# ORIGINAL ARTICLE

# From practice contexts towards the (co)construction of family nursing care models\*

DOS CONTEXTOS DA PRÁTICA À (CO)CONSTRUÇÃO DO MODELO DE CUIDADOS DE ENFERMAGEM DE FAMÍLIA

DE LOS CONTEXTOS DE LA PRÁCTICA A LA (CO)CONSTRUCCIÓN DEL MODELO DE CUIDADOS DE ENFERMERÍA DE LA FAMILIA

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### **ABSTRACT**

As nurses face challenges in the development of care focused on the family as a context and unit of intervention, this research aimed to identify family intervention processes in the context of Primary Healthcare. This qualitative-based study adopted the investigation-action approach on a study plan's five-step path. By means of the comparative analysis of family care practices and conceptual models, the diagnosis results brought forth the need for change triggered by training processes. Having the Systemic Model, the Calgary Family Assessment Model, and the Calgary Family Intervention Model as references, the family nursing care model was (re)constructed and operationalized through the definition of attention and intervention areas. The (re) construction of the model from the needs identified by nurses and legitimated by their decision-making processes is the basis for family nursing focused discussions.

# **KEY WORDS**

Family.
Family nursing.
Models, nursing.

#### **RESUMO**

Face aos desafios que se colocam aos enfermeiros, no desenvolvimento de cuidados centrados na família como contexto e unidade de intervenção, realizamos uma pesquisa direcionada para a intervenção familiar, no contexto dos Cuidados de Saúde Primários. De natureza qualitativa, adotamos a metodologia de investigação-ação, numa trajetória de cinco etapas, integradas num ciclo de estudos. Dos resultados do diagnóstico, através da análise comparativa dos modelos conceituais com as práticas de cuidados à família, emergiu a necessidade da mudança iniciada com um processo formativo. Tendo como referenciais o Modelo Sistêmico, o Modelo Calgary de Avaliação da Família e o Modelo Calgary de Intervenção na Família, reconstruiu-se o modelo de cuidados de enfermagem à família, operacionalizando-o através da definição das áreas de atenção e intervenção. A co-construção do modelo a partir das necessidades identificadas pelos enfermeiros, legitimado pelas tomadas de decisão dos mesmos, constituise como base de discussão no contexto da enfermagem de família.

# **DESCRITORES**

Família. Enfermagem familiar. Modelos de enfermagem.

#### **RESUMEN**

Frente a los desafíos que se colocan a los enfermeros, en el desarrollo de cuidados centrados en la familia, como contexto y unidad de intervención, realizamos una investigación dirigida para la intervención familiar, en el contexto de los Cuidados de Salud Primarios. De naturaleza cualitativa, adoptamos la metodología de investigación acción, en una trayectoria de cinco etapas, integradas en un ciclo de estudios. De los resultados del diagnóstico, a través del análisis comparativo de los modelos conceptuales con las prácticas de cuidados a la familia, surgió la necesidad del cambio, iniciado con un proceso formativo. Teniendo como marco teórico el Modelo Sistémico, el Modelo Calgary de Evaluación de la Familia y el Modelo Calgary de Intervención en la Familia, se (re)construyó el modelo de cuidados de enfermería a la familia haciéndolo operacional a través de la definición de las áreas de atención e intervención. La (co)construcción del modelo a partir de las necesidades identificadas por los enfermeros, legitimado por las tomas de decisión de los mismos, se constituye en la base de discusión, en el contexto de la enfermería de familia.

# **DESCRIPTORES**

Familia. Enfermería de la familia. Modelos de enfermería.

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# INTRODUCTION

Family care has developed parallel to the evolution of nursing care. Nurses have always provided care in social contexts where people were inserted<sup>(1)</sup>. There was evidence of existing practices guided towards caring for families since the time of Florence Nightingale, expressed by the concern for including family members in care development<sup>(2)</sup>.

In the past, the concept of family was associated with the family core, a couple living with their biologic children and, perhaps eventually, one of the parents from one member of the couple. Currently there is a great diversity of family structures and types. Multiple family organization formats are associated not only with role alterations in gender, but also to a diversity of marital interactions and family re-building processes<sup>(3)</sup>. In current literature, we can find concepts that include people as significant members of the family<sup>(4)</sup>, which builds an even more self-defining tendency expressed by the diversity of the ties that feature the family as a group<sup>(1,2)</sup>. Ties established between the family group associated with specific contexts of its development make

the family a group with self-identity, an open multidirectional communication system<sup>(5)</sup> in a multi-version perspective of the family.

In order to understand the family as a unit, it is essential to build a concept of family through a paradigm that enables us to understand its complexity, global view, diversity, and unity, among many other inherent features, including its multi-dimensionality that will overcome the definitions associated with blood ties and affectivity. From the triangulation between the General Theory of the Bertanlaffy Systems<sup>(6)</sup> that defined the gen-

eral laws for learning about the features of systems, the Norbert Weiner Cybernetics<sup>(7)</sup>, which studied the functional format of systems and Paul Watzlawick's Pragmatics of Human Communication in collaboration with other authors from the Mental Research Institute of Palo Alto<sup>(8)</sup>, which made the connection between the elements composing each system, emerged the Systems Model or Systems Thinking<sup>(9)</sup>. Systems research has emerged from the need to broaden the vision for the whole instead of decomposing parts of it. It conceived the family unit as a whole and indivisible entity in which none of the parts can be reduced by the other<sup>(6)</sup>. In this context, the Systems Model focuses on the intrinsic relations and interactions system of family life, shifting its focus to the complexity of the context.

Family nursing care emerges as both art and science<sup>(2)</sup>, based on systems thinking with an approach surpassing the traditional science paradigm, enabling the understanding of all factors comprising the family unit.

Prior theories associated with family nursing care integrate a philosophy of partnership with the family, with a view to supporting it in searching for solutions for the iden-

tified problems, and by interacting with the family in the planning and execution of interventions (1,10). Suitable for all types of families, considering that there are no inappropriate and unfit families(11), it is centered on the strength of the family members and the family group promoting their growth and development. It emerges from the mutual association between health and family functioning<sup>(12)</sup>, where health problems influence perceptions and behaviors of the family, in the same way that perceptions and behaviors of the family influence the health of its members. The family itself is an adversity or protection factor regarding the health and sickness processes of its members and has inherent adequacy processes in its development. Adaptation processes to new situations, whether internal or external, with a view to ensuring family changes and continuity will always be accompanied by more or less stress<sup>(13)</sup>.

As from these prior conjectures that represent some of the most important aspects featured by the family system, we can understand the nursing focus on the family for relations and interactions, where the purpose of these interventions is change; encompassing a dynamic welfare per-

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spective of the interactive, functional and structural dimensions of family systems. Summing up, family nursing objectives are centered on helping the family identify and develop the competencies that will enable a healthy relationship with its constantly changing processes. Nursing care develops within the family life cycle, in both health and illness, focusing on family strategies for coping with real and potential problems<sup>(1)</sup>.

It is in this context of care, based on a systems approach, that the family is understood in all its complexity and unity. Each one of its

parts, or the individuals that comprise the system, is perceived as a single, dynamic structure, with a single story structure understood in the contextual interaction<sup>(14)</sup>.

Nursing evaluation and intervention require the use of models that enable establishing concepts of care guided both to the collection of data and to planning interventions. Under this perspective, the Calgary Family Assessment Model (CFAM)<sup>(1)</sup> with a multidimensional perspective of the family system, is featured as a structure that involves three dimensions: structural, developmental and functional. Each one of these dimensions integrates many categories and sub-categories that enable a systems assessment of the family using a dynamic and continuous perspective.

The structural assessment<sup>(1)</sup> integrates aspects of the family structure, integrating aspects related to its internal, external and context structure; In other words, a view of the family composition, the ties among and between members and other meaningful elements as in enlarged families or more broadened systems, in addition to the context in which the family is inserted.



Development<sup>(1)</sup> assessment enables the understanding of exclusive phenomena of the family associated with its growth and evolutional path at a functional, structural and interactional level. Having knowledge of this path, articulated by transformations in the family organization resulting from the vital cycle, enables the development and anticipation of care for training the family to be effective in its developed tasks.

The functional assessment<sup>(1)</sup> features the way in which family members interact with each other. Instrumental Functioning is centered on the daily activities of family life, while Expressive Functioning is guided by interaction patterns and includes nine sub-categories: emotional communication; verbal communication; non-verbal communication; circular communication; problem solving; roles; influence and power; beliefs; and alliances and unions. These interaction processes seem to have greater effect on family health conditions than on its structure or function<sup>(2)</sup>.

Inter-penetrability of dynamics and dimensions enables family interventions planning within the family. It has a view to providing answers to the problems identified through the promotion of changes in one of many domains of family functioning: cognitive, affective and behavioral<sup>(1)</sup>. We then judge that the use of CFAM<sup>(1)</sup> allows nurses the ability to propose interventions that will respond to the needs of the family under care, identifying, specifically, these needs.

Identifying some family intervention areas where sensible health profits from nursing care can be attained in a way that defines care areas and implements guiding strategies to produce results, keeping in mind that it can be a stage for the construction of a specific knowledge base for family nursing.

#### **OBJECTIVE**

Within this context, we proposed to develop a research that could contribute to improving nursing care for families, in the community, where the following objectives were defined: to understand primary health care nurses' family intervention; and to contribute to the knowledge base definition of the family nursing area.

#### **METHOD**

The research is a qualitative study using an action investigation methodology, with a view to implementing new practices for family care through practical knowledge and the development of the theory<sup>(15)</sup>. Inherent to the methodology, a flexible path appropriate to context interactions was established, where the production of new paths for family practice is intended. Therefore, by integrating a cycle of studies, we defined different stages that guided the continuity of the research objectives that we believe necessary for understanding action investigation: Diagnosis; Action Planning; Implementation; Practical Changes Assessment; and Indentifying Inquiries.

The research population was composed of family nurses form a Health Center in the city of Porto in the North of Portugal that featured the following characteristics: Family Nurse organization methodology; and the use of a Support System for Nursing Practice (SSNP) that allows for computerized nursing records, enabling nurses' documents analysis.

In order to develop the many stages of this study cycle, starting in January of 2005, we used a methodological triangulation with the employment of a questionnaire, document analysis, group debates and field observation.

All nurses agreed to participate in this research after the approval of the Investigation Project by the Institution's Ethics and Research Committee (Protocol # 4126/CA/AA).

#### RESULTS AND DISCUSSION

We present the respective results discussion according to the methodological path adopted. In diagnosis, we carried out three studies that allowed us to globally identify context practice problems in family-centered care. These results are presented below. Results from each study carried out in this phase are discussed and a global analysis is performed in order to allow continuity of the research through action planning and change strategies implementation.

# Diagnosis

In this phase of the study cycle we intended to carry out a comparative analysis between the exposed models and the usage models regarding family-centered nursing care practices as a care unit. Exposed models were defined as encompassing family nursing concept models, by the integration of constructive models, where models in use correspond to decision aspects of practices, their structuring elements and meanings<sup>(16)</sup>.

In order to identify and analyze the exposed models, in addition to the exhaustive research on theories and models that define family nursing, constructive models of family nursing were analyzed using the analysis study plan of the Undergraduate Nursing Course (UNC) from the nursing educational institutions in the city of Porto, namely Study 1.

Study 1 - Nursing care for the family in the Study Plan of UNC

This first study was intended to identify the curricular units of the Study Plan of UNC that integrate family nursing scope themes planning and that analyze objectives, contents and the bibliography expressed in the identified curricular units.

It regards a descriptive qualitative study. Five UNC institutions from the Northern area of the country were considered, three of them being public institutions and two being private.

Data collection was performed through document analysis of the UNC Curricular Plan by using the information given by institutions and/or the information available from their respective sites throughout March, April and May of 2005.



Data analysis and management were carried out by content analysis of the curricular units with the expression of one or more analysis units.

Great heterogeneity in the Study Plans from the institutions was found, whether in general features of the plans or in content structuring regarding the family and their distribution by different curricular units.

The expressed contents comprise five categories: concepts and tendencies; family nursing models and theories; family social sciences theories; health/sickness processes; and family as the care target.

The compound analysis of the five institutions suggests that the expressed objectives and contents are guided towards the development of competencies for family care. However, fragmentation by the institution was considered as a problematic element for full understanding.

In order to identify and analyze the used models, two studies were developed, namely Study 2 and Study 3, which comprise the analysis and discussion relating to family-centered nursing practices.

Study 2 - Care for the Family from concepts to representations

We adopted as theoretical reference the Social Representations Theory. Representations contribute to the construction of a common reality in a social group. This reality comprises beliefs and values of the groups that, through communication, guide the production of a social subject. As group attributions, representations work as a reference, making individual or group behaviors predictable<sup>(17)</sup>.

In the diagnosis context and according to the theoretical reference, the following objectives were defined: identify nurses' representation elements regarding Family, Family Nursing and Family Health and describe the way they are organized.

The study population was composed of 22 nurses from the contexts where we developed the research.

Data were collected through a self-applied questionnaire, throughout May and June of 2005, after which data were subjected to structural content analysis. Analysis was performed from a theoretical chart based on the fact that the dimensions and the category system resulted from the analogue and progressive classification of elements.

Results demonstrated that family representations generated two perspectives in the nurses' thought system: sociological and psychological, suggesting cognitions associated with the International Classification for Nursing Practice (ICNP)<sup>(4)</sup>. Regarding family health representations, cognitions respectively connected to *psychological welfare* and *family group* categories, which seem to be based on individual health concepts. Family Nursing representations are structured into three dimensions: intervention levels, intervention featuring and objectives, where the first is more relevant. All nurses' evocations were spread throughout four inter-

vention levels<sup>(11)</sup>, holding family context with higher preponderance. Intervention featuring emerges associated to family developmental and functional domains with representations guided to promote, maintain and restore family health.

Study 3 - Family-centered practices: description and care

The following objectives guided the complement of inuse (16) models analysis: identify the types of families requiring interventions; identify care focus used for the initial family assessment generating a diagnosis; identify nursing practices guided to families and results assessment; and analyze concept models for family care practice and nurses' perception of obstacles in family nursing practice.

Data collection: A self-applied questionnaire was provided to the 22 family nurses from the study context and the document analysis produced by them in SSNP was analyzed, throughout May and June of 2005.

Data management and analysis was carried out through the use of quantitative techniques by using descriptive statistics analysis and non-parametric tests, as well as qualitative techniques for the content analysis. For the effectiveness of this analysis, the Calgary Family Assessment Model<sup>(1)</sup> and the Calgary Family Intervention Model<sup>(1)</sup> were used. We articulated their concepts with the International Classification for Nursing Practice (ICNP), Beta2 version, since the documents standard of the nursing system used here were based on this version.

In the complexity of results obtained here, those that do not seem relevant to the understanding of family intervention, in this context and care, were highlighted:

- Families throughout all stages of their life cycle were considered as targets for nursing interventions;
- There was divergence between the most valuable focus description in family assessment and the data documents from the initial assessment; these divergences stood out in all assessing dimensions: structural, developmental and functional;
- Care focus was valued by nurses and used in diagnosis descriptions; however, without data description that would provide a basis for the diagnosis;
- Description of practices was guided to the family as a unit and as the target for the care;
- Care concepts that are not based on concept models that enable the organization of phenomena in a family systems approach were identified;
- Aspects perceived by the team as being a barrier in the family nursing practice are identified in terms of the families ( they are not prepared for a differentiated intervention), the education (lack of education in the family nursing area), practice models (lack of guiding models), and organizational aspects (care organization and resources).

After the development of these three studies comprising the diagnosis stage of the action investigation cycle, many



meetings were carried out with the nursing team with a view to confronting, discussing and reflecting on the results.

Acknowledging the need for changing the model for nursing care aimed at the family was based on mutual agreement, which brought it closer to concept and training models.

In addition to aspects considered by the team as impeding factors for executing family-centered practices, the nurses demonstrated difficulties in defining care situations when the family is the target, diagnosing activities, understanding family systems, and in using SSNP, since they believe that document patterns do not allow for a global and systematic assessment of the families.

Following this process of discussion and reflection, the following stage of strategies definition for implementing the changes could be initiated.

# **Action Planning Stage**

Considering global data analysis and the strategies discussed with the team, a plan related to this stage and validated by the managing departments of the institution was elaborated, integrating two main stages: training process and redefinition of the care model in use.

# **Training Process**

For the training process, guiding objectives for the development of competencies that would allow for the family concept based on the system paradigm were defined, making the redefinition of the care model possible.

Contents were guided towards essential aspects of family care, introducing contents for the Primary Health Care scope from the ICNP Nursing Information System.

This device was developed in the Health Center where the investigation was carried out. Four groups of training/ discussion members were formed, comprising 80 hours of work in the period of July through December of 2006. Throughout this training, themes emerging from the discussion were introduced and training resources were employed for the process dynamics.

#### 2- Redefinition of the Care Models in Use

In order to execute this activity, the following stages were developed:

- (Re)Construction of the Family Nursing Care Model using the Systems Thinking<sup>(9)</sup>, the Calgary Family Assessment Model (CFAM)<sup>(1)</sup> and the Calgary Family Intervention Model (CFIM)<sup>(1)</sup> as references.
- Model operational action through the definition of: family assessment data; relevant care areas for family nursing practice; sub-groups diagnosis, and interventions and results from nursing activities guided to Family Nursing.
- Document pattern adequacy plan for the structure of the (Re)Constructed Care Model.

In order to execute these activities, group debate techniques were used<sup>(18)</sup>, including weekly debates with subgroups, monthly general group debates and theme discussions by smaller groups.

Since we are aware of the need for involving all nurses in decision-making, the debates were creatively dynamic, mobilizing practical knowledge from the participants for the changing processes.

In the (Re)Construction of Care Models, in addition to the global analysis of CFAM(1) concepts of inter-relationships and the construction aims associated with model categories, real situations in family care were discussed, allowing for enhancing the family vision of their understanding phenomena.

Family assessment data are appropriate to the discussion of the model. They allow for the systematization of diagnosis data associated to care areas, which are considered relevant in family nursing practice. As from these prior conjectures, and articulated to the ICNP, the following care areas were described (Figure 1)

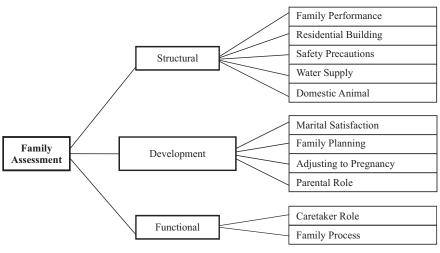


Figure 1 - Family Nursing Care Model Diagram (Reconstructed)



Since this dynamic and interactive model was intended, as from the care areas, the diagnosis sub-groups were defined, with the family and through the identification of resources and strengths, allowing for the description of an appropriate care plan.

In order to define sub-diagnoses, each care area required evaluation dimensions. Other nursing practice<sup>(4)</sup> focus areas that emerged according to group discussions were defined and considered as components of the central focus. For instance, regarding the *Family Process* care area, appointed as a central focus, other focuses were considered as evaluation assessment was aggregated: Family Communication; Family Coping; Roles Interaction; and Dynamic Relations. The clinical opinion of the nurse regarding each one of these dimensions will be considered as a sub-diagnosis, while their decision regarding the central focus, Family Process, will be considered a diagnosis.

This methodology was used to formulate all diagnosis descriptions, as coming from the considered relevant care areas in the practice of family-centered care as previously described intervention units.

The last operation stage of this model corresponded to the construction of intervention descriptions for each one of the sub-diagnoses and central diagnosis. For this stage, we used the CFIM<sup>(1)</sup> as a basis for reflections. Little by little, according to the emerging ideas from the debates, concepts and strategies from other family intervention models, especially those of Family Therapy, enabled practice reflections based on evidence.

As the reconstruction and operation stages of the Care Model were completed, group debates were continued throughout January to November of 2007, with a view to establishing documentation patterns that were congruent with the Model and simultaneously appropriate for the Information System in use. All data obtained by care area were structured and systematized as from the initial family assessment areas.

#### **IMPLEMENTATION**

The SSNP, a nursing information system, is a software framework that processes information and enables professionals to access information for the appointment and the subsequent analysis.

Interface specifications and graphic alterations of the system were authorized by the appropriate management of the Institution and by the Health Systems Central Management (HSCM), which is responsible for managing information systems and technologies of the National Health Service.

In order to effectively transform care practices according to the preparation plan for changes, in December of 2007 alterations in computer applications and structuring data according to the (Co)Constructed Model were employed.

As this effective alteration was employed in the practice context, and with the constant involvement of all participants from previous processes, we believe that conditions were established for shifting from an individual-centered care practice to a family-centered practice using a systems approach.

# **FINAL CONSIDERATIONS**

In order to evaluate practices, the analysis model used in the diagnosis stage was used when it regarded the identification of the used model. Comparing representations, interpretations and description of nursing care are intended, indentifying the changes produced in all three levels. With the featuring of this assessment, identifying the practice knowledge produced parallel to the theory was possible.

The (co)construction of the model originated from the identification of needs by nurses, legitimated by their decision-making, comprised, in a certain way, a theory and practice discussion process on family nursing. Based on a systems approach reference, constantly emerging from the multidimensionality and complexity inherent to family care, we believe that the intervention areas definition will allow for the implementation of guiding strategies to produce results.

Model operation was based on prior conjectures of the nursing process, approaching the following elements: diagnosis, interventions and results. Dynamic systematization of these elements helped to determine what must be done, why it must be done, for whom it must be done, how it must be done, and which results are expected by implementing nursing interventions. These implementation interventions will always have the purpose of assisting the family undergoing change in one of its three functional domains, cognitive, affective and behavioral<sup>(1)</sup>.

Including the information system in this research started from the expressed need of nurses, since it is more and more an integral part of the nursing process and influences practice by its information quantity and complexity. In addition, care documents favor planning activities and ensure nursing care continuity. For that reason, a concept model of family care was conceived and data were structured in the system based on it. We believe that the implementation of the change processes will make visualizing benefits from nursing care possible in the context guided to the family as an intervention unit.



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