as well as communicative and repetitive behaviors associated with autism (Dykens et al., 2017).

2.4. Communication among children with ASD

The study by Ibrahimagic, Patkovic, Radic, & Hadzic (2021) proposed a relationship between the concept of ASD as a developmental disability, which is a biologically based neurodevelopmental disorder that affects a child's social interaction and communication skills. Core deficits include social communication or interaction deficiencies and restrictive, repetitive patterns of behavior. Moreover, in the study, common ways for children with ASD to communicate are physical affection, acknowledging familiar faces, and signifying when he or she needs help or wants something. Following simple instructions, understanding connected words or phrases, pronouncing simple words, and looking when called by name are common language forms of children with ASD. Overall, the parents of kids with ASD agree that their kids have a lot of trouble communicating and speaking. The developed communication and language skills of the child with ASD are valid indicators of the parents' consistent positive emotions and attitudes.

Additionally, developing an academic study concerning the integration of these ASD children into the regular population is an effective approach to improving communication ability following intervention with a technology-assisted method (Taryadi & Kurniawan, 2018). The research showed that the average level of communication abilities before and after the treatment improved by 18%, while during the treatment the average level remained at significantly high levels. Whereas there is an improvement after the intervention stage with an average of 76%. It was decided that some communication systems helped these children with ASD get better at communicating. Teaching communication skills under stressful conditions is important, especially in listening to the thoughts and feelings of these children. (Kumazaki et al., 2021)

2.5. Types of Communication

There was a study proposing that seeks to find out how special education teachers, apply evidence-based practices to nonverbal communication skills in children with ASD. The researchers found that nonverbal communication skills were better when teaching and training in functional communication and drawing were made better. In addition, children with autism spectrum disorder who play regularly with their peers are usually more

developed compared to those who do not. Co-education also called "integrated learning," can help children with autism and lessen the stigma that often grows around them. (Saeed, Aleryani, Nouf, Enas, & Alshamsi, 2016) Consequently, as various academic studies have shown, the results of the communication of children with autism in a learning environment with multiple technologies have greatly benefited them. This means that children used their voices a lot, that they had many ways to show problems with language development, and that each child had a unique way of communicating. (Vellonen, Kärnä, & Virnes, 2018)

Notably, it is demonstrated that nonverbal communication expressed by autistic children when interacting with others has been better. Although autistic children cannot interact clearly through verbal communication, they can express their desires through nonverbal communication. They can communicate by expressing it through facial expressions, eye contact, body movement, posture, and touch, wherein the meaning of the non-verbal communication expressed by each autistic child has a different meaning. (Safira, Rangkuti, Nasution & Harefa, 2020)

2.6. Challenges to Communication among ASD children

The incidence of ASD has grown dramatically in the past decade, as its treatment possibilities. However, the tremendously complex subject of autism encompasses challenges in the identification of these disorders, their description, identification, evaluation, and separation from other neurodevelopmental conditions. Diagnosing ASD and telling it apart from other communication and language disorders are quite complicated, especially since ASD affects children differently, and how culture plays a role in caring for and handling a child with ASD. (Hus, 2017) The research found six categories of perceived symptoms in ASD: behavioral issues, social and communication skills, language, relationships, extra diagnoses or challenges, and confined and repetitive activities and hobbies. These lead to compensatory actions such as parental worries, relying on others' opinions, based on lack of knowledge or resources, and clinician bias.(Lockwood Estrin, Milner, Spain, Happé & Colvert, 2021)

In addition to previous findings, the experiences of children on the autism spectrum in mainstream schools were explored. They focused particularly on getting the point of view

of the children and highlight the importance of doing this more often in future research, as well as in practice. The authors of that study highlighted three themes that came up in their study: the potential to find a place in society, the impact of social communication difficulties at school, and entering into an institution as a social context. All of which create stress and difficulties for children with ASD. The findings give good guidance on children and provide some insight into the experiences of children on the autism spectrum in mainstream schools as well as entering any institutions that may create difficulties and add burden to them, especially when communication is a challenge. (Stephenson & Adams, 2021)

2.7. Challenges of Autism

Autism causes a lot of problems for both healthcare workers and parents alike. Issues in communication and acting in disturbing ways repeatedly, when a child with ASD is admitted to the hospital, are highlighted problems that can make it hard to treat them quickly and effectively. Furthermore, communication issues are difficult for nurses and other healthcare workers to overcome especially when faced with limited time and heavy workloads for nurses adding to their complex duties and responsibilities. Communication is the basic ability of humans to relay information in various formats. Children with autism cannot communicate effectively, either verbally or through nonverbal communication. Therefore, when they express their demands and desires, it usually leads to agitation and flare-ups (Brown & Elder, 2014). Communication is unique to everyone, but it is especially so for autistic children, as keeping them calm and steady will answer most of their concerns about anxiety, safety, and security (Celia et al., 2016).

When a child's needs are not addressed, he or she is more likely to exhibit erratic behavior and violence. Autistic children have much higher levels of irritability, hyperactivity, and emotional upheaval. Although the role of sensory perception in autism is not fully understood, it is recognized that sensory stimuli and depression may lead to social avoidance and repetitive behavioral issues. (Jussila et al., 2020)

Social anxiety has been identified as a major issue in children with ASD. Due to their inability to communicate and connect socially, these kids are stressed and anxious because they are

afraid, can't talk well, and do embarrassing things. Because of this, tiredness, sadness, and social withdrawal are seen, and their problems get worse, leading to avoiding people and staying alone. (Espelöer, Hellmich, Vogeley, & Falter-Wagner, 2021) Some of the issues are compounded by sleeping disruptions induced by their condition, which increases the prevalence of inattention, physical aggressiveness, and impulsivity (Mazurek & Sohl, 2016).

2.8. Concomitant Medical Conditions

According to a study by Celia et al. (2016), autistic children have medical issues that might make it difficult for a healthcare practitioner to treat them. Comorbid problems, such as sleeping difficulties, are included. Potential issues such as sleep apnea, stress, and immunologic deterioration should also be monitored. Sleep deprivation produces a slew of mental and physiological disorders, exacerbating their pre-existing ailments. Neurological issues such as epilepsy, cranial anomalies, muscular dystrophies, and schizophrenia are some of the comorbid conditions that children with ASD might have that make it more difficult for nurses to treat patients with ASD. (Celia et al., 2016)

2.9. Healthcare Setting for Children in Finland

The Finnish welfare state is unique because everyone has the right to social services and health care. The Nationwide Supervisory Authority for Welfare and Health (Valvira) is in charge of keeping an eye on how services for social welfare and health care are given all over the country. (Ministry of Social Affairs and Healthcare, 2013)

Nonetheless, the Finnish system of early childhood education and care (ECEC) policy stipulates that, in addition to education, assistance for children's optimal development in Finland is to be prioritized. Local and municipal governments are in charge of these young children's health and well-being, as well as their social and healthcare needs. The main point of this policy is to give children a good healthcare system and service with a focus on a client-centered approach and openness. Closer cooperation between the public and healthcare providers is essential for providing such high-quality healthcare as recommended in the first national recommendation for quality management in social and

healthcare services in 1995. It is critical to provide more personalized and balanced support for all children. (Grierson, 2000) Rissanen's (2018) study shows that equal access to children's health care includes maternity and pediatric health clinics, which provide essential services to children and their families. Also, the Child Protection Act says that evaluations of services for children, young people, and families who need extra help must start within the limits set by the law.

2.10. Medical Personnel and ASD

It is important for doctors and nurses to understand ASD and discover how to work with children who have it. If a child with ASD had a bad experience during a hospital visit, they might act badly at their next appointment. Even so, nurses who work in hospitals often don't have access to the right training programs for managing behavior. (Drake, Johnson, Stoneck, Martinez, & Massey, 2012) Pediatric primary care practitioners often state that they lack expertise in treating behavioral and medical difficulties in kids with ASD (Bellando, Fussell & Lopez, 2016). Nevertheless, a study done in 2014 revealed that physicians had low self-perceived competency in providing care for children with ASD; the areas with the lowest levels of self-perceived competency were planning medical care and searching for ways to communicate effectively with ASD children (Broder-Fingert, Brazauskas, Lindgren, Iannuzzi, & Van Cleave, 2014). Similarly, Drake et al. (2012) reported that nurses find dealing with children who have ASD to be particularly stressful, especially when there are activities that must be completed quickly. In a hospital setting, nurses need to have the right training to help children with ASD and their families. When their child is in the hospital, families of children with ASD often feel tired, sad, frustrated, and in bad health, because the medical staff doesn't support or understand them (Jolly, 2015).

Relevantly, population-based research on kids with ASD found that they were more likely to be admitted to the hospital than their normally developing peers, with longer durations of stays and greater related expenses (Lokhandwala, Khanna, & West-Strum, 2012). The increasing rate of ASD diagnosis indicates that this population is rising and will potentially contribute to the increase of use of health care services in combination with the general population also accessing the same health care systems. Thus, the healthcare provider must be adequately prepared to care for this vulnerable population. It is important to point

out that given the numerous comorbidities associated with ASD, and the enormous burden on the economy, the significance of this problem must not be ignored. The likelihood of healthcare providers encountering a pediatric patient with ASD is very high. (Leyfer et al., 2006)

2.11. Nurses and Children with ASD

Johnson & Rodriguez (2013) say that 64.9% of children with ASD are taken to the hospital within their first five years of life, while only 48.2% of children who are developing normally are taken to the hospital during this time. More and more, medical staff needs to understand ASD and acquire the skill to help children with ASD. Children ages 24 months to 11 years old are mostly the ones affected by this because of their young age and are susceptible to deficient care because of a lack of developmental skills to communicate. If a child with ASD has a bad experience during a doctor's visit, it can affect how that child acts at future visits (Winslow, 2017). Even though this is important, nurses in hospitals often don't have access to good training programs for behavior management skills (Drake et al., 2012). Pediatric primary care clinicians have often said that they do not have enough training to deal with the medical and behavioral problems of children with ASD (Bellando et al., 2016). So, the role of nurses in the health care of people with ASD is of the utmost importance in pediatric nursing care. Children with ASD and their caregivers are already under a lot of stress, so additional stress should be avoided (Johnson & Rodriguez, 2013).

3. Aim and research questions

The aim of this review was to map the existing literature and evidence-based practices for children with ASD. Its purpose was to aid nurses in practice to gather knowledge and evidence-based strategies so that nurses can better serve the specific needs of autistic children.

Research questions:

1. In a hospital setting, how can nurses best care for children diagnosed with autism spectrum disorder (ASD) during admission and reduce suffering?

2. What guidelines do nurses have in caring for children with ASD hospitalized in the pediatric department?

4. Theoretical Framework

Katie Eriksson proposed a nursing theory called Caritative caring, which according to her is a natural phenomenon of nursing in which kindness and compassion are linked to improving health in a holistic approach that leads to protecting life and reducing suffering for a patient. The key ideas of Eriksson's theory of Caritative caring are linked to the paradigm concepts of human beings together with mind soul and spirit, suffering during a health crisis, and caring, together with the environment preserves dignity and alleviates suffering. All of these are run through with the spirit of Caritative caring, the thought of human love and mercy, and the honoring of the dignity of human beings. Caring entails growing faith, hope, and love via engagement, play, and learning from one another through dialogue. It is a connection that requires time, space, and plenty of involvement, that is the ethos of it all. Nurses show this by promoting warmth and intimacy with patients and providing patience, respect, and sincerity. Easing the suffering of patients and providing quality care is an ethical responsibility and role of a nurse, according to this theory. The plan is to reduce discomfort while promoting and protecting health and life. Due to the holistic definition of healthcare, Eriksson places a strong emphasis on caring with the intent of building a caring relationship with patients, where the idea of the person as an integrated entity made up of a body, soul, and spirit is held. (Bergbom, Nåden, & Nyström, 2022)

This theory may provide the framework within which the respect and care given to pediatric ASD patients by nurses could be based on improving the quality of healthcare for these patients. The core idea of Eriksson's theory is that ASD patients may experience difficulties in development and are suffering due to their disorder, and a nurse may or may

not be able to successfully resolve all the conflicts, but is willing to go to lengths to ease their suffering. When the child receives good care while they are young, they will develop the ability to trust and believe that these healthcare professionals were there to provide for their needs. Therefore, if nurses had enough knowledge and understanding of ASD, it would be easier for both patient and nurse to communicate with one another and nurses would have specific guidelines for caring for children with ASD that were hospitalized in the pediatric department based on the caring ideas of this theory.

5. Ethical Considerations

In research, it is important to consider ethical issues. Especially in nursing, which involves caring for human beings (Polit & Beck, 2010), Because of this, there needs to be a lot of proof that the information gathered is ethically and morally sound. The researcher seeks knowledge from the articles rather than swaying the beliefs of its audience to suit any ideologies. In evaluating and interpreting evidence from articles, they were reviewed in an ethical manner that did not skew the authors' assumptions and beliefs that may influence other research (Suri, 2020). Making certain that no human rights were infringed upon and Adhering to the International Council of Nurses (ICN) ethical criteria was of utmost importance. Government laws and rules were in place to protect these rights, and because of this, people who break the Ethical Conduct for Human Research principles will be punished. When doing research, there are different rules to follow, such as beneficence, respect for human dignity, fairness, and the subject's right to full transparency. Along the way, researchers may face ethical questions, and we should not only be aware of them but also help find and avoid them. It is critical in nursing research to closely adhere to the rules established for producing evidence-based publications. This is especially true given that we are dealing with human existence and all of its complexities. It was not only necessary to collect this information from credible sources and databases, but it is also necessary to cite correctly to avoid plagiarism and properly credit the authors using the citation procedures established by these rules. (Polit & Beck, 2010) The Finnish board on research integrity(TENK), is appointed by the Ministry of education and Culture to set the guidelines for Responsible conduct in research (RCR) to ensure that research was done ethically with fairness and competence benefiting many through research. According to TENK (2021), all elements and phases of the study, and research should be conducted with integrity,

accuracy, and extraordinary care. It is not only the responsible collection of data but also the method by which the findings were reported and information was disseminated. It instructs researchers on how to properly acknowledge and respect other researchers when citing their work in papers. Permits should be obtained if needed, and participants should be made aware of their rights from the start of the study. Any conflicts of interest, such as funding or memberships, that may jeopardize the integrity of the research, should be disclosed. Most importantly, personal data of all study participants will be protected at all times. (TENK, 2021) The ethical review refers to the prior analysis and evaluation of a research plan considering the ethical principles commonly followed in that branch of science, with a specific emphasis on preventing any harm that the research or its findings may bring to the research subject (Medical Research Act and Decree, 488/199).

6. Methodology

Guidelines for scoping reviews includes inclusion and exclusion factors, evaluating literature searches, and analyzing data. To do this, the existing scholarly articles and knowledge on pediatric nurses' roles in dealing with ASD children in the hospital need to be mapped out methodically. This means figuring out the main scope of the review and finding and charting all the relevant literature on the topic that meets the criteria for inclusion. Background data, theoretical frameworks, and databases were vital, where evidence can be gathered that was relevant to the search. Scoping reviews find and map important information that fits the criteria that have already been set for the topic, field, context, idea, or problem that was being looked at. Scoping reviews have review questions that are more general than those in systematic reviews. Scope reviews can use many different types of evidence. Since the design of scoping reviews was to give a broad overview of the evidence instead of a quantitative or qualitative summary, they usually don't include methodological evaluations or risks of bias when evaluating sources. This was done to address the stated objectives and review question(s) about key ideas, theories, facts, and evidence gaps. Scoping reviews don't combine statistical or qualitative data from different sources. Instead, they find, present, and describe the most important parts of each source. (Godfrey, Harrison, Graham, & Ross-White, 2010)

The review methodology started after deciding on the topic of the research and the title of the review, the type of research to be done and the methods to be used were chosen. These options were made based on the aims of the study. The next step was to decide the research inclusion criteria, such as children aged 1 to 11, autism, ASD or autism spectrum disorder, language search as English, articles with abstract and full text admitted to a somatic ward, and articles that are 9 years and below years old (2013-2022) selection were used in the review that would best answer the questions set in its aims. A step-by-step search strategy was used by first reading through article titles first then abstracts and after reading through the entire articles to see what ideas and in what context these articles apply in answering the research questions. The article search goes on after using keywords while going through specific databases that were relevant to the search such as Pubmed Central, Cinahl, Medline, Proquest, and Cochrane Library. It was also important to make accurate charts of the data to determine the relevancy of the studies included by creating a systematic article matrix. The PRISMA method for data charting was used to make it easier to quantify gathered articles from each of the databases searched, which include published and non-pear reviewed materials. In addition, other articles were included due to their relevance to the said topic, which was important in delivering a reliable conclusion. The process of evaluating the articles selected was mapped out using an Excel file. And after looking at all of the publications with their methods and conclusions, the JBI Critical Appraisal checklist for systematic reviews and research synthesis were used to ensure the quality of the articles to be reviewed and score them. After reading the articles again, the main themes and sub themes were picked out and put into Excel data so that the study's results could be discussed. A total of 30 references were found as a result of the data search, using the keywords to narrow the search for relevant articles for this review. Duplicates were eliminated, leaving 11 potential sources for further examination. After screening the titles and abstracts and reading through the articles, A number of references were excluded, leading to seven articles after the titles were first scrutinized for relevancy. Additionally, the whole texts were screened using the inclusion and exclusion criteria, resulting in three reference articles left for analysis and discussion. Four more articles were added due to their relevance to the topic which was used in the background portion of this review. A total of seven articles were selected to be used as sources for coming up with data that would answer the research questions in this review. Lastly, the seven articles were then evaluated with the use of JBI assessment tools, where sources were examined

and evaluated using several JBI checklist to be included in the review. The researcher also started a separate search dedicated to finding guidelines. It led to the production of two relevant articles. In the last step, all nine sources were used to construct this review. The most frequent justifications given for rejecting papers were that they duplicated content from other databases, that the topic wasn't relevant to the study, that it lacked specificity rather than being general, and/or that it wasn't directly tied to the problem. In addition, the author also contacted a Finnish company that aids in applying guidelines following ethical principles in healthcare practices for children with disorders and associated developmental obstacles, to find out if they have any standard guidelines about how children with ASD who were hospitalized, should be cared for. Unfortunately, no replies were received up until the date of submission of this review.

6.1. Data collection

Data collection is the process of gathering information that can be used to answer the study's questions. There could be either qualitative or quantitative studies from relevant databases. The development of inclusion and exclusion criteria is critical in developing a high-quality scoping review. The inclusion criteria entail selecting a particular group with demographic and geographic traits that will aid in answering the study questions. Exclusion criteria were equally crucial in narrowing the search parameters so that study participants were not part of the group participating in the research. Both are necessary in order to produce an accurate outcome and the best data for the review. This is how we discover papers related to this review, which affects the validity and precision of the scoping review outcomes. Structured data was collected by repeatedly asking for the same set of pre-set keywords on each database search option. In order to answer the research inquiry, the same sequence of questions should be asked. Getting structured data helps researchers be objective. Objectivity refers to the degree to which similar results or observations can be made when the same interesting topics were searched by two different researchers. On top of that, it makes the data easy to analyze. It was said that data collection is the process of gathering and measuring information about variables of interest in a set, systematic way that lets one answer stated research questions, test hypotheses, and evaluate outcomes. (Patino & Ferreira 2018)

In this review, the researcher conducted the following steps for data collection: first formulation of inclusion criteria, which were as follows: Children ages 1 to 11 with autism, ASD, or autism spectrum disorder were searched, indicating also that the language selected for the search was English. Then the articles were selected by way of tiles, abstracts, and full texts, verifying that the studies selected included admission to a somatic ward and not while being treated for their ASD disorder, while also screening against other exclusion factors. It was noted that only studies and articles with ASD children below 11 were included in the selection and not those with adolescents and adults (12 years and older). Subsequently, the exclusion criteria were also set to minimize the search and remove articles that may not be relevant and will not be useful in answering the research questions. After deciding what the criteria would be, the researcher chose the keywords that would be used in the review. Keywords used in searching for articles include autism, caring, nursing care, children and guidelines, adding "and" in the search options to produce the desired search parameters. After this, the researcher selected relevant databases that were highly appropriate for the review. The researcher used PRISMA method to show the screening process for searching for the review. The articles found from databases were filtered based on their titles, abstracts, and full contents, following the rules and guidelines it has set. After all of the articles were read, an evaluation of article files was made to further assess the articles that would be in the review. Once chosen, it would be evaluated using tools from the Joanna Briggs Institute (JBI) to appraise the quality of these articles. Lastly, in order to effectively analyze the results of the search, the researcher created an Excel file where the main themes of the studies selected were identified and subtyped. All of this leads to the results part of the review, which was later addressed in the discussion part of the review.

INCLUSION CRITERIA	EXCLUSION CRITERIA
• Children age 1 to 11 • Autism, ASD or autism spectrum disorder • Language: English • Articles with abstract and full text • admitted to a somatic ward • 9 years and below (2013-2022)	• adolescents and adults (12 years and above) • Other psychosocial disorders • admitted to a psychiatric ward • articles and studies: 10 years and above

Table 1. Inclusion and Exclusion
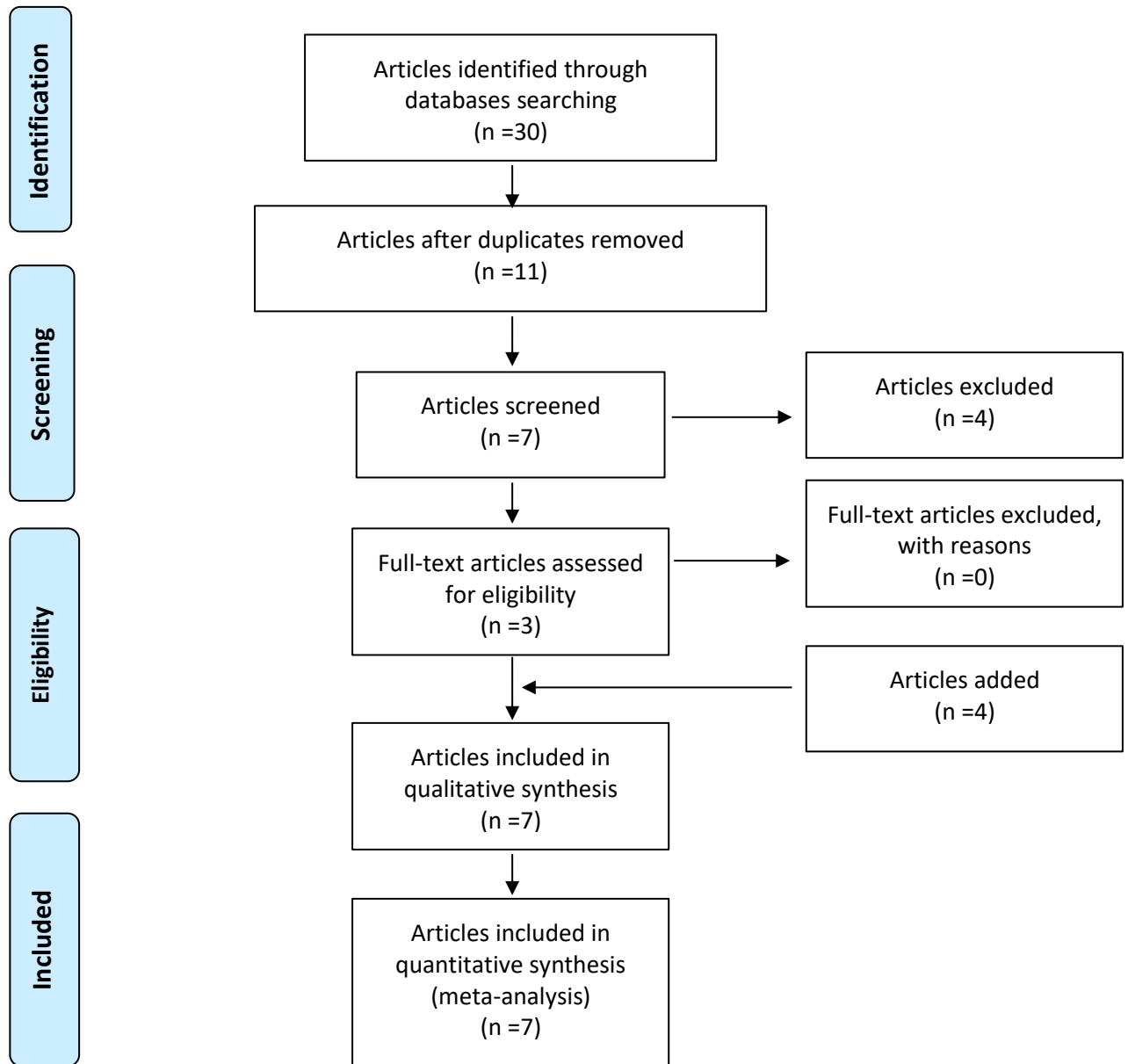
Figure 1: Prisma diagram (adapted from Moher, Liberati, Tetzlaff, Altman, & Prisma Group, 2009)

6.2 Data analysis

The scoping review design and conduct follow the methodological framework of a systematic literature review. The difference lies in the articles and sources that can be included in a scoping review. Peer-reviewed articles were not required in the inclusion criteria of this method of review. A scoping review's main objective was to synthesize the data surrounding a subject, including both what was known and what was unknown. These include explaining what the review means for future research, pointing out any gaps in

knowledge that were found, and giving advice on how to approach a more focused research topic. Scope review is becoming a more common way to bring together the results of previous research. It tries to make a map of all the work that has been written about an interesting topic in terms of the number, type, and quality of the original research that has been done. A scoping review analysis of the relevant body of research can be very helpful when the topic at hand hasn't been well researched, is hard to comprehend, or has many different results. Scoping reviews are frequently carried out to assess the volume, diversity, and nature of research activity in each field; determine the value, potential size, and cost of an exhaustive systematic review; summarize and disseminate the results of research, and identify research gaps in the body of previously published literature (Polit & Beck, 2018).

The analysis started by reading the abstract and then reading the whole text of the studies several times in order to determine their relevance according to the aim of the review. This scoping review includes definitions of underlying key concepts and grouping them to form commonly mentioned ideas and themes arising from the articles chosen. Although extensive reporting was guided by PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses), it emphasizes systematic research done to provide quality outcomes in order to improve review reporting in step with developments in practical and clinical studies in healthcare (Moher, Liberati, Tetzlaff, Altman, & Prisma Group, 2009). The reasoning for this scoping review was guided by conducting an inductive approach in reporting the involvement of patients and nurses' specific recommendations and interactions to draw generalized observations and guidance for future research, which is beneficial in defining the general concepts gained by building on specific ideas and findings for this review. Several themes rose when started to combine sub themes of the emerging from articles selected, which were then put into an Excel file and will be used to discuss the study's results to conclude generalized concepts and ideas.

6.3. Literature search evaluation

The literature analysis was done narratively to obtain either qualitative or process-oriented knowledge from each sample. In addition to that, the results were to be gathered as well as summarized. The tabular technique was adopted to present a general overview;

however, the literature synthesis was not provided. To offer a numerical description of the range of the research and its results, tables and maps are frequently utilized. After that, a clear summary is provided to assess the quality of the research included, using the Critical Appraisal Tools developed by the Joanna Briggs Institute (JBI). When it comes to revealing data, clarity, accuracy, and ethical concerns are all key factors to consider. (Levac, Colquhuon & O'Brien 2010)

7. Results

Following a methodological framework for scoping reviews, the content of these articles was synthesized featuring the best practices that nurses can do to provide quality care for children with ASD during hospitalizations. It brings forth some common themes that were helpful in answering the research questions and providing conclusions on the research topics at hand. This summarizes and puts out the results of these articles to identify what is known and the gaps that may be lacking in these bodies of knowledge in published pieces of literature. (Polit & Beck, 2018)

Conducting an Inductive analysis method was the appropriate method for this design for scoping review. Seven studies formed the final set of articles included in this review. The articles gathered focused on 4 main themes which included communication, safety and protection, proper endorsement and preparation, and Education and training for nurses is essential. An inductive content analysis was done in order to conduct this small-scale research to create the themes and sub themes in these 7 articles.
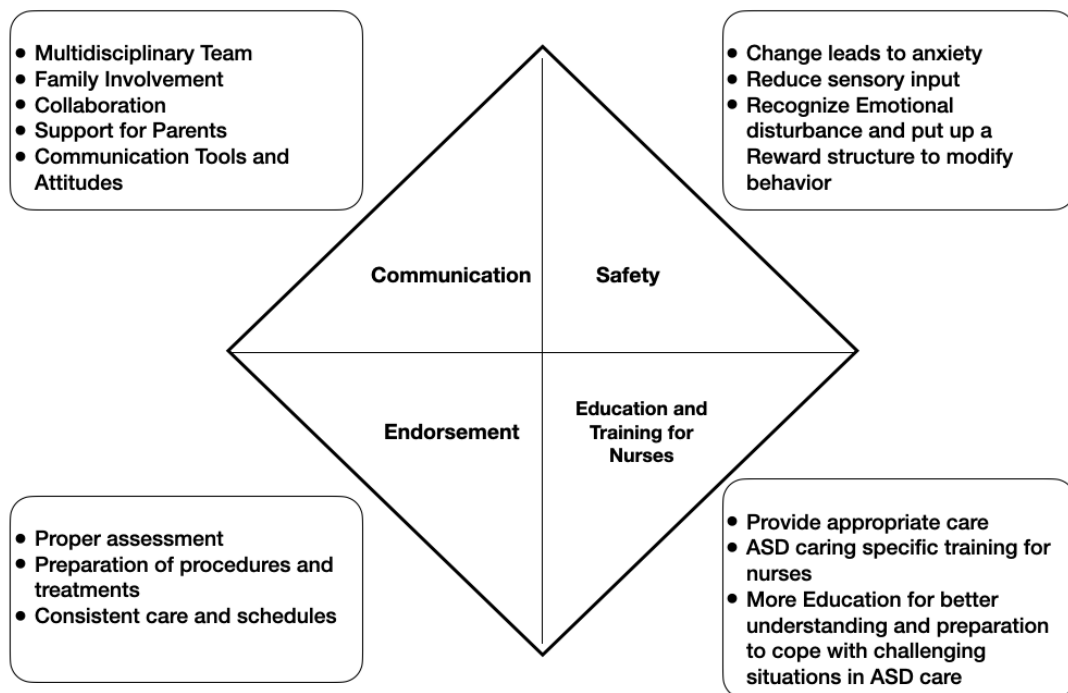
Communication

Safety

Endorsement

Education and
Training for
Nurses

- Multidisciplinary Team
- Family Involvement
- Collaboration
- Support for Parents
- Communication Tools and
  Attitudes

- Change leads to anxiety
- Reduce sensory input
- Recognize Emotional
  disturbance and put up a
  Reward structure to modify
  behavior

- Proper assessment
- Preparation of procedures and
  treatments
- Consistent care and schedules

- Provide appropriate care
- ASD caring specific training for
  nurses
- More Education for better
  understanding and preparation
  to cope with challenging
  situations in ASD care

Figure 2: Result analysis

7.1. Description of included studies

Of the 7 studies considered in the study, 2 were descriptive studies, 4 were systematic or research synthesis, and 1 was a case report. The studies were between 2012 and 2021, all meeting the below-nine-year inclusion factors, bringing the research up to date. The USA and the United Kingdom were the countries represented in the studies. The two guidelines gathered were from the USA as well. Most researchers were particularly interested in nurses' roles in caring for children with autism during hospitalization. Medical treatments that were for their somatic conditions, not counting studies about their neuropsychiatric treatments for ASD conditions. Included in the guidelines was information on how to properly provide medical attention to children diagnosed with ASD who were hospitalized.

7.2. Description themes drawn from included studies

The investigation of the seven publications led to the discovery of several sub themes that led to the discovery of four primary themes that were used for analysis. The topics that were discussed were communication, safety, and security, proper endorsement, Education, and training of nurses in practice.

7.2.1. Communication

There were several different generalized themes that were taken out of the analysis of these articles, but the most common theme that emerged was the importance of communication. This pertains to communication not only with the patients but also communication among a multitude of healthcare professionals, all helping out in providing the best care for a child with ASD (Jolly, 2015). Communication also refers to interacting with parents, who are rich sources of information that will aid in the objective of providing children with speedy and efficient somatic treatments during hospitalization (Vuattoux et al., 2021). Nurses may be able to recognize these children with ASD's communication abilities with the assistance of their parents and guardians (Brown & Elder, 2014). And also, that poor communication and coordination lead to low quality of care and inadequate planning strategies for these ASD children, negatively impacting their treatment and prolonging their hospital stay (Hurt et al., 2019). This implies that when an ASD child comes to the hospital for treatment, a dedicated multidisciplinary team must be available (Jolly, 2015). The support for the parents was also enough, thanks to communication, and the parent's or caregiver's irritation and stress may be avoided during these tough moments (Hurt et al.,2019). There were also chances to improve contact with these youngsters by using communication tools and kits that help to relax and reduction of anxiety in these children while they were hospitalized. (Drake et al., 2012). Lastly, the effective way of communicating with these children with ASD is with a calm and patient attitude to better understand their needs and wants (Johnson & Rodriguez, 2013).

7.2.2. Safety and Protection

The review's second most prevalent major subject was safety and protection. It refers to the ASD child's sense of safety in order to alleviate anxiety and avoid emotional discomfort caused by changes in routine and surroundings, as well as what nurses may do to adapt to the environment and methods of working to accomplish this. (Jolly, 2015) Needless to say, this includes the safety of nurses on wards in the case of ASD behavioral disorders causing disturbances. Through the assistance of family members and caregivers, nurses were able to provide the ASD child with a sense of safety by minimizing sensory input and managing ambient sensory impacts (Vuattoux et al., 2021). They may be able to relax and enjoy the feeling of security they need by eliminating upsetting noises and overstimulating distractions from their surroundings. (Brown & Elder, 2014). Furthermore, keeping to their regular daily schedule might soothe their safety worries while avoiding overstimulation and anxiety (Johnson & Rodriguez, 2013).

7.2.3. Proper endorsement and preparation

The next theme that emerged from this analysis was the need for proper endorsement, which is the handing over of data and tools in caring for the patients in a ward. Nurses on the wards lead the preparation and handling of these patients resulting in consistent outcomes in reducing the negative effects of hospitalization and minimizing the risks for children with ASD (Vuattoux, et al., 2021). As a result, somatic treatment was more cost-effective and comfortable for these autistic children in pediatric wards (Johnson & Rodriguez, 2013).

7.2.4. Knowledge and training needed by Nurses

Caring for people with ASD is hard but worthwhile, which is why the last main theme gathered from these articles, were the difficulties that healthcare professionals, particularly nurses, face when caring for children with ASD in the hospital. This is tedious work but most believe that being armed with additional knowledge and training, would make their experience of working with ASD children meaningful and gratifying (Hurt et al.,

2019). The training and knowledge they receive may be adequate for normal children in pediatric wards, but when dealing with children with ASD, a better understanding of their behaviors and condition leads nurses to feel ready in coping and prepared for the challenges in communicating, adjusting, and creating a comforting environment for these ASD children and their parents (Winslow, 2017). As well as providing a satisfactory quality of care that most patients need and parents appreciate especially since ASD children are more vulnerable to comorbid conditions (Vuattoux et al., 2021).

8. Discussions and Limitations

Based on the findings of the three chosen publications, this review identified the primary themes that emerged, including communication, safety, correct endorsement, and the knowledge and training needed by nurses to receive rewarding experiences when ASD children's needs were satisfied during their inpatient admission. The aim of this review was to map the existing literature and evidence-based practices for children with ASD. Its purpose was to aid nurses in practice to gather knowledge and evidence-based strategies based on guidelines so that nurses can better serve the specific needs of autistic children. The results showed that different strategies were employed to address the needs of children with ASD when admitted to the hospital but only a few guidelines are available for nurses. Through discussion of these findings, I am able to answer the first research question on how can nurses provide proper care and reduce the suffering of these children with ASD. The findings of the publications evaluated revealed that there has been a considerable increase in the quality of care provided to these children and reduced their sufferings during hospitalization by decreasing complication risks and hospital stay length (Hurt et al.,2019; Johnson & Rodriguez, 2013). The notion of Caritative care in Ericsson's nursing care theory may be used to support these findings. The search for recommendations was difficult, which may lead to the notion that there aren't many standards that may support nurses to give this essential care for these ASD children, which is particularly crucial for this patient group with communication and behavioral challenges. This also implies that nurses have an ethical obligation to seek and consolidate established norms in order to enhance treatment for these ASD children. Not just to better their physical health, but also because a rising number of children were being diagnosed with this condition, which means that

the possibility of seeing and caring for them is significant. As a result, the nursing profession and its practitioners in all nursing sectors should be prepared to meet the requirements of these ASD children if they were hospitalized, particularly in the pediatric sector (Jolly, 2015). This is to help new nurses and nurses already working to care for autistic children better and lessen their suffering.

As a result, the intent of this review was to improve the nurse's knowledge and ability to interact with members of the ASD population. Its purpose was to aid nurses in practice to gather knowledge and evidence-based strategies based on guidelines so that nurses can better serve the specific needs of autistic children. It is also crucial to find what guidelines were used to guide nurses in caring for these children with ASD. This shows how important nurses are in ensuring children with ASD receive quality care. The knowledge gained by nurses in this endeavor would benefit children with communication difficulties in particular. This, in turn, could alleviate the suffering of these ASD children, so that nurses may fulfill their ethical responsibility in providing the best care possible to these children. Although these ASD children may already be undergoing treatment for their disorder through various therapies, it is important to note that this review was focused on helping these children through somatic medical care provided for them during their admission into a hospital with varied conditions that they may suffer from and not treatment of their autism disorder. Based on the articles, ASD is marked by an assortment of neurobehavioral conditions with varying degrees of poor social interaction and communication issues that were stereotypical behaviors of this disorder. Stereotypical actions could involve hand flapping, spinning, rocking, or other repetitive motions. A child could become fixated on a particular item or stimulus, and if left unchecked, this could engage a child in repetitive actions and self-stimulation. (Brown & Elder, 2014; Jolly, 2015; Drake et al., 2012) These behaviors are disturbing and may lead to poor communication with the healthcare provider. Children with ASD are usually in poorer health conditions as well, so treating them quickly is essential (Hurt et al.,2019). Establishing the first crucial step in giving good care to a child with ASD is gaining an understanding of the child's communication abilities and soliciting the parents' help in communicating with them in order to address the child's needs (Jolly, 2015). Determining the child's ability to communicate is essential, especially when they are very restricted. Observing non-verbal methods and cues is important and by identifying the best methods to communicate with them, nurses were able to understand

their needs and provide for them. (Brown & Elder, 2014) With the help of visual aids like graphic timetables and communication boards, people with ASD can communicate well (Drake et al., 2012). Finding out the child's care needs falls heavily on the nurse's ability to involve the child's family, as determining any emotional disorders or what exasperates the child the most is vital. Nurses are responsible for not only communicating effectively with parents but also offering and providing support to them in order to establish proper collaboration with them. Children with ASD may get upset if they have trouble communicating, can't handle change, or were too stimulated, which in turn frustrates the parents and family, leading to their feeling of "not being heard or understood". (Hurt et al.,2019) Speaking calmly and patiently helps communicate with children with this condition, especially with behavioral problems. If these issues arise be patient and repeat the instruction in a calm voice to help manage anxiety for these children. (Johnson & Rodriguez, 2013)

The author found out that communication is the key to all the strategies needed to care for these children with ASD. Even the dissemination and training of nurses in different sections of the hospital. Communication is needed for specialized care and communication involving the caretakers and parents of these children with ASD. I notice that not found were global or nationwide guidelines to specifically address these children, especially when communicating with them is a challenge. Gaps may also be seen in the training and knowledge needed by nurses in practice and during schooling to effectively care and communicate with these children with ASD. What's important is to understand the specific needs of these children with ASD and how to address them once admitted by nurses in the hospitals. I think that in order to be able to care for them, nurses must have ASD-specific training for them to better understand the condition and lastly to be able to respond proactively once these children are admitted even when they were undiagnosed and recognize their need for better communication and understanding. ASD children need extra care from their healthcare team because their unique personalities may make it hard for them to follow the standard treatment plan for other patients. A multidisciplinary team might be able to take care of all of the needs of people with ASD (Jolly, 2015). Face-to-face contact should happen often, and someone should be chosen to coordinate care (Vuattoux et al., 2021). Doctors need to think about the mental and emotional effects of the treatment, and a nurse needs to lead the care and management of the patient's somatic

condition, whether they are going through procedures and therapies or dealing with the difficulties of their neurodevelopmental disability. Families are encouraged to bring food for the child, and a nutritionist should be consulted to make sure the child is eating well (Jolly, 2015). Autism patients have trouble processing information, so children with ASD are especially likely to be misunderstood. The tools available to measure their pain and suffering were also not as good as they could be, which makes them vulnerable to monitoring problems. Lastly, communication is key to building a clear line of communication with the child. It is also an important step in building rapport and trust and taking care of a child with ASD in the right way. Working with other professionals is very ideal. When doctors and nurses don't coordinate with each other well, care was likely unsatisfactory and it takes longer for these ASD children to get better. Most parents said that at least one expert had helped them out. But there were still a lot of things that need to be fixed before children with ASD can get the right treatment plan and support they need. (Hurt et al.,2019) During these trips to the hospital, some information may be lost or repeated, which could slow down how these children with ASD are treated. A well-coordinated system should be set up to help ease suffering and get people the care they need.

One study looked at how to teach pediatric nurses about ASD and make a guide for and help show nurses how to better care for kids with ASD in the hospital (Winslow, 2017). But before they can do that it is important to establish the safety and protection of these patients as well as the staff caring for them. For the ASD children's safety and peace of mind, it is important to create a safe area around them and lock up the area around them. One way nurses can help children with ASD is by making sure they are in a safe and calm place. This is also true for nurses, who need a secure area that could keep both patients and healthcare workers safe. (Jolly, 2015) Rearranging the rooms and conditions so that they don't have any stimulation or noises that could make ASD patients anxious (Brown & Elder, 2014). Another objective was to keep the patients safe by making sure nothing harmful happens to them, either by accident or because of their own doing. These arrangements might make it less likely that any of the hospital staff might get hurt or that a child with ASD will get upset and behave badly. (Jolly, 2015) As the nurse works with the family, nurses should find out what makes the child anxious or stimulated. Steps can be taken to help a child follow a medical plan that encourages and helps with a reward

program that children with ASD look forward to and enjoy. Because of their disorder, children with ASD do things that aren't appropriate socially. These problematic behaviors may get worse in a new place or with new caretakers. If a familiar face is at the child's bedside while they are in the hospital and their family is not there, it is helpful to keep the same people who care for them during admissions on the same schedules. The staff, the families, and especially the patient, will feel safer because fewer of these changes happen. (Vuattoux et al., 2021) Working together with the child's family may help them feel more confident in and respect the healthcare team. Also, reducing sensory stimuli is a good way to make sure patients are safe, especially those with ASD. There are ways to make sure these patients don't get too excited. (Brown & Elder, 2014) Change makes people feel anxious by nature, even more so for a child with ASD. So it would be ideal to minimize changes by creating a comforting schedule that allows the child with ASD to ease into his normal daily routine. A child with ASD may feel better when they stick to a schedule, and being in the hospital can definitely disrupt their normal routines. This is crucial in promoting compliance and reducing behavioral breakdowns during treatment, diagnosis, and procedures. (Jolly, 2015) It's important to ask family members and caretakers for help in figuring out what they usually do during the day. One option is to try to keep the routine that they were doing when they were not sick and continue to apply the same procedures throughout their stay. (Vuattoux et al., 2021) It's in everyone's best interest to be able to spot any emotional problems the patient might have and deal with them accordingly. The nurse's responsibility is to find patients who might have emotional problems and figure out what worries were making them feel bad (Jolly, 2015). Many things, like communication, change, and too many stimuli, can make children with ASD feel anxious. This was less of a problem when there was less sensory input and less in the environment that gets in the way of processing sensory information. Crowds, being in an unexpected place, or being sick can all make kids with ASD upset and cause them to act in difficult ways. (Johnson & Rodriguez, 2013) Healthcare workers need to be more competent in how to handle children with ASD. One way to do this is to make sure they are safe and safe from harm and anxiety, leading to providing better care.

Recognizing that this group of people with ASD is different also means taking a different approach, therefore proper assessment, endorsement, and preparation were needed for these patients. For the nurse to give good care, nurses need to do a thorough assessment,

works with people from different fields to plan, knows a lot about the child's special needs, and work closely with the family. For more advanced care, nurses should be able to assess the ASD child's needs and plan efficiently in order to make the child's hospital stay safer and less stressful, if not even fun, for the child and family. (Jolly, 2015) To reduce anxiety and stress for the ASD child, it is possible to set up a secure perimeter and stop giving any IV medications or non-essential procedures right away. Preparing for the needs of a child with ASD and being consistent in care and health service delivery is critical to their management. It is very important for parents and other caregivers to help set up routines for both inpatient and during discharge care. They can give a lot of information and help set up a routine that works best for the child. (Vuattoux et al., 2021) The nurses can help the child with ASD get used to new places in subtle ways, such as by getting rid of loud, strange sounds, bright lights, and rough surfaces that could hurt or overstimulate the child. When it is possible, give patients their own rooms with their parents. To give them privacy and keep them calm, away from overstimulation. A diet of familiar foods that are planned and made with the help of a nutritionist may also help the child with ASD feel better. (Johnson & Rodriguez, 2013). To make sure that the child with ASD gets good care over time, there needs to be a proper endorsement. The nursing staff needs to keep track of the child's ways of communicating, as well as any things that might make the child upset or anxious, their daily routine, and their likes and dislikes. This means that preparing ahead of time, grouping similar tasks together, giving one's self enough time to get ready, and making sure that care and procedures are consistent are activities that need to be done. Eventually, finding out the patient's needs, and then getting them ready for the most effective treatment is possible. (Jolly, 2015)

Caring for children with ASD is serious and challenging work, but many nurses believe that adequate training and enough support may help them support these patients and make their tasks enjoyable and fulfilling (Hurt et al., 2019). Autism is still not diagnosed as effectively as it should be because its clinical symptoms can be confused with those of other comorbidities of ASD or other psychiatric disorders and because people with autism, especially females, can have complicated ways of masking it. Children with ASD have a higher overall death rate, which may be because they don't use healthcare services enough, which means that their needs aren't met. Complications from having more than one disease were also seen. The use of extra drugs like atypical antipsychotics, poor

nutrition, and insufficient or improper use of healthcare resources are all linked to a poor prognosis and, therefore, poor quality healthcare for children with ASD. (Queisser, Fairley, Suttle, & Hotaling, 2016) Important information will need to be gathered and shared between all members of the team. This includes ASD-specific indicators of severity and intellectual functioning, the sensory profile, somatic and psychiatric comorbidities, and whether or not the person can speak. Children with ASD are about four times more likely to have unmet healthcare needs than children with no disabilities. (Vuattoux et al., 2021) This shows how important specific healthcare services, need to be available for families with a child with ASD. Improving the system as a whole is still hard because it requires coordinating the efforts of many caregivers who work in different settings and, often, in different places. Because most people in the healthcare industry work alone in silos, it might be hard to get to this level of "holistic thinking." This makes hospital treatment more cost-effective and affordable for the parents by reducing hospital stays ultimately benefiting the patient. (Johnson & Rodriguez, 2013)

Parents often expect help from the healthcare system after their child has been diagnosed, but there was no clear way to get an ASD diagnosis, even armed with diagnostic tools some children are still left undiagnosed. They had trouble trying to get help for their child. Some parents, for example, talked about health services they had found by accident. This might happen because healthcare providers don't know enough or have enough training, which limits their ability to help this group of patients. (Hurt et al., 2019). So, children with ASD often have bad experiences with healthcare and other services related to healthcare, and there haven't been many studies done on the subject (Johnson & Rodriguez, 2013). But a recent study of the healthcare system in the United Kingdom showed that access to and quality of care for ASD remained inconsistent and, in most cases, not good enough (Hurt et al., 2019). Less experienced nurses need more education and training in how to communicate with patients with ASD and care for children with behavioral problems (Winslow, 2017). This skill development should be placed as a top priority for better patient care. This is especially important for people who have been diagnosed with ASD because they usually don't communicate well and are more likely to have other health problems. As soon as possible, we need to do research on the best ways to help children with ASD. Nurses found it beneficial to receive proper training and knowledge that would help them

handle children with ASD. This makes their work more satisfying when able to cope with these challenges with ASD children. (Vuattoux et al., 2021)

As for guidelines, this answers the second research question of this review. There aren't many that were made just for people with ASD. It is known that children with ASD are more vulnerable and harder to care for, but general guidelines don't have any specific suggestions for how to treat these patients in the best way. The NICE (National Institute for Health and Care Excellence) 2021 guidelines for ASD in children under 19 (recognition, referral, and diagnosis) are the most recently updated international guidelines for these children with ASD. But even back then, it was clear that there were still some holes in the advice these guidelines give for treating these kids in hospitals. This kind of care should get better over time, but for that to happen, it needs a strong and clear answer that was based on evidence. In the guidelines, there should be information about how to change the clinical environment to make care easier to get and how to find the right providers and healthcare systems to train. When taking this route, it goes without saying that it should be as clear and open as possible. To meet this need, it's essential to make a resource that everyone can use, and that makes it easy for everyone to keep track of a child's progress along the route. So, it can be said that healthcare professionals don't have the training they need to help people with ASD. ASD death rates are increasing because people's needs aren't being met. Even so, jobs that involve taking care of patients are still hard but rewarding. In principle, staff who worked in healthcare thought their jobs were laborious but ultimately worthwhile. Especially when it comes to hearing parents' concerns and giving them responses, which raises the quality of care for ASD children as a whole. This is important for helping children with ASD in the future. The Continuing Nursing Education (2014) guidelines for ASD pediatric nurses say that nurses should have enough knowledge and training to deal with the most important part of autism: communication. The development of communication strategies among nurses will help them deal with the communication and social problems that a child with ASD may have. This will help them treat the child's physical symptoms more effectively, reducing anxiety and costs for the child, the parents, and the healthcare workers. (Brown & Elder, 2014).

The risk of bias in selecting and evaluating the articles chosen for this study was one of the review's limitations. The author worked hard to find the best bits of evidence in order to deliver better reporting. However, this is typical even after taking considerable measures

to ensure that they were free of prejudice. Furthermore, the subject may be vast, and the sources may be unpublished or peer-reviewed, which may reduce the quality of the findings. Finally, scoping reviews are often used as a preliminary study on subjects in order to assess the wide evidence accessible to contribute to future empiric research. (Godfrey, et al., 2010). In the end, most of the authors in the research gathered agree that more research is needed in order to come up with best practices that will encourage guideline makers to create better protocols for caring for these special needs children.

9. Conclusions

The results show that the hospital's education and healthcare systems are not fully ready to help children with ASD. It wasn't clear what the nurses were supposed to do when these children with ASD came in for their somatic conditions. Also, the articles only gave a few rules for how nurses should care for children with ASD in pediatric hospital wards. Because of this, there is a need for evidence-based guidelines on how to care for children with ASD. This is because there isn't a lot of research on the best ways for nurses to care for hospitalized children. As a way to improve person-centered care for children with special needs in hospitals, rules were made based on facts. Diagnosing ASD can be a very important skill for nurses who want to help set national standards, and also important when confronted with caring for these ASD patients. Those who are very young and haven't been diagnosed or who are older and haven't been diagnosed enough can benefit the most from this competency. Guidelines can also be used to help care for children with other neurodevelopmental conditions that cause some of the same problems. Although this review was meant for readers globally, it was also the researcher's initiative to look into the prevailing nursing practices of Finland. It seems that Finland may not have standing guidelines specifically catered for children patients with ASD. It was not apparent how the care for them was based upon but relevant articles show that the country's healthcare system is geared toward providing these children with ASD with all available means of support to provide not only quality care in their treatment, diagnosis, and eventual care in somatic conditions, but also support in financial, educational and societal support proceedings that help to this undertaking based on law and directive by the government. In relation to Katie Ericsson's theory, it is crucial and important to give care based on

scientific evidence and look at the patient as a person suffering because of their condition and environment as a whole. Caritas care is based on the idea that everyone should be treated with respect and dignity, regardless of their culture or values. All the decisions nurses make for their patients were based on how they treat their patients ethically and how they get along with them. This means that nurses don't regard the patient's disorder as an obstacle to providing them proper care and are willing to heed their needs, acting appropriately to halt their needlessly suffering for an extended period of time, especially if they have trouble communicating. For a child with autism spectrum ASD, going to the hospital can be both physically and mentally stressful. This was why it was so important to come up with guidelines and more specific rules for how to care for ASD children. If nurses know what a child with ASD needs, they can change the plan of care to make the patient and family feel better, improve treatment outcomes, and make hospitalization less stressful. These findings were inconclusive but knowledge can be drawn from this review so that it can be used for further studies and for future guideline makers to make appropriate regulations to help nurses be guided in providing sufficient care for children with ASD upon hospital admissions.

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11. Appendices

11.1 Appendix - Article Matrix, Characteristics of selected articles

Database		Reference	Country	Aim an purpose	Design	Data and methods	Main results
				Systematic search data			
Cinahl	1	Jolly, A. A. (2015). Handle with Care: Top Ten Tips a Nurse Should Know Before Caring For a Hospitalized Child with Autism Spectrum Disorder. Pediatric Nursing, 41(1), 11–22.	USA	The aim of this article is to educate pediatric nurses on autism spectrum disorder (ASD) and to provide a resource for the effective inpatient care of children who have the illness.	Case study	The study used participant observation as a method of research for the case scenario, describing a boy with Autism and how the boy and his mother deal with healthcare procedures when confronted by it in hospital admissions.	JJ was upset all day following his hospital introduction. He proceeded to bite his fingers, grind his teeth, armflap, and strike whenever confronted. JJ's interdisciplinary team called the facility's autism expert, who helped create a care plan and suggested starting constipation therapy the next day. The staff created JJ's daily image schedule with his mother, including his home routine and therapies. JJ's mom suggested an incentive system for drug compliance, which the CLS constructed. She found a game system and other things JJ liked for his room. The nurse who admitted JJ agreed to care for him for the following two days, the nursing management team reduced the patient load to 2:1, and the nurse and management team made JJ and his mother as comfortable as possible. The nurse recorded JJ's mother's advice and shared it with the following shift. JJ was discharged after three days after a traumatic hospitalization.
Pubmed Central	2	Vuattoux, D., Colomer-Lahiguera, S., Fernandez, P. A., Jequier Gygax, M., Choucair, M. L., Beck-Popovic, M., Diezi, M., Manificat, S., Latifyan, S., Ramelet, A. S., Eicher, M., Chabane, N., & Renella, R. (2021). Cancer Care of Children, Adolescents and Adults With Autism Spectrum Disorders: Key Information and Strategies for Oncology Teams. Frontiers in oncology, 10, 595734. https://doi.org/10.3389/fonc.2020.595734	USA	The purpose of this research is to disseminate vital knowledge on this diverse collection of neurodevelopmental diseases, in addition to providing suggestions and practical resources for improving the quality of oncological treatment provided to a particularly vulnerable group of patients.	Descriptive study	Review of available evidence and provide a) a concise synthesis of the evidence relevant to the optimal oncological care of patients with ASD and b) a discussion of recommendations and strategies on how teams can enhance their care and provide support for these patients and their families/caregivers in their cancer trajectory	The review's biggest weakness is the paucity of study-based cancer care for ASD children, adolescents, and adults. Thus, a systematic evidence evaluation is not possible at this time. As the oncology practices see more pediatric and adult ASD patients, the suggestions are mostly extrapolations from other therapeutic contexts. the researchers believes this should not prevent consideration of real changes that can directly assist ASD cancer patients. Globally, enhancing ASD care for medical, nursing, and associated workers is a priority. In the lack of higher-grade data, they advise for awareness of these particularly susceptible people' particularities. Further study is needed to understand how cancer and its treatment (including supportive care) affect people with ASD, which will assist create instruments/strategies to reliably measure quality and outcomes in this group across their cancer care trajectory.

Proquest	3	Hurt, L., Langley, K., North, K., Southern, A., Copeland, L., Gillard, J., & Williams, S. (2019). Understanding and improving the care pathway for children with autism. International Journal of Health Care Quality Assurance, 32(1), 208-223. doi:https://doi.org/10.1108/IJHCQA-08-2017-0153	United Kingdom	This study's objective is to provide a description of the existing care pathways for children with autism, including facilitators and obstacles, based on the experiences of health professionals, education professionals, and families living in South Wales, United Kingdom.	Mixed - methods approach	Focus group discussions, creative writing workshops, and visualization using rich pictures.	The experiences that each of the three groups had throughout the care paths were very different from one another. The most strictly planned paths, with clearly defined entry points and outcomes, were outlined by specialists in the health care industry. Education experts and parents reported paths that were more complicated and confusing, with parents taking on the task of coordinating the health and education activities in an effort to link the two autonomous pathways. The facilitators were different for each of the three groups, but they were identified by all three groups. The obstacles were more similar across all of the categories, and they included poor communication, missing information, a lack of openness, restricted post-diagnostic assistance, and access to treatments that were based on diagnosis rather than need.
Added articles	4	Brown, A. B., & Elder, J. H. (2014). Communication in Autism Spectrum Disorder: A Guide for Pediatric Nurses. Pediatric Nursing, 40(5), 219–225.	USA	For nurses to grasp the style of communication of children with ASD and successfully interact with these patients in order to deliver high-quality treatment.	Descriptive study	Identify and explain the linguistic development of these children with ASD so that nurses may establish practical applications to assist these patients with ASD during their treatment in pediatric wards.	Children with ASD are one-of-a-kind. They are having problems communicating. It is the nurses' responsibility to communicate effectively with children with ASD in order to offer appropriate interventions. It is critical to reduce the children's misunderstanding and worry. It may take time and effort, but it is a nurse's responsibility to identify and solve communication concerns.
Added articles	5	Drake, J., Johnson, N., Stoneck, A. V., Martinez, D. M., & Massey, M. (2012). Evaluation of a coping kit for children with challenging behaviors in a pediatric hospital. Pediatric Nursing, 38(4).	USA	To determine if nurses have coping kits in order to fulfill the requirements of hospitalized children with developmental impairments who are at high risk for problematic behaviors.	Qualitative study	A cross-sectional post-test survey research design requested 24 professional nurses to utilize coping kits to connect with children with behavioral challenges. They employed basic communication cards, a social script book, and distraction items, such as toys that are designed to improve communication and distract children with developmental difficulties including children with ASD during somatic medical treatments.	The use of coping or communication items to assist children with ASD is useful in meeting these children's requirements to minimize anxiety and problematic behaviors. The nurses concluded that using these tools improved the quality of care for these children and reduced their stress during hospitalizations for treatment of their medical issues. It benefited in communicating with ASD youngsters and in giving smooth and timely therapies.

Added articles	6	**Johnson, N., & Rodriguez, D. (2013). Children with autism spectrum disorder at a pediatric hospital: A systematic review of the literature. Pe diatric Nursing.**	USA	Recognizing ASD behaviors in children with ASD and developing techniques to deal challenging these behaviors	Systematic literature review	The systematic analysis of the literature identified 34 publications from databases on the health care of children with ASD who exhibit difficult behaviors.	The study identified four kinds of problematic behaviors, including noncompliance, hyperactivity, sensory defensiveness, and self-injury, as well as various solutions for minimizing these behaviors, including planning, consistency in treatment, and good communication. It is critical to collaborate with parents to establish methods for children with ASD in order to provide timely and safe treatment.
Added articles	7	**Winslow, P. M. (2017). Preparation of Nursing Students to Address Challenging Behaviors of Patients with Autism Spectrum Disorder in Health Care Settings.**	USA	To investigate the utilization of a training program to educate nursing students in managing problematic behaviors in children with ASD in health care settings using roleplaying, lectures, and other communication components.	Combinati on of Qualitative and Quantitativ e study	Thirty-six nursing students were trained in a pediatric practical nursing course, then two groups were created to evaluate this programs effectivity. One was the control and the other was interviewed on their perceived competency level using surveys rating their knowledge in dealing with children with ASD.	The research suggests that the training method employed was helpful in boosting nursing students' comprehension and knowledge of Autism Spectrum Disorder, as well as their self-perceived competence in managing problematic behaviors in children with ASD in a healthcare context. However, further study is required to determine the effectiveness of this training strategy.

11.2 Appendix - JBI assessment checklists

	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses				
		1	**2**	**3**	**4**
	JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses	**Hurt, et al 2019**	**Vuattox, et al 2021**	**Brown & Elder, 2014**	**Johnson & Rodriguez, 2013**
1	Were the review question clearly and explicitly stated?	Y	Y	Y	Y
2	Were the inclusion criteria appropriate for the review question?	Y	Y	Y	Y
3	Was the search strategy appropriate?	Y	Y	Y	Y
4	Were the sources and resources used to search for studies adequate?	Y	Y	Y	Y
5	Were the criteria for appraising studies appropriate?	Y	Y	Y	Y
6	Was critical appraisal conducted by two or more reviewers independently?	Y	Y	Y	Y
7	Were there methods to minimize errors in data extraction?	Y	Y	Y	Y
8	Were the methods used to combine studies appropriate?	Y	Y	Y	Y
9	Was the likelihood of publication bias assessed?	Y	Y	Y	Y
10	Were recommendations for policy and/or practice supported by the reported data?	Y	Y	Y	Y
11	Were the specific directives for new research appropriate?	Y	Y	Y	Y
	TOTAL	11/11	11/11	11/11	11/11
	Legend: **Y = Yes, N = No, U = Unclear, NA = Not applicable**	Included	Included	Included	Included

Case reports	
	1
JBI Critical appraisal checklist for Case reports	**Jolly, 2015**
1 Were patient's demographic characteristics clearly described?	Y
2 Was the patient's history clearly described and presented as a timeline?	Y
3 Was the current clinical condition of the patient on presentation clearly described?	Y
4 Were diagnostic tests or assessment methods and the results clearly described?	U
5 . Was the intervention(s) or treatment procedure(s) clearly described?	Y
6 Was the post-intervention clinical condition clearly described?	Y
7 Were adverse events (harms) or unanticipated events identified and described?	Y
8 Does the case report provide takeaway lessons?	Y
TOTAL	7/8
Legend: **Y = Yes, N = No, U = Unclear, NA = Not applicable**	Included

JBI Critical Appraisal Checklist for quasi-experimental studies	
	1
JBI Critical Appraisal Checklist for quasi-experimental studies	**Winslow, 2017**
1 Was it clear in the study what is the 'cause 'and what is the 'effect '(i.e. there is no confusion about which variable comes first)?	Y
2 Were the participants included in any comparisons similar?	Y
3 Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	Y
4 Was there a control group?	Y
5 Were there multiple measurements of the outcome both pre and post the intervention/exposure?	Y
6 Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	Y
7 Were the outcomes of participants included in any comparisons measured in the same way?	Y
8 Were outcomes measured in a reliable way?	Y
9 Was appropriate statistical analysis used?	Y
TOTAL	9/9
Legend: **Y = Yes, N = No, U = Unclear, NA = Not applicable**	Included

Checklist for Qualitative Research		
		1
	JBI Critical appraisal checklist for Case reports	**Drake et al. 2012**
1	Was there congruity between the stated philosophical perspective and the research methodology?	Y
2	Was there congruity between the research methodology and the research question or objectives?	Y
3	Was there congruity between the research methodology and the methods used to collect data?	Y
4	Was there congruity between the research methodology and the representation and analysis of data?	Y
5	Was there congruity between the research methodology and the interpretation of results?	Y
6	Was there a statement locating the researcher culturally or theoretically?	Y
7	Was the influence of the researcher on the research, and vice- versa, addressed?	U
8	Were participants, and their voices, adequately represented?	Y
9	Was the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Y
10	Did the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	Y
	TOTAL	9/10
	Legend: **Y = Yes, N = No, U = Unclear, NA = Not applicable**	Included