



Accuracy of nursing diagnoses for identifying domestic violence against children*

Acurácia de diagnósticos de enfermagem para o enfrentamento da violência doméstica infantil
Precisión de diagnósticos de enfermería para el enfrentamiento de la violencia doméstica infantil

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ABSTRACT

Objective: Identify nursing diagnoses involving a hypothetical situation of domestic violence against a child and the respective degrees of accuracy. **Method:** An exploratory, evaluative, case study was conducted using a quantitative and qualitative approach, with data collected using an online instrument from 26 nurses working in the Municipal Health Network, between June and August 2010, in Curitiba, and also during the first half of 2014 in São Paulo. Both of these cities are in Brazil. Nursing diagnoses and interventions from the International Classification of Nursing Practices in Collective Health were provided, and accuracy was verified using the Nursing Diagnosis Accuracy Scale. **Results:** Thirty-nine nursing diagnoses were identified, 27 of which were common to both cities. Of these, 15 were scored at the null level of accuracy, 11 at high accuracy and 1 at medium accuracy. **Conclusion:** The difficulty the nurses had in defining diagnoses may be associated with the fact that nursing care generally focuses on clinical problems, and signs expressing situations of domestic violence against children go unnoticed. The results demonstrated the difficulty of participants in selecting the appropriate nursing diagnosis for the case in question.

DESCRIPTORS

Child Abuse; Domestic Violence; Nursing Diagnosis; Primary Care Nursing.

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INTRODUCTION

Domestic violence against children is a global problem that progressively contributes to higher child mortality rates. Data from the World Health Organization⁽¹⁾ released in a 2008 report revealed approximately 57,000 deaths and pointed out the existence of a considerable number of victims of non-fatal injuries, which could not be precisely determined due to immense variations among information sources and reporting systems. The severity of this phenomenon in Brazil is attested to by the 21,199 reports of violence against children from ages 0 to 9, in 2009 and 2010. In addition, the main care provided was for negligence (35.6%), sexual violence (35.6%) and physical violence (32.8%)⁽²⁾.

Primary Health Care (PHC) is an ideal forum for tackling this issue, since its strategic insertion within the country is conducive to recognizing and caring for children in situations of violence. Studies conducted in Latin American and Caribbean countries show that there is still a lack of protocols and training of human resources to deal with this phenomenon. Addressing violence against children does not have an approach that considers identification and treatment of cases, proposal of preventive actions, interpretation of risk situations and vulnerabilities of specific groups, links with families and, above all, coordination with other services and organizations in society⁽³⁻⁴⁾.

Nursing consultations enable the determination of health needs through clinical reasoning and identification of nursing diagnoses through a classification system that supports interventions, strengthens scientific aspects, and generates direct and indirect care actions⁽⁵⁾. However, the complexity of identifying and formulating nursing diagnoses, along with the influence of the subjective impressions of the person performing the diagnosis, make the clinical reasoning process subject to errors of judgment, particularly when done in an unstructured way⁽⁶⁾.

As a support to this process, nurses can use classification systems, such as CIPESC[®] (International Classification of Nursing Practices in Collective Health), which consists of an inventory of vocabulary and enables formulating diagnoses and defining PHC nursing interventions^(4,7). The use of a classification system can equip nurses to recognize domestic violence against children⁽⁸⁾. CIPESC[®] is an offshoot of the International Classification for Nursing Practice (ICNP) and the first studies on the importance of classification systems and violence are found in an article by Coler et al. regarding social violence⁽⁹⁾.

Classification systems can improve intellectual, technical and interpersonal competencies necessary for critical thinking and development of accurate diagnoses⁽¹⁰⁾. The accuracy of a nursing diagnosis refers to the relevance, specificity and consistency of the data collected during the anamnesis, which is essential for supporting the decision-making process of professionals⁽¹¹⁾.

Accuracy is not immutable, since it describes the current state of the person/family/community, which can rapidly

change⁽¹²⁾. Nevertheless, interventions based on accurate diagnoses generate better outcomes and less redundant and more efficient nursing documentation, consequently leading to more positive nursing results⁽¹³⁾. Various designs and instruments have been developed to verify the accuracy of nursing diagnoses⁽¹⁴⁻¹⁵⁾. This study uses the Lunney Scoring Method for Rating Accuracy of Nursing Diagnoses⁽¹⁶⁾. In Brazil, its adapted version is called the Nursing Diagnosis Accuracy Scale (NDAS – *Escala de Acurácia de Diagnósticos de Enfermagem* (EADE))⁽¹⁷⁾.

A study conducted in the city of Curitiba (Paraná, Brazil) demonstrated a contradiction between reported cases of violence against children and specific nursing diagnosis records of violence in nursing consultations done at the PHC level⁽¹⁸⁾. This contradiction indicates a need to examine the accuracy of nursing diagnoses related to domestic violence against children, based on the guiding question of this study: Are diagnoses involving a hypothetical case of domestic violence accurate, enabling professionals to direct their interventions to modify the previous diagnosis? Despite its relevance, there are still no studies that address this theme.

Assuming that nursing diagnoses and the respective interventions to overcome the vulnerabilities identified emerge from nursing practices, this study sought to identify the nursing diagnoses involving a hypothetical case of domestic violence against a child and the respective degrees of accuracy. This study may provide support to children's health care in the identification of domestic violence, as well as help qualify nursing staff.

METHOD

This was an exploratory study with a qualitative approach which used the case study technique, with data collection at primary sources. Data was collected in Curitiba, Paraná, from nurses in the Municipal Health Network, between June and August 2010; and in São Paulo, nurses from the Capão Redondo district participated during the first half of 2014. All the nurses working in the Curitiba Municipal Health Network and Capão Redondo district at the time of the collection were invited to participate, via a printed letter and an electronic message. In each location, 13 professionals responded to the case study.

The inclusion criteria adopted were: being a PHC nurse, with at least six months on the job, and having witnessed at least one case of violence against a child, even though the theme of violence is commonplace in primary health units and nurses are exposed to numerous cases.

Two aspects were relevant and justified the selection of the locations. In Curitiba, there is a protection network for children and adolescents in situations of risk of violence, which has been operating since 2004⁽¹⁹⁾. There is also an electronic record for registering nursing consultations, and CIPESC[®] has been integrated into the record as the classification system since 2004. In São Paulo, dealing with domestic violence against children is based on regulatory guidelines on the subject, even though there is no protection network with the same characteristics as the one in Curitiba.

Although CIPESC® is frequently used in São Paulo, it is at the discretion of the professional and is not available in digital format.

Data was collected using an online instrument that presented a hypothetical case study⁽⁷⁾. The underlined excerpts indicate the cues of the case that should be identified by participants and taken into account in the description of the diagnoses. The CIPESC® nomenclature was provided in a tree format, summarized from the original, and diagnoses related to chronic illnesses not applicable to the case were excluded. The original distribution into 23 groups of needs and 101 nursing diagnoses, with the respective interventions, was maintained⁽⁷⁾.

The text of the case presented was as follows:

“This is the case of a child who started menstruating six months ago and started telling me that she wanted to have sexual relations. She did not feel very comfortable talking to her mother about this. Her mother is an alcoholic and engages in promiscuous relationships at home with all kinds of men. Apart from this adolescent, there are two more boys in the family, ages 6 and 9, and another girl who is about to turn 10. It is a totally unstructured family. After around 4 months, the girl came to do her first pregnancy test. This shocked the unit, because the girl was only 11 years old. She was seen by a physician who instructed her to use birth control and the girl refused because she really wanted to get pregnant. After that, she did the test every 15 days, which was a sign she was having sexual relations with anyone at the street. We concluded she was prostituting herself and her mother did not know. She said her mother did not know. The girl does not go to school and if you visit the neighborhood you will find her dressed inappropriately for her age, with all sorts of people. Girls need to be accompanied by their mothers during medical consultations, but she refuses to because she does not want her mother to find out what she is doing. She said she wanted to be a mother, that she wanted to get pregnant, and we referred her to a psychologist to discover why she wanted to be a mother at such a young age. We learned that this girl’s story was much more complex than we could ever have imagined. She had been raped by members of the family since the age of 9.”

The NDAS was used to estimate the correlation between the data presented in the case study and the diagnoses selected by the interviewees. The nursing participants studied the case and selected the diagnoses and interventions. The NDAS was applied by the researchers, based on the criteria of relevance, consistency, and specificity of the cues contained in the case under examination. The score ranged from 0 (null accuracy), 1 to 4.5 (moderate accuracy) and 8 to 12.5 (high accuracy)⁽¹¹⁾. The scale was applied by the researchers individually and minimum correlations of two-thirds were accepted as valid. The discordances were discussed among the researchers and the consensual response was adopted. The small amount of data made it impossible to verify statistically significant correlations.

Since the study involved human beings, both projects were approved by the Research Ethics Committee of the School of Nursing of the Universidade de São Paulo, and by the Municipal Health Departments in each location, under Process No. 829/09 (Resolution of the National Health Council Ordinance No. 196/96) and Opinion No. 32299/12 (Resolution of the National Health Council Ordinance No. 466/12).

RESULTS

In Curitiba, of the 12 women and one man who participated, six had less than five years of PHC experience, four had six to 10 years, and three had more than 11 years of experience. Nine nurses had received previous training on how to use CIPESC® and 11 reported having used this tool in nursing consultations. In the Capão Redondo district, 12 women and one man participated, 10 of whom had less than five years of PHC experience. Seven interviewees had received previous training on how to use CIPESC® and all reported having used it at work.

The CIPESC® terminology used in the case study enabled the identification of 39 nursing diagnoses (among the 101 provided), of which 27 were common to the two locations; two were identified in the Capão Redondo district and only 10 in Curitiba. These 39 nursing diagnoses corresponded to 16 impaired needs, among those provided by CIPESC®. It should be noted that different diagnoses, with distinct accuracies, were attributed to the same need.

Chart 1 describes the impaired needs, the respective diagnoses common to the two locations, and the accuracy verified after application of the NDAS. The number of selections (Chart 1) corresponds to the nurses who selected a certain diagnosis. For nursing diagnoses common to both locations, it was found that the nurses selected 15 diagnoses rated with null accuracy, 11 with high accuracy and only one with moderate accuracy. The two nursing diagnoses most selected and rated with high accuracy were sexual abuse (environment need), followed by unsatisfactory sexual activity (sexuality need). The third most selected nursing diagnosis was inadequate self-care (body care need). However, this diagnosis was rated with null accuracy, since there were no elements in the case presented that would have defined it as such.

The most predominant groups of needs among the nursing diagnoses selected were: Environment, with 28 selections, Gregarious, with 23 nursing diagnosis selections, and Learning – Health Education, with 19 selections.

The heterogeneous and divergent results reflect the difficulty expressed by the participants in selecting the appropriate nursing diagnoses for the case in question and prioritizing the interventions. It was noted that the sexual abuse nursing diagnosis was predominant in the case presented, but it was not selected by all the study participants (16). On the other hand, the inadequate self-care nursing diagnosis with null accuracy was chosen by 11 participants (Chart 1).

Chart 1 – Nursing diagnoses identified by the participants in São Paulo and Curitiba and respective needs, number of selections, and accuracy rating according to the application of the NDAS.

Need	Nursing diagnoses	Selections	Accuracy
Environment (PB)	Sexual abuse	16	High
	Risk of domestic violence	8	High
	Use of alcohol and other drugs	4	Moderate
Learning – Health Education (PS)	Impaired understanding	5	Null
	Limited information processing	4	Null
	Birth control: barrier methods	4	Null
	Insufficient knowledge about current state of health	2	Null
	Birth control: hormonal methods	4	Null
Self-image (PS)	Distorted body image	8	High
Growth and development (PB)	Inadequate development of the child	4	Null
	Adequate female maturity	2	Null
Body care (PB)	Inadequate self-care	11	Null
	Altered genital hygiene	3	Null
Gregarious (PS)	Conflictive family relationship	6	High
	Impaired mother/child bond	3	High
	Impaired family support	3	High
	Conflictive bond	2	High
	Absent family bond	8	Null
Freedom (PS)	Impaired decision-making	7	High
Recreation (PS)	Deficient recreational activity in the child	4	High
Immune regulation (PB)	Compromised immune status	2	Null
Reproduction (PB)	Unwanted pregnancy	3	Null
	Abortion risk	4	Null
Safety (PS)	Shame in female victim of violence	7	High
	Denial	4	Null
Sexuality (PB)	Unsatisfactory sexual activity	12	High
Therapeutics (PB)	Inadequate use of contraceptives	4	Null

PS: psychosocial need; PB; psychobiological need.

Source: Elaborated by the authors.

The two diagnoses cited only in São Paulo were selected by just one nurse and were rated with high accuracy: impaired self-esteem (psychosocial need – self-esteem) and impaired interpersonal relationship (psychosocial need – Gregarious).

The ten nursing diagnoses identified only in Curitiba are described in Chart 2. Of these, only three were rated with high accuracy: inadequate participation, right of citizenship limited, and risk of solitude, even though the last two were indicated by only one participant each.

Chart 2 – Nursing diagnoses identified by the participants in Curitiba and level of accuracy according to the NDAS.

Need	Nursing diagnoses	Selections	Accuracy
Growth and development (PB)	Inadequate growth of the child	1	Null
Body care (PB)	Inadequate oral hygiene	1	Null
Cutaneous mucosal integrity (PB)	Impaired skin integrity in the child	1	Null
Participation (PS)	Inadequate coping	6	High
	Limited citizenship rights	1	High
	No coping	2	Null
Reproduction (PS)	Infertility	1	Null
Safety (PS)	Risk of solitude	1	High
	Sadness	1	Null
	Anxiety resulting from current state of health	1	Null

PS: psychosocial need; PB: psychobiological need.

Source: Elaborated by the authors.

DISCUSSION

This study identified nursing diagnoses and the corresponding degrees of accuracy, selected by PHC nurses in a hypothetical case of domestic violence against a child. There were high, moderate and null accuracies in the nursing diagnoses in Curitiba and the Capão Redondo district.

Fifteen nursing diagnoses were rated with a high degree of accuracy and 12 with null accuracy, revealing the complexity of the process of applying nursing diagnoses, since this may result in different approaches. Similar results were found in a study that compared diagnostic accuracy among nursing students and residents, with results close to the diagnoses with high accuracy and null accuracy⁽²⁰⁾. This complexity was also noted in a study conducted among undergraduate nursing students on the use of nursing diagnoses related to the health of elderly people, where 68% of the nursing diagnoses selected had null accuracy⁽²¹⁾.

The difficulty the nurses have in defining diagnoses may be associated with the standardized approach in nursing care for identifying clinical problems, where signs expressing domestic violence against children go unnoticed. A single piece of data is not sufficient for establishing an accurate diagnosis. In the case of nursing, the subjectivity of human responses does not permit precise identification of diagnoses, unlike other situations that can be based on other diagnostic methods, such as lab or image tests. Therefore, nursing diagnoses depend directly on the skills of the professionals involved and, consequently, on their training to work in certain health situations⁽¹⁵⁾.

In addition, depending on the urgency of the decision, accuracy in identifying nursing diagnoses may not be relevant for professionals. This attitude reflects an inadequacy in the care process and reveals an inconsistency in nurses' knowledge regarding the formulation of diagnoses based on a taxonomic standardization⁽²²⁾. Null accuracy was also observed in other studies that sought to assess nursing diagnosis accuracy in other clinical cases⁽²²⁻²³⁾. Therefore, the diagnostic skills of nurses need to be expanded and developed, especially in terms of improved diagnostic accuracy, with the interpretation of signs and symptoms serving as a foundation for more reliable care and tangible goals⁽²⁴⁾.

Even though the problem involving domestic violence against a child was explicit in the hypothetical case, only 16 nurses selected the sexual abuse nursing diagnosis and 12 the unsatisfactory sexual activity nursing diagnosis, with a high degree of accuracy, which demonstrates weakness in the critical thinking of these professionals. This skill is essential for improving nursing diagnosis accuracy and developing the cognitive skills of professionals⁽²⁵⁾.

Nursing practices require complex decision making through critical reasoning and communication skills, and the implementation of interventions generally within a short period of time. This skill is developed throughout the educational process and honed during professional training, in order to promote safe and effective nursing care, based on scientific evidence. A Brazilian study showed that nurses, in their second year of a nursing residency program, identified

fewer low accuracy diagnoses than first-year residents and undergraduate students in nursing. The results pointed out by the researchers suggest that on-the-job training is conducive to the process of developing accurate diagnoses⁽²⁰⁾.

However, a literature review revealed that enhanced clinical reasoning has benefited the field of hospital nursing and that there have been few studies on psychosocial issues that require more reflexive strategies to promote dealing with certain social phenomenon⁽²⁶⁾, as in the case of domestic violence against children.

The results of the present study enabled identifying specific selections of different nursing diagnoses in the locations studied: 10 nursing diagnoses in Curitiba and two in the Capão Redondo district. This discrepancy may be related to the existence of the Protection Network for Children and Adolescents in situations of violence in the city of Curitiba, which has been training health professionals on the issue of violence against children. Health professionals in this city have also received more training on how to use CIPESC® in PHC. The importance of professional training for nursing diagnosis accuracy was demonstrated in a study by an Indian researcher⁽²⁷⁾, in which nurses undergoing an educational intervention related to the use of nursing diagnoses, critical thinking, and clinical reasoning obtained greater accuracy in established nursing diagnoses in hypothetical case studies.

Even though the total number of nursing diagnoses indicated in Curitiba was higher, the selection of high-accuracy nursing diagnoses was greater among participants from the Capão Redondo district. Some speculations can be made regarding this result: professional experience and the social context of greater vulnerability to violence associated with this region of São Paulo may make professionals more attuned to this problem. Between 2002 and 2011, the rates of urban violence in Capão Redondo were five times higher than those registered in the rest of the city of São Paulo⁽²⁸⁾. However, the nurses from Curitiba were from various regions of the city, with different degrees of violence. The absence of a network to deal with domestic violence against children may also have influenced professionals to assume the responsibility themselves for combating this problem. To validate these hypotheses, further studies would be necessary that compare aspects of vulnerability to violence against children in the work context of professionals with nursing diagnosis accuracy.

The difficulty of professionals from Curitiba and Capão Redondo in selecting nursing diagnoses related to violence against children with a high degree of accuracy may reflect the way this type of violence is hidden in society⁽¹⁸⁾, which may also be replicated in health services. A study conducted in the United States and Brazil demonstrated lack of knowledge on the part of professionals assisting children who are victims of sexual violence in terms of assessing sexual abuse against them⁽²⁹⁾. This reinforces the idea that approaching violence against children is not limited to the conceptual issue and injuries manifested in victimized children. Given the need for spaces of discussion in professional practice, multiprofessional care is a strategy that can be adopted to address the problem, in addition to shared decision making⁽³⁰⁾.

It is necessary to strengthen public health policies and the education of professionals who work in this area, teaching them how to use instruments such as the classification systems utilized in nursing.

The small number of PHC nurses in the two study locations prevented treatment of the results with statistical significance tests. This limitation, however, does not invalidate the study, since the NDAS is able to identify the level of accuracy of the nursing diagnoses regardless of the number of participants.

This is the first study of its kind to assess the accuracy of nursing diagnoses for domestic violence against children in the scope of PHC. The results indicate the need to provide more training for professionals and to strengthen the use of CIPESC® nursing diagnoses related to domestic violence against children to improve the accuracy of nursing diagnoses selected by nurses.

CONCLUSION

The results of this study reveal the complexity inherent to accurately formulating nursing diagnoses, as shown by the hypothetical case of domestic violence against a child

presented to nurses from Curitiba and the Capão Redondo district. It is clearly necessary to invest in expanding and developing critical thinking in nurses to improve the identification and documentation of nursing diagnoses and, therefore, the care of children in situations of violence.

This study reinforces that accurate use of the nursing diagnoses contained in CIPESC® is conducive to exposing and dealing with the social phenomenon of domestic violence against children in the context of primary health care. It also indicates the potential of these diagnoses to support interventions that would have an impact on this problem and, consequently, lead to actual changes in the Brazilian reality. The results demonstrate the urgent need to review how the themes of domestic violence and clinical reasoning have been addressed in the education and training of health professionals.

A limitation of this study is the small number of participants, which precluded the application of statistical tests to identify associations and significance in the results. However, in the methodological case study proposal, the results reinforce the need for further studies of this nature.

RESUMO

Objetivo: Identificar os Diagnósticos de Enfermagem atribuídos a uma situação hipotética de violência doméstica infantil e os respectivos graus de acurácia. **Método:** Estudo exploratório, avaliativo, de abordagem quantitativa e qualitativa, tipo estudo de caso, com coleta de dados por instrumento *on-line* com 26 enfermeiros da Rede Municipal de Saúde, entre junho e agosto de 2010 em Curitiba e durante o primeiro semestre de 2014 em São Paulo, ambos cenários brasileiros. Foram oferecidos os diagnósticos e intervenções de enfermagem da Classificação Internacional de Práticas de Enfermagem em Saúde Coletiva, e a acurácia foi verificada com a Escala de Acurácia de Diagnósticos de Enfermagem. **Resultados:** Foram identificados 39 Diagnósticos de Enfermagem, dos quais 27 foram comuns aos dois cenários. Destes, 15 foram avaliados com acurácia nula, 11 com acurácia alta e um com acurácia média. **Conclusão:** A dificuldade dos enfermeiros de definir diagnósticos pode estar associada ao atendimento de enfermagem focado em problemas clínicos, passando despercebidos sinais que expressam situações de violência doméstica infantil. Os resultados demonstraram a dificuldade dos participantes em selecionar os Diagnósticos de Enfermagem apropriados para o caso.

DESCRITORES

Maus-Tratos Infantis; Violência Doméstica; Diagnóstico de Enfermagem; Enfermagem de Atenção Primária.

RESUMEN

Objetivo: Identificar los Diagnósticos de Enfermería atribuidos a una situación hipotética de violencia doméstica infantil y los respectivos grados de precisión. **Método:** Estudio exploratorio, evaluativo, de abordaje cuantitativo y cualitativo, tipo estudio de caso, con recolección de datos por instrumento en línea con 26 enfermeros de la Red Municipal de Salud, entre junio y agosto de 2010 en Curitiba y durante el primer semestre de 2014 en São Paulo, ambos escenarios brasileños. Fueron ofrecidos los diagnósticos e intervenciones de enfermería de la Clasificación Internacional de la Práctica de Enfermería en Salud Colectiva, y la precisión fue verificada con la Escala de Precisión de Diagnósticos de Enfermería. **Resultados:** Fueron identificados 39 Diagnósticos de Enfermería, de los que 27 fueron comunes a ambos escenarios. De esos, 15 fueron evaluados con precisión nula, 11 con precisión alta y uno con precisión media. **Conclusión:** La dificultad de los enfermeros de definir diagnósticos puede estar asociada con la atención de enfermería enfocada en problemas clínicos, pasando desapercibidos señales que expresan situaciones de violencia doméstica infantil. Los resultados demostraron la dificultad de los participantes en seleccionar los Diagnósticos de Enfermería apropiados al caso.

DESCRIPTORES

Maltrato a los Niños; Violencia Doméstica; Diagnóstico de Enfermería; Enfermería de Atención Primaria.

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