NURSING COMPETENCES IN THE PREVENTION OF FALLS IN CHILDREN IN LIGHT OF THE GALWAY CONSENSUS

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ABSTRACT

Objective: to analyze nurses’ abilities regarding the prevention of falls in hospitalized children in light of the Galway Consensus.

Method: a cross-sectional study was conducted with 40 nurses who worked in the open hospitalization units of a pediatric hospital. Data collection was performed through the application of a questionnaire with validated content. The actions performed by the nurses, according to the fall prevention protocol, were related to the eight domains of the Galway health promotion competency model. Statistical analysis and professional performance analysis were performed.

Result: the domain of competence leadership was present in all actions (15). The other areas of competence were presented in the following frequencies: advocacy (9 actions), catalyzing changes (6 actions), implementation (6 actions), planning (3 actions), partnerships (3 actions), needs assessment (2 actions) and impact assessment (2 actions).

Conclusion: the competence domains were considered in at least two fall prevention actions. The importance of the identification of nurses’ competences in the prevention of falls of hospitalized children is highlighted, aiming to improve the quality of care and, consequently, to reduce unsafe actions.


COMPETÊNCIAS DO ENFERMEIRO NA PREVENÇÃO DE QUEDAS EM CRIANÇAS À LUZ DO CONSENSO DE GALWAY

RESUMO

Objetivo: analisar as competências do enfermeiro na prevenção de quedas de crianças hospitalizadas, à luz do Consenso de Galway.

Método: estudo transversal, realizado com 40 enfermeiras que atuavam nas unidades abertas de internação de um hospital pediátrico. Coleta dos dados realizada mediante aplicação de um questionário com conteúdo válido. Foram relacionadas as ações executadas pelas enfermeiras, segundo o protocolo de prevenção de quedas, com os oito domínios do modelo de competências para promoção da saúde de Galway. Procedeu-se à análise estatística e análise do desempenho dos profissionais.

Resultado: o domínio de competência liderança esteve presente em todas as ações (15). Os demais domínios de competência apresentaram-se na nas seguintes frequências: defesa (9 ações), catalisar mudanças (6 ações), implementação (6 ações), planejamento (3 ações), parcerias (3 ações), avaliação das necessidades (2 ações) e avaliação do impacto (2 ações).

Conclusão: os domínios de competência foram contemplados em pelo menos duas ações de prevenção de quedas. Destaca-se a importância da identificação das competências de enfermeiros na prevenção de quedas de crianças hospitalizadas, visando melhoria da qualidade assistencial e, consequentemente, redução de atos inseguros.

COMPETENCIAS DEL ENFERMERO EN LA PREVENCIÓN DE CAÍDAS EN NIÑOS A LA LUZ DEL CONSENSO DE GALWAY

RESUMEN
Objetivo: analizar las competencias del enfermero en la prevención de caídas de niños hospitalizados, a la luz del Consenso de Galway.
Método: estudio transversal, realizado con 40 enfermeras que actuaban en las unidades abiertas de internación de un hospital pediátrico. La recolección de los datos realizada mediante la aplicación de un cuestionario con contenido validado. Se relacionaron las acciones ejecutadas por las enfermeras, según el protocolo de prevención de caídas, con los ocho ámbitos del modelo de competencias para la promoción de la salud de Galway. Se procedió al análisis estadístico y análisis del desempeño de los profesionales.
Resultado: el dominio de competencia líder estuvo presente en todas las acciones (15). Los demás ámbitos de competencia se presentaron en las siguientes frecuencias: defensa (9 acciones), catalizar cambios (6 acciones), implementación (6 acciones), planificación (3 acciones), alianzas (3 acciones), evaluación de las necesidades (2 acciones) y evaluación del impacto (2 acciones).
Conclusión: los ámbitos de competencia se contemplaron en al menos dos acciones de prevención de caídas. Se destaca la importancia de la identificación de las competencias de enfermeros en la prevención de caídas de niños hospitalizados, buscando mejorar la calidad asistencial y, consecuentemente, reducción de actos inseguros.


INTRODUCCIÓN
En el último decenio la calidad de cuidado de pacientes hospitalizados ha sido un tema recurrente. Es evidente que las directrices establecidas por el National Patient Safety Program1 son similares a las recomendaciones del Charter de Ottawa, donde la prevención de caídas es una acción que se debe implementar de manera efectiva.2 Los niños hospitalizados son una población vulnerable que requiere un cuidado específico que minimice el riesgo de sufrir caídas e implicaciones derivadas.3

Las caídas en el entorno del hospital son una emergencia que requiere atención.4 Los niños son más propensos a sufrir caídas debido a su menor estatura, una mayor probabilidad de caminar de forma inestable y la dificultad de percibir riesgos como un adulto.5

Así, la Organización Mundial de la Salud (OMS) define la seguridad del paciente como la minimización del riesgo de sufrir daños innecesarios durante el cuidado de la salud.6

In order to support this patient safety process, the protocol for the prevention of falls is used.7 In order to prevent the occurrence of damages the use of updated protocols by the health team is one of the necessary strategies for the inclusion of safe practices in the health services.8

As an integrative member of the health team, the nurse plays a fundamental role in the elaboration and implementation of measures aimed at the safety of hospitalized children, as the nursing practice is permeated by the experience and daily perception of risk situations that can support care management and decision-making in order to promote safety and minimize the repercussions of harm.9 Thus, nursing care should be strongly based on the perspective of health and safety promotion of children exposed to falls, and in doing so it is necessary that nurses have specific competences so that this care is effective.10-11

These competencies are to be used as a reference point to: establish professional standards, create mechanisms to ensure the quality of work, professional selection for work, identify and structure training programs and guide academic training, in the area of patient safety, with emphasis on the prevention of falls.11

According to the theme, this article uses the Galway Consensus as a theoretical reference, which aims to identify and construct fundamental competences in health promotion and health education, as well as the development of workforce.10-11

Held in Ireland in June 2008, the Galway Consensus has set out values and principles, common definition and key competency domains required for effective engagement in health promotion practices. The areas are: catalyze change, leadership, needs assessment, planning, implementation, impact assessment, advocacy and partnerships.10-11
However, the discussions about these professional competences for health promotion in Brazil are still limited to certain professional practices,12 corroborating the need to broaden the discussion regarding nurses’ competences in the prevention of falls in pediatric patients.

In view of this context, the following question arose: In light of the Galway Consensus, what are the competencies of the nurse in the prevention of falls in children in the hospital environment? The response to this question could contribute to a critical reflection that leads to the improvement of the nursing care practice in the prevention of falls in children, aiming to improve nurses’ performance, as although there are intrinsic and extrinsic factors to the individual that are potential for falls occurrences, prevention is directly related to the good practices of the nursing team. The health promotion competencies are aids for the integral and safe care of hospitalized children. Thus, the objective was to analyze the nurses’ competences in the prevention of falls in hospitalized children, in light of the Galway Consensus.

METHOD

A descriptive study, with a cross-sectional design, developed in seven open hospitalization units of a reference pediatric tertiary hospital in Ceará, in which seven episodes of falls were reported in 2016, according to the Center for Patient Safety of the institution in question.

The sample consisted of 40 nurses who met the following criteria for inclusion: they had been working for at least six months in direct care with hospitalized children. Nurses who were on vacation, on leave or removed from activities during the data collection period, and did not respond to the study questionnaire were excluded. Non-probabilistic sampling was used for convenience of the consecutive type, in which the professionals were selected between February and March in 2016.

Data collection was performed using a questionnaire developed according to the recommendations of the Fall Prevention Protocol,4 and the content was validated by a group of seven judges, who all had doctorate degrees in nursing and teachers of the child health discipline of one public university of Ceará. The questionnaire contained two parts, the first consisting of questions that enabled the characterization of nurses (age, training time, professional experience in pediatrics and weekly workload), and the second consisting of questions about the safety actions of the children, whose variables referred to the fifteen fall prevention actions recommended by the Ministry of Health’s Fall Prevention Protocol.4 Each action contains answers using a Likert Scale: 1 (never performs the action), 2 (sometimes performs the action) and 3 (always performs the action).

The questionnaire was delivered to the professional for it to be answered and returned at the end of the shift. The professionals who did not return the completed questionnaire within the recommended time were invited back to participate in the study, with the importance of collaboration reinforced and a new deadline established. Those who did not return the questionnaire after the second deadline were excluded from the sample.

Data were grouped and analyzed using the Statistical Package for Social Sciences (SPSS) version 20.0. The analysis was performed using the descriptive statistics approach, which includes the distribution of the absolute and relative frequencies for the categorical variables, the means, standard deviation (SD) and for the continuous variables, demonstrated in the characterization of the nurses.

The categorization of the actions of the questionnaire in the health promotion competency domains established in the Galway Consensus was performed through discussion with the authors regarding the concept of each domain. The actions that had discordance were discussed on a case-by-case basis, until a common agreement was reached.

For data tabulation, the answers given by the nurses were grouped in a dichotomous manner, in which items 1 (never performs the action) and 2 (sometimes performs the action) were classified as unsatisfactory; and item 3 (always performs the action) was considered as satisfactory.13-14

A study on patient safety was considered for the analysis of the nurses’ performance, addressing drug administration, which considered the cutoff score > 70% as satisfactory.15 However, in order to prevent falls, it was decided to consider the cutoff point as > 80% of professionals who always stated that they were performed the action, in order to reduce the risks to the hospitalized child as much as possible.

The study was submitted to the Ethics Committee of the Federal University of Ceará, according to opinion n. 1.376.514 and Certificate of Presentation for Ethical Appraisal (CAAE) n. 48712815.5.0000.5054, respecting the norms of Resolution n. 466/2012 of the National Health Council. Participants were informed about the research, and after reading, they signed the Term of Free and
Informed Consent. As required by research ethics, the participants were guaranteed anonymity and confidentiality.

RESULTS

All 40 participants were female. The nurses were between 25 and 59 years of age, with a mean of 34.7 (SD±8.04) years of age. All had been graduated for two years or more, with an average of 8.8 (SD±6.67) years. Regarding the time of professional experience in pediatrics, the minimum performance was six months and the maximum was 34 years, with an average of 7.4 (SD±7.46). The weekly workload ranged from 12 to 66 hours, with a mean of 32.7 (SD±12.4). Regarding the participation in patient safety courses, 60% (n = 24) of the nurses did not have the training on this subject.

The actions scored in the questionnaire were categorized according to the health promotion competency domains established in the Galway Consensus, so that the same action corresponded to more than one domain. Table 1 shows the fall prevention actions, the corresponding competency domains and the respective frequency of nurses who always perform the action.

Table 1 - Distribution of fall prevention actions according to the competence domains. Fortaleza, CE, Brazil, 2016 (n=40)

<table>
<thead>
<tr>
<th>Action Items</th>
<th>Fall prevention actions</th>
<th>Competence Domains</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inform the caregiver of the child if the child is free to walk around or not.</td>
<td>Catalyze changes Leadership Defense</td>
<td>39 (97,5)</td>
</tr>
<tr>
<td>2</td>
<td>Inform the child and the caregiver about the risk of falling related to contributing factors, such as age, diagnosis, cognitive factors, previous history, prolonged fasting, surgery/sedation/anesthesia and/or medication, fall injury and how to prevent occurrence.</td>
<td>Catalyze changes Leadership Implementation Defense Partnership</td>
<td>37 (92,5)</td>
</tr>
<tr>
<td>3</td>
<td>Inform the child and/or family/guardian about getting up gradually (raise the headboard 30°, sit on the bed with feet flat on the floor for 5 to 10 minutes, before leaving the bed), according to the presence of risk for falls already identified.</td>
<td>Catalyze changes Leadership Implementation Defense Partnership</td>
<td>36 (90,0)</td>
</tr>
<tr>
<td>4</td>
<td>Evaluate the risk for falls at the time of hospital admission of the child.</td>
<td>Needs Assessment Leadership Defense</td>
<td>37 (92,5)</td>
</tr>
<tr>
<td>5</td>
<td>Daily evaluation of the child for the risk of falls</td>
<td>Needs Assessment Leadership Defense</td>
<td>30 (75,0)</td>
</tr>
<tr>
<td>6</td>
<td>Ensure that children aged≤6 months are being held by the responsible person who must be sitting in a wheelchair</td>
<td>Planning Leadership Defense</td>
<td>28 (70,0)</td>
</tr>
<tr>
<td>7</td>
<td>Ensure that children&gt;6 months≤36 months are transported on a stretcher in the company of the responsible person, when undergoing anesthesia/sedation procedures; or in a wheelchair or are held by the responsible person.</td>
<td>Planning Leadership Defense</td>
<td>38 (95,0)</td>
</tr>
<tr>
<td>8</td>
<td>Ensure that children aged&gt; 36 months are transported on stretcher, lying down and are accompanied or not accompanied by the person in charge, or in a wheelchair on the responsible person’s lap.</td>
<td>Planning Leadership Defense</td>
<td>38 (95,0)</td>
</tr>
<tr>
<td>9</td>
<td>Place children aged &lt;3 years in a crib and children&gt; 3 years in bed, both with high safety bars at maximum height.</td>
<td>Implementation Leadership Defense</td>
<td>32 (80,0)</td>
</tr>
<tr>
<td>10</td>
<td>Keeps one of crib sides elevated during the changing of the child’s clothes/diaper</td>
<td>Implementation Leadership Defense</td>
<td>37 (92,5)</td>
</tr>
<tr>
<td>11</td>
<td>Check prescription medicines which effect mobility and balance.</td>
<td>Implementation Leadership Defense</td>
<td>29 (72,5)</td>
</tr>
</tbody>
</table>
### Nursing competences in the prevention of falls in children in light...

The frequency of falls prevention actions was between 70% and 97.5%. In the majority of the actions, the nurses obtained satisfactory performance, with a percentage > 80%. It should be noted that in actions 5, 6, 11, 12, 13 and 15, the nurses’ performance was unsatisfactory, i.e., having a percentage lower than 80%.

The competence leadership domain was present in all actions. The other most frequent competences were: defense (9 actions), catalyze changes (6 actions) and implementation (6 actions). The skills needs assessment and impact assessment were the least predominant, with two actions for each domain.

### DISCUSSION

Regarding the performance of nurses in fall prevention actions, six actions were not performed satisfactorily: risk assessment for falls on a daily basis, provision of adequate transportation of children less than or equal to six months of age, verification of the prescription of medications that alter mobility and balance, placing the child with a previous history of falling near the nursing station; recording of the results of the evaluation and reporting incidents.

In order for notifications of incidents to occur, a non-punitive safety culture must be promoted in institutions. In the health field, the high-risk potential of the activities and the need to achieve safe practices require an environment free from blame, in which professionals are able to report errors without fear of being reprimanded or punished.

To perform satisfactory care for the pediatric patient, nurses need to have specific skills that enable them to ensure quality and resolutive services aimed at preventing falls. To assess the development of these competencies, actions guided by the Galway Consensus’s health promotion domains (catalyze change, leadership, needs assessment, planning, implementation, impact assessment, advocacy and partnership), strengthens and ensures professional practice.

Leadership in the Galway Consensus is the direction of strategies and opportunities for participation in the development of healthy public policies, mobilization and resource management for health promotion and capacity building. In this study, this competence was identified in all actions recommended by the protocol, recognizing that the ability to lead is an essential competency in the nurses’ work process, assisting in care management and in the construction of a satisfactory quality work environment.

The nurse is the professional responsible for the leadership in nursing care, the development of fall prevention actions, such as planning, organizing and providing care; training, delegation of functions and supervision of technicians and nursing assistants; education of patients and family members in order to reach the objectives of the care plan; in

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<tbody>
<tr>
<td>12</td>
<td>Place children with previous history of falls near the nursing station when possible</td>
<td>Implementation</td>
<td>30 (75,0)</td>
</tr>
<tr>
<td>13</td>
<td>Record the result of the falls risk assessment results and all the procedures performed for fall prevention in the child’s chart.</td>
<td>Impact assessment</td>
<td>29 (72,5)</td>
</tr>
<tr>
<td>14</td>
<td>Record the occurrence of falls, related factors and the damages generated in the medical records</td>
<td>Impact assessment</td>
<td>34 (85,0)</td>
</tr>
<tr>
<td>15</td>
<td>Notify falls incidents to the falls risk management and/or patient safety center (when available).</td>
<td>Impact assessment</td>
<td>29 (72,5)</td>
</tr>
</tbody>
</table>
addition to interaction with other professionals of the health team through interdisciplinary practice.19

The defense competence aims at improving health and well-being by favoring important aspects of quality of life and health promotion.10-11 This competence is considered important, as it allows action that go beyond clinical intervention, involving the professional being proactive, together with the family and the community, with interdisciplinary and intersectoral actions.20

It is known that falls can occur during child hospitalization and the consequences of these can be permanent and irreversible. Therefore, it is the duty of the health professional to prevent these from occurring, and there must be constant vigilance and ability to anticipate the behavior of the child who is active and playing in the bed/crib.21 The consequences must be related to the context and mechanism of falls, the children’s clinical condition and medications, as it is known that continuous medications and falls are linked.22

Therefore, it is imperative that medication use is monitored, with involvement of all the health team in the accomplishment of the necessary treatment, in order to avoid falls.

Regarding the catalyze change competence, which refers to producing changes and empowering individuals and communities to improve health.10-11 Competency directed to this domain was present in six actions, noting that to avoid falls from occurring, it is necessary to promote empowerment and make those involved active in the process of health maintenance and/or rehabilitation, and that there is a need for convergent actions between health promotion and patient safety in the hospital context and recognizing these practices as essential elements for care.2

The assessment of needs motivates the identification and analysis of cultural, social, environmental and organizational determinants that promote or compromise health.10 Thus, when identifying the risks that can result from a fall, the nurse can evaluate them, with a systematic process of identification, analysis and treatment of the causes.23 The risk assessment of the falls in hospital admission is a daily practice and aided by decision-making aiming to improve the clinical outcomes and allow more patients to benefit from the knowledge of the best available practices which favor care.24

Planning is aimed at the development of measurable and objective goals in response to needs assessment and identification of strategies based on theory, evidence and practice.10-11 Regarding the safety of the pediatric patient, the knowledge of the types of possible harms, such as falls, occurring in a pediatric unit, is critical in order to analyze the risks to which children are exposed to and in order to plan the priorities to be worked on in order to improve the care process.25 If planning is effective, it will result in the implementation of the professionals in the fall prevention process.

Therefore, in relation to the actions of the protocol studied, using measures in relation to the ideal form of transportation, according to the child’s age group, reinforces the adoption of preventive measures, avoiding complications to the physical and emotional integrity of the patients.26 Therefore, the number of wheelchairs in the institution is questioned, which may corroborate the nurses’ unsatisfactory performance in planning to provide transportation for the children.

Implementation is the effective and efficient implementation of culturally sensitive and ethical strategies to ensure the highest possible degree of health improvements, including human and material resource management.10 The performance of strategic health plans aims to ensure quality care and are recommendations which need to be developed through this competency in order to prevent falls.27 Given the importance of adopting safe practices, corrective and proactive measures must be taken, as well as developing strategies that reduce the occurrence of falls and the resulting harm in hospitalized patients.28

Impact assessment aims to determine the extent, effectiveness and impact of health promotion programs and policies. This includes using appropriate assessments and research methods to support improvement, sustainability and dissemination programs.10-11

By evaluating the impact of fall prevention actions, it is possible to modify paradigms of the health management process, requiring nurses to be more creative and daring, to appropriate strategies that effectively reach the patient or family, and to promote reflection and change in practices.29

In view of the above, the records in the medical files regarding the risk assessment for falls and occurrences of these and the sustained injuries is the most used method to evaluate the results. However, limitations exist such as underreporting due to time constraints, lack of adequate information systems, fear of litigation, people’s reluctance to report their own mistakes, lack of knowledge about the importance of records and lack of changes after the records. However, this method of communica-
tion is the most useful for inducing changes in safe practices.\textsuperscript{30} It is worth mentioning that due to the fact that the patient safety centre has recently been implanted in this institution, it is necessary to make the professionals aware about the importance of reporting injuries and adverse events in patient care, in order to improve the quality of services provided, and to promote and improve the quality of records.\textsuperscript{31}

According to the Galway Consensus, the partnership, the cooperative work between disciplines, sectors and partners were also investigated in order to improve the impact and sustainability of health promotion programs and policies.\textsuperscript{10} Thus, the search for a an expanded approach to intersectoral care values the communication between professionals and services, and also creates work perspectives that avoid gaps in partnership relationships and broadens the integrity and intersectoriality of actions aimed at fall prevention.

Therefore, intersectoriality allows the expansion of health care actions and management strategies which are fundamental in the consolidation of the integrity of preventive actions and services, especially in relation to the set of laws and programs aimed at achieving safe care for children\textsuperscript{32} who are exposed to the risk of falls, considering that having contact with an environment that is not familiar, arouses attention and curiosity, and can motivate the occurrence of such falls. Therefore, it is essential that partnership is strengthened between professionals and the family while preserving the integrity of the child.

**CONCLUSION**

With the development of the present study, it was possible to analyze nurses’ competences in the prevention of falls in hospitalized children, in light of the Galway Consensus. Competence domains were identified in the study, with leadership being the most predominant competence in all actions considered in the prevention of falls, followed by the defense, catalyzing changes and implementation competences. The other domains were also identified, however in fewer protocol actions.

By using a self-assessment questionnaire, the present study presented limitations in relation to the fact that the nurse can be influenced by the presented alternatives, prompting them to select answers that indicate the continuous performance of the action.

Considering this, it is suggested that an observational study is performed as this method allows detailed information of existing variables to be collected and also allows data to be used in order to justify and evaluate conditions and practices, as well as to plan improvements in health care practices.

Although the performance of fall prevention actions has been adequate for the most part, permanent education regarding nursing care in the prevention of falls to the pediatric patient is fundamental, mainly regarding the actions in which the performance proved to be unsatisfactory.

The results demonstrate that the issue of patient safety in the hospital environment, regarding the prevention of falls, is developing and that nurses need to continue to develop the skills in order to perform safe actions.

The study contributed to the dissemination of the topic, especially in view of the fact that investigations on the subject are new and scarce in Brazil. The results can be used by pediatric institutions to establish prospective plans for improvements in fall prevention care. To avoid the occurrence of risks and damages of falls, it is necessary to identify the nurse’s competences in the prevention of hospitalized child falls, with the aim of improving the quality of care in the pediatric hospital environment.

**REFERENCES**


