CALGARY FAMILY ASSESMENT MODEL APPLIED IN RIVERSIDE CONTEXT
MODELO CALGARY DE AVALIAÇÃO FAMILIAR APLICADO EM CONTEXTO RIBEIRINHO
MODELO CALGARY DE EVALUACIÓN FAMILAIR APLICADO EN CONTEXTO RIBEIRINHO

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ABSTRACT

Objective: to evaluate the dynamics of a family living in the bank of a river. **Method:** qualitative and descriptive study performed with a family using the Calgary Family Assessment Model (CFAM). Data were obtained by semi-structured interview and analyzed by the Content Analysis technique. **Results:** the application of this model investigated the main aspects of its structure, development and functioning, identifying family ties, social support networks and daily functions. **Conclusion:** the family nucleus under study showed strong bonds and positive relationships, strong family and community social support networks, but with fragility in relation to the health service, since the services offered on the island are incipient and there is difficulty locomotion in the island to seek health care elsewhere. The Calgary Model is a useful tool for considering the family in its context, besides being a nursing model. This study may contribute, in the future, for other nurses to propose to the family interventions aimed to improve the quality of family life, collaborating to find solutions and deal with daily difficulties. **Descriptors:** Family Nursing; Family Relations; Professional-Family Relations; Family; Family Health; Family Characteristics.

RESUMO

Objetivo: avaliar a dinâmica de uma família ribeirinha. **Método:** estudo qualitativo, tipo descritivo, realizado com uma família utilizando o Modelo Calgary de Avaliação Familiar (MCAF). Os dados foram obtidos por entrevista semiestruturada e analisados pela técnica de Análise de Conteúdo. **Resultados:** a aplicação deste Modelo investigou os principais aspectos de sua estrutura, desenvolvimento e funcionamento identificando os vínculos familiares, redes de apoio social e as funções diárias. **Conclusão:** o núcleo familiar estudado mostrou-se com vínculos fortes e relacionamento positivo, fortes redes de apoio social familiar e comunitário, porém com fragilidade com relação ao serviço de saúde, uma vez que os serviços oferecidos na ilha são incipientes e há dificuldade de locomoção da ilha para a busca de atendimento de saúde em outro local. O Modelo Calgary é uma ferramenta útil por considerar a família no seu contexto, além de ser um modelo próprio da enfermagem. Este estudo pode contribuir, futuramente, para que outros enfermeiros possam propor à família intervenções para a melhoria da qualidade de vida familiar, colaborando para encontrar soluções e lidar com as dificuldades do cotidiano. **Descritores:** Enfermagem de Família; Relações Familiares; Relações Profissional-Família; Família; Saúde da Família; Características da Família.

RESUMEN

Objetivo: evaluar la dinámica de una familia ribeirinha. **Método:** estudio cualitativo, tipo descriptivo, realizado con una familia utilizando el Modelo Calgary de Evaluación Familiar (MCAF). Los datos fueron obtenidos por entrevista semi-estructurada y analizados por la técnica de Análisis de Contenido. **Resultados:** la aplicación de este Modelo investigó los principales aspectos de su estructura, desarrollo y funcionamiento identificando los vínculos familiares, redes de apoyo social y las funciones diarias. **Conclusión:** el núcleo familiar estudiado se mostró con vínculos fuertes y relacionamiento positivo, fuertes redes de apoyo social familiar y comunitario, sin embargo con fragilidad con relación al servicio de salud, una vez que los servicios ofrecidos en la isla son incipientes y hay dificultad de locomoción de la isla para buscar atendimento de salud en otro local. El Modelo Calgary es una herramienta útil por considerar a la familia en su contexto, además de ser un modelo propio de la enfermería. Este estudio puede contribuir, futuramente, para que otros enfermeros puedan proponer a la familia intervenciones para la mejoría de la calidad de vida familiar, colaborando para encontrar soluciones y lidiar con las dificultades del cotidiano. **Descriptores:** Enfermería de la Familia; Relaciones Familiares; Relaciones Profesional-Familia; Familia; Salud de la Familia; Composición Familiar.

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INTRODUCTION

The family is considered as a support network that is constituted by a group of people who may or may not have blood ties, experience life in different cycles and coexist with the demands of roles, functions and influence exercised over one another. Despite all the transformations that have occurred in the family organization, it remains as an emotional and affective unit, essentially characterized by psychological and social dimensions, a fact that is also related to the learning of health behaviors.¹⁻²

In the Amazon, families living on the banks of rivers call themselves riverside and present traditional ways of life and cultural peculiarities related to food, routines in daily life, way of coping with health-disease situations, forms of communication, relationship with nature and their classification systems of fauna and flora, being designated as cultural patrimony. The river also has symbolic power for bringing the fish, which is the food base of this community, for serving as a transportation route and also for providing water for activities of daily living, such as bathing and household chores. In fact, the riverside houses are always built facing the river, evidencing this symbolism.³ Analogically, "This river is my street" (music by the singer Fafá de Belém) portrays this cultural riverside characteristic.

Health service in the riverside areas is precarious, sometimes with only one Basic Health Unit and, in this condition, the riverside population has little access and, consequently, low knowledge and empowerment of self-care in health. From the point of view of caring for this group, nurses have a special role in the care of riverside families, representing the link between the health service and the family, assuming the responsibility for provision of care in daily life and in their experiences in the health-disease processes, and it is emerging the practice of health promotion and protection in this type of community.⁴

Health evaluation and intervention need models that allow the conception of care oriented both for the collection of data and for the planning of the interventions. In this perspective, the Calgary Family Assessment Model (CFAM) was proposed and implemented by Wright and Leahey, researchers at the University of Calgary, Canada. Such a model is a methodological reference that allows the family to be analyzed as a system through the diagnosis of its health problems, potential

resources to face the problems and available social supports.⁵

In this perspective, the CFAM addresses the individual and the familiar subsystems, and the supersystem (relations with other social media). It is based on a multidimensional perspective of the family; the model integrates structural, development and functional dimensions. This model is applied in promoting interaction with families and better planning of care in the context of primary health care.⁶

The structural category comprises the family structure, that is, who makes part of it, what the affective bond is between its members compared to the outsiders and what its context is. Three aspects of family structure can be examined, as internal elements (family composition, gender, sexual orientation, birth order, subsystems and boundaries), external elements (extended family and broader systems) and context (ethnicity, race, social class, religion and environment).⁵

In relation to the development category, it refers to the progressive transformation of family history during the phases of the life cycle: its history, life course, family growth, birth, death and its subcategories are classified in stages, tasks and links.⁵

As for the functional category, this refers to the way in which interaction occurs between individuals in the family. Two aspects can be explored: instrumental functioning, which refers to activities of everyday life; and expressive functioning, which relates to the styles of communication, problem solving, roles, beliefs, rules and alliances.⁵

Faced with this perspective, it is necessary that nursing, like any other discipline, promote the renewal of its body of knowledge, be instrumented with new technologies that respond to the needs of professionals and give visibility to what they do, like this model.⁵

OBJECTIVE

- To assess the dynamics of a riverside family.

METHOD

This is a qualitative and descriptive study, using the Calgary Family Assessment Model (CFAM) with a family living in Combu Island, Pará, Brazil.

The descriptive study has as main characteristic to describe occurred phenomena. It can also describe the daily

lives of people within a social group or geographical area.⁷

The Combu Island is located on the left bank of the Guamá River, in front of (on the other side of the river) the Campus of the Federal University of Pará (UFPA) in Belém. This island belongs to the state of Pará, in the Amazon Region located in the North of Brazil. The access to the capital is only done by waterway, with an average duration of 15 minutes. Its population is denominated as riverside community.⁸

Approximately six (6) home visits were conducted to understand the relationships, behaviors and health care. The family was chosen by convenience and the criteria to participate in the research were: the family should be registered in the Basic Health Unit and live in an area easily accessible to the team. We excluded the families in which the researcher did not find any family member aged 18 years or more to carry out the research.

In the research, the application of the CFAM was performed through the semi-structured interview technique, in which the informant has the possibility to talk about experiences and give free and spontaneous responses from the main focus proposed by the researcher. The interview consisted of guiding topics based on the branched diagram of the CFAM, which addresses aspects of structural, developmental and functional evaluation of the family. All interviews were scheduled according to the availability of family members in order to ensure participation as a unit of analysis.

An outline of the genogram was drawn up together with the family. For the elaboration of this genogram in digital medium, the GenoPro software was used. The genogram is

a diagram that details family structure and history, and tends to follow conventional genetic and genealogical charts. It is a familiar tree representing the internal family structure. At least three generations are often included, and family members are placed in horizontal series that correspond to generation lineages. Genograms present information in a graphical structure that provides a quick view of complex family norms and a broad source of hypotheses about how a clinical problem may be related to the family context.⁵ In the analysis phase, the data were discussed according to the structure, development and functionality of the family unit interviewed. The analysis of interview data was done in the light of Minayo, following the guidelines of the Content Analysis technique: ordering, classification in empirical categories, synthesis and interpretation of the data.⁹

This research brought minimal risks to the participant, and data collection only occurred after authorization from the Municipal Health Secretariat (SESMA) and the Ethics Committee of the Institute of Health Sciences/UFPA under approval number 17487213.6.0000.0018 and opinion number 961.277, of 01/26/2015, complying with resolution 466/12. Participants were identified by acronyms to preserve their anonymity.¹⁰

RESULTS

The family nucleus under study is the family T, composed in its internal structure by: Gra, Ci and J. Gra lives with her husband (Ci) and a 22-year-old granddaughter (J). The genogram and the functional evaluation, development and functionality of the family according to the CFAM, respectively, are presented, respectively:

Figure 1. Genogram of family T. Belém (PA), Brazil, 2017.

Structural Evaluation: Gra is a 75-year-old Catholic woman who has been married for fifty years and was born at the Combu Island, PA. She develops labor activities in her residence by selling food products, carries out the household chores and provides the space of her house to hold parties, promoted by one of his children, Rval (DJ and producer). Gra is a former alcoholic and had abandoned this habit after advancing age and developing health problems (cardiac arrhythmia, hypertension and gastritis). She has used a cardiac pacemaker for one year, as well as medications for hypertensive disease.

Ci is married to Gra, 75, retired and receives a financial benefit from the government called *Bolsa Verde* (Green Grant), but still develops carpentry activities. Ci has a medical diagnosis of rheumatic disease, feels constant pain in the legs, had already had Wirchowian leprosy and is now cured.

Jé is 22 years old, single, student and waitress in spare time. She is Reia's 9th daughter, does not have children and was raised by the grandparents. Jé's only health complaint was an alteration in her last UPCE (Uterine Preventive Care Examination), which showed an inflammation, but Jé has been followed up.

The family's house is located on the Combu island, is made of wood and clay tile, and has four rooms. The service area and the bathroom are outside the house and there is a boarding ramp for the most used means of transportation: boats and canoes. It has a septic tank, but it is always invaded by the river waters during the flood season.

There is no basic sanitation and the water for consumption is purchased, coming from an artesian well located in the municipality of Acará-PA. For domestic use, water comes

from rivers and streams, pumped by an individual electric pump.

When necessary, the family uses the Basic Health Unit of Combu or services of the University Hospital Bettina Ferro de Souza.

Development Evaluation: according to the genogram, the couple conceived thirteen children, respectively, and in order of birth: Ros, Ro, Re Lú, Roe, Rdo, Rne, Rto, Rrto, Reia, Rli, Ri, Rval, Rda. Two died at birth, both males (Rto and Rrto). Of the living children, nine are female and two are male. The couple has raised a granddaughter, Reia's daughter, the ninth daughter. All the children have constituted new family nuclei and they live in the same island, on the banks of the same river.

In relation to the tasks, it is noticed that Gra performs the family function of wife, mother and grandmother, performs household chores, is a dealer and retired. Ci does not perform household chores and only works sporadically as a joiner. Jé is a student and works as a waitress on weekends and assists her grandmother in the household chores. All family members contribute to the economic support.

As for the bonds, the family has strong bonds. Special family relationships and support exist because a large part of the extended family lives in the same river bank and keeps in daily contact for social company, emotional support and advice. Ci's relatives are more absent because they live far away, making it difficult to get around, however, contacts by telephone are frequent and this does not interfere with family interaction and relationships. After the installed picture of Gra's illnesses, it was noticed that the bonds became even stronger with the members of her family.

Functionality Evaluation: with the emergence of the disease in the elderly couple, activities of daily living were divided into two subgroups: the more difficult tasks (requiring more effort) are performed by the granddaughter, and the easier tasks (requiring less physical effort) are performed by the couple.

In the reports, the subjects interviewed were unanimous in affirming that this family has women as the majority in its composition. This fact makes them work and become more burdened with their daily tasks. Prior to the insertion of the pacemaker, Gra was engaged in extractive activities, but due to the difficulties imposed by the disease she reduced participation in activities that required physical exertion.

The main health decisions of this family were previously taken by the couple; however, after the diagnosis of pathologies of Gra and Ci, the granddaughter started to be responsible for the health care of the grandparents, and she reported that she worries about their health. Nevertheless, all decisions and problem solving are always shared and discussed in family, as well as everyday tasks. They reported having good verbal and emotional communication.

On the nursing care service, the family pointed out the nurses' orientations as positive for the care and that this action had more positive impacts on the family. All family members are cared for in a nearby Basic Health Unit and they have the fluvial health service (*Luz na Amazônia*- Light in the Amazon Program, a university health care project), but they reported difficulties in reaching the health service due to transportation and delay in attendance.

The family claimed to follow the precepts of Catholicism. The children follow the example of their parents and raise grandchildren within Christian concepts. The family stated that the relationship with the neighborhood and community is peaceful.

During the home visit, it was observed that the couple wanted to be more active in daily activities; however, they were focused on the treatment of diseases, thus dividing the responsibilities of the house with the granddaughter.

DISCUSSION

The family as a unit is characterized by the interrelationships established among its members, in a specific context of organization, structure and functionality, not taking into account the number of members.

In this way, it is noticed that the number of members, although reduced, does not influence the link between these.¹¹

It is important to emphasize that the Calgary Family Assessment Model (CFAM) is based on a multidimensional perspective, and this comprises the structural, developmental and functional dimensions of the family.⁵ This model is successfully applied in promoting interaction with families and better care planning in the context of Primary Health Care.⁶

It is essential to understand the family as the most constant health unit for its members. Assistance to the family as a unit of care implies knowing how they take care of each other and identifying their strengths, difficulties and efforts to share responsibilities. Based on the information obtained, professionals should use their knowledge about each family and, together with it, think and plan the best possible care, respecting their beliefs, cultures and values.¹²

The task of the main provider of family care to attributed women is linked to sociocultural issues derived from an ideologically determined and accepted social construction, thus constituting a moral obligation. It is perceived that the gender issue is intrinsic to society, having strong cultural influences on the ways in which women organize their lives and family dynamics.¹³ It is the family health nurses' role to recognize the social, economic, and cultural factors experienced, and not only face the family's health and disease situations, but to interact with situations that support family integrity.¹⁴

The presence of cardiac diseases negatively influences the functional capacity of the elderly. Functional capacity is essential in the life of any individual, but it is greater in the life of the elderly, who wants to maintain the routine independently, performing basic and daily activities.¹³

In the Amazon region, in the riverside communities, it is noticed that, in face of the geographic, cultural and social characteristics, there are some challenges to health promotion. In order to achieve the universality of care and the fulfillment of right to health, obstacles, such as the lack of health professionals, poor sanitation conditions, long distances, difficulties in transportation and communication should be highlighted.¹³ Thus, health conditions are closely related to the environment in which the person is inserted. Cultural factors can cause or contribute to the emergence of

health problems, just as they can protect them.¹⁵

In this context, family members are a crucial link to achieving positive results in the face of illness. It is essential that the multidisciplinary health team approach families with the purpose of listening to them, getting to know them, exploring their resources and difficulties, exchanging knowledge and helping them, so that, from the satisfaction of their needs, they can play and legitimize their role of support and care for their sick relatives and for themselves.¹⁶

The experience during the home visits facilitates the establishment of a link of the health professional to the construction of the care process among carriers of chronic illness and their families. This aspect is a key tool for coping with chronic diseases, since it allows the family member, through the established partnership, to better understand the importance of actions in the prevention of complications related to chronic diseases.¹⁷

CONCLUSION

The studied family nucleus showed strong ties and positive relationships, good family and community social support networks, but with fragility in relation to the health service, since the services offered on the island are incipient and there is difficulty in getting out of the island to seek for health care in another location. It was also observed that the daily life of this family is greatly modified by the disease of two members and the concerns increase when it comes to the elderly persons impaired by the conditions of chronic illness.

The Calgary Model is a useful tool to consider the family in its context, besides being a nursing model. This study contributes so that other nurses, in the future, can propose to the family, based on this type of evaluation, interventions to improve the quality of family life, collaborating to find solutions and deal with daily difficulties.

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