CALGARY MODEL OF FAMILY ASSESSMENT: EXPERIENCE IN A COMMUNITY SERVICE PROJECT

Hellen Pollyanna Mantelo Cecilio[1], Katiucy Sturião dos Santos[2], Sonia Silva Marcon[3]

[1]RN. M.Sc. in Nursing. Universidade Estadual de Maringá. Maringá-PR-Brazil.
[2]RN. Universidade Estadual de Maringá. Maringá-PR-Brazil.
[3]RN. Ph.D. in Nursing Philosophy. Universidade Estadual de Maringá. Maringá-PR- Brazil.

ABSTRACT: The study objective was to assess the family structure, functioning and development based on the emergence of a chronic condition. Qualitative study, developed in two families that were monitored through a community service project. The Calgary Model of Family Assessment was applied, which proposes the use of three analysis categories: structural, developmental and functional, besides the genogram and ecomap. One family is nuclear and the other consists of a single individual. Through the application of the model, the differences in family support for the chronic condition and the coping of the individual without family could be identified. Aging poses challenges that need to be experienced and, for elderly people living along, these confrontations are aggravated by the fact that they are deprived of any company.
DESCRIPTORS: Family; Chronic disease; Nursing.

MODELO CALGARY DE AVALIAÇÃO DA FAMÍLIA: EXPERIÊNCIA EM UM PROJETO DE EXTENSÃO

RESUMO: O objetivo do estudo foi avaliar a estrutura, a funcionalidade e o desenvolvimento da família, a partir do aparecimento da condição crônica. Estudo qualitativo, desenvolvido junto a duas famílias, que foram acompanhadas por um projeto de extensão. Utilizou-se o Modelo Calgary de Avaliação da Família, que propõe a utilização de três categorias de análise: estrutural, desenvolvimental e funcional, além do genograma e ecomapa. Uma família é nuclear e a outra é composta por apenas um indivíduo. A aplicação do modelo permitiu identificar as diferenças entre o apoio familiar na doença crônica e o enfrentamento do indivíduo sem a família. Com o envelhecimento surgem desafios a serem vivenciados e, para o idoso que vive só, tais enfrentamentos se agravam, pelo fato de estar privado de qualquer companhia.
DESCRITORES: Família; Doença crônica; Enfermagem.

MODELO CALGARY DE EVALUACIÓN DE LA FAMILIA: EXPERIENCIA EN UN PROYECTO DE EXTENSIÓN

RESUMEN: El objetivo del estudio fue evaluar la estructura, la funcionalidad y el desarrollo de la familia, considerando el aparecimiento de la condición crónica. Estudio cualitativo, desarrollado con dos familias que fueron acompañadas por un proyecto de extensión. Se utilizó el Modelo Calgary de Evaluación de la Familia, que propone la utilización de tres categorías de análisis: estructural, de desarrollo y funcional, además de genograma y ecomapa. Una familia es nuclear y la otra es compuesta por solo un individuo. La aplicación del modelo posibilitó identificar las diferencias entre el apoyo familiar en la enfermedad crónica y el afrontamiento del individuo sin la familia. Con el envejecimiento vienen desafíos que serán experenciados y, para el anciano que vive solo, tales afrontamientos se agravan, por el hecho de estar privado de cualquier compañía.
DESCRIPTORES: Familia; Enfermedad crónica; Enfermería.

Corresponding author:
Hellen Pollyanna Mantelo Cecilio
Universidade Estadual de Maringá
Av. Colombo, 5790 - 87020-900 - Maringá-PR-Brasil
E-mail: pollymantelo@gmail.com

Received: 13/07/2013
Finished: 28/07/2014

INTRODUCTION

The family consists of a group of mutually related people bound by blood, interest or merely affective relations and who live in a historical, cultural, physical and political context[1], permitting its own identity. Permeated by beliefs, values and customs that were constructed and transmitted for generations, the family molds the personality of its members and guides citizens and actions for health promotion and recovery and disease prevention[2]. In that sense, the role of nursing is to intervene with a view to promoting care autonomy, in view of the patients' individuality, beliefs and values, with a view to enabling them to be independent[1].

One of the causes that represent the greatest demand for family care in the health-disease process are chronic illnesses, which share risk factors and demand continuous care and attention, being often related to aging[2]. Therefore, when the chronic condition affects a family member, it becomes a source of burden, as the needs range from daily core to recurring and prolonged hospitalizations, besides being a stressor for the patients and the social relationships of the family system. Hence, it is perceived that the emotional and social changes deriving from this process in a family require constant care and adaptations to the new situations.

Considering the impact the disease causes, the Calgary Model of Family Assessment (CMFA) was chosen, which permits an expanded view of the family system, including its internal and external relations, strengths and weaknesses[2-3]. The use of this model allows the nurse to get to know the family in its context and identify its needs, as well as care alternatives specific to its condition. In that sense, the following question emerges: what is the influence of the family on care and treatment adherence when a chronic condition emerges? To answer this question, the study objective was set as: assessing, by means of the CMFA, the family structure, functioning and development, based on the emergence of a chronic condition.

METHOD

Qualitative study involving two families assisted for approximately one year in the community service project "Assistance and Support to Families of Chronic Patients at Home", affiliated with the Family Study, Research, Assistance and Support Group of the Nursing Department at Universidade Estadual de Maringá. The community service project assists families of people with chronic illnesses who were hospitalized at the University Hospital and accepted to receive visits from the students. The selection of the families included in this study was based on a convenience sample and on the students' perception of the family's interest in participating.

As the methodological framework, the CMFA and its three main categories were used. The structural assessment refers to the family composition, the affective bonds among its member in comparison with the external individuals and its context, consisting of three aspects: internal structure, external structure and context[3]. To outline these aspects, the genogram and ecomap are used; the first is a diagram representing the family group, that is, a family three representing the internal structure. The main objective of the genogram is to support the family assessment, planning and intervention and also permits the clear observation of which family members constitute the family, besides identifying the main diseases, thus facilitating the therapeutic plan[1]. The ecomap is a complement of the genogram and consists in a graphic representation of the family members' contacts with the community, permitting an assessment of the available networks and social support and their use by the family. This is a dynamic instrument, as it shows the absence or presence of social, cultural and economic resources at a given time in the family's lifecycle[1].

The functional assessment refers to the details about how the individuals behave towards one another, based on the instrumental functioning with regard to the activities of daily life and on the expressive functioning, which refers to the family roles, communication and problem solving[3]. Finally, the developmental assessment emphasizes the exclusive trajectory constructed by one family and is modeled by predictable and unpredictable events, such as diseases, catastrophes and social trends[3], which imply changes in the family functioning, structure and interaction processes[1].

The data were collected between August and November 2012, through six home visits

to the family, according to the monitoring plan established in the project. The genogram and ecomap were constructed with the family's active participation, with freedom for discussion and considerations about the diagrams, besides the orientations specific to each situation experienced. The study was developed in compliance with the ethical premises and approval for the project was obtained from the Permanent Ethics Committee for Research involving Human Beings at Universidade Estadual de Maringá (Opinion 084/2006).

RESULTS

Family one consisted of Adão, Eva and Abel, according to Figure 1. Adão was 76 years old, illiterate and retired for disability for 14 years, suffered from systematic arterial hypertension and reported six cerebrovascular accidents. The first happened more than 16 years earlier and caused left hemiparesis, making it impossible to walk. The next five were less intense and did not leave visible sequelae. Adão reported that he drank and smoked much before the first cerebrovascular accident, used to work as a bricklayer but that, due to his health condition, he is in a wheelchair, watching television or sleeping. He depends on help from relatives for everything. When he suffered the first cerebrovascular accident, he was advised to use medication and do physiotherapy, but he decided not to adhere to the treatment and is still resistant to taking medication and performing the necessary healthcare. Adão showed that he does not like to talk about his health and got aggressive to his wife when she commented on the theme.

Eva, his wife, was 73 years old, retired, less than four years of education and worked on the field. Eva also suffered from arterial hypertension, arthrosis in both knees aggravated by overweight, underwent a surgical procedure at the start of 2012 to correct cystocele and, in August of the same year, underwent another surgical procedure to correct an umbilical hernia. At the time of the data collection, she was still recovering from the surgery and her daughter, Maria, was accompanying her and helping her to take care of Adão. Eva mentioned being overloaded and tired several time, as she spent most of the day dedicated to her husband, son and housework. She mentioned suffering because of Adão's disobedience, and also when her son had consumed alcohol. Her health condition also demanded daily care with correct medicines, food and, often, stress impaired her situation.

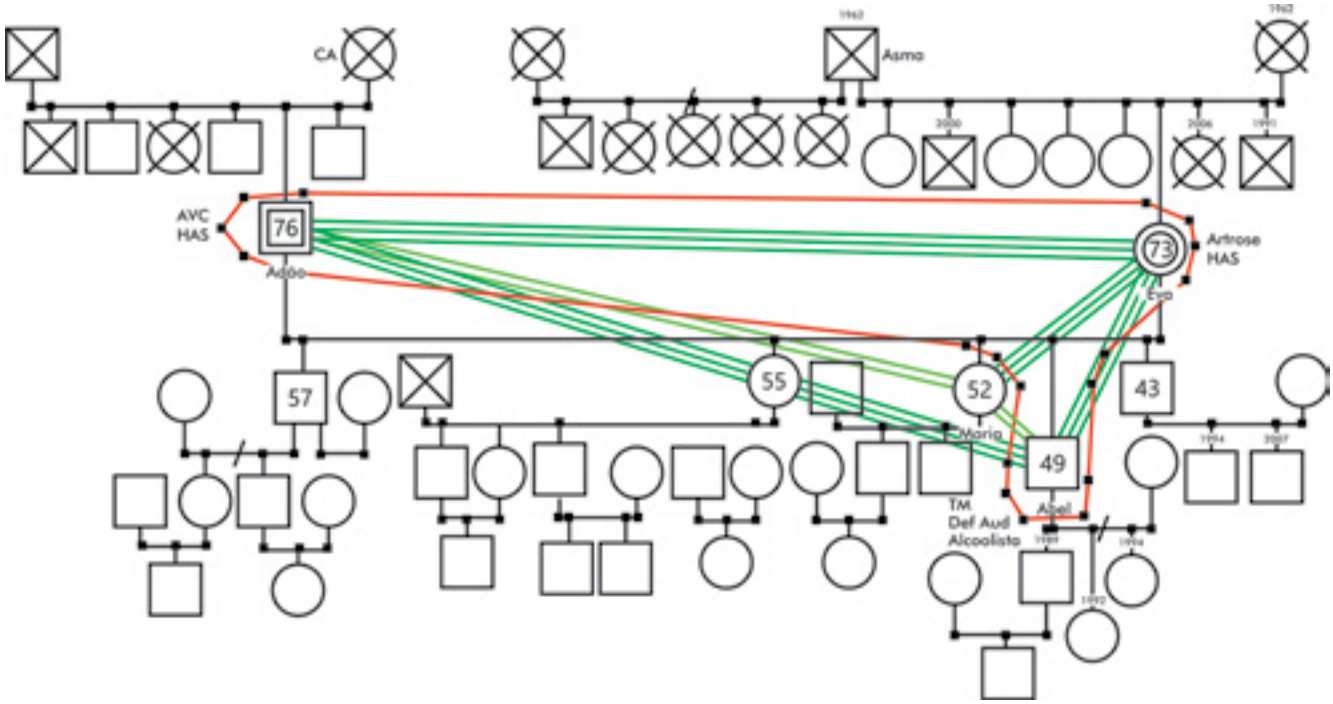
Abel was 49 years old, single, lived with his parents and was unemployed; he was hearing impaired and showed signs of mental disorder, but the family could not inform the diagnosis for certain, despite reporting that the signs had been present since birth. According to the mother, he frequently consumed alcohol and got altered and aggressive under its affect. Abel was Eva's main helper with housework and with Adão, he helped his father to take a bath, use the bathroom and move, while Eva was responsible for taking care of his food. Abel also helped Eva to clean the house and do heavy work like washing clothes and sidewalks.

The couple's other children were married and rarely visited their parents, leaving Abel responsible for monitoring and taking care of his parents. He seemed to play his caregiving role well, but became aggressive when they disagreed from him and when he drank. The family's main difficulty was the income, as they only survived on Adão and Eva's retirement who, besides the domestic expenses, had to purchase medicines not offered at the Primary Care Service. They also mentioned that the neighbors and a group from a church they attended sporadically donated food and clothes.

Eva had a good bond with the family health team, represented by the nurse, and reported that she was always attended well at the primary care service, but mentioned that the team physician does not stay in touch very much. Nevertheless, Adão, being restricted to his home, received a visit from the nurse once a month and from the community health agent once per week, both of whom had a good bond with the family, according to Figure 2.

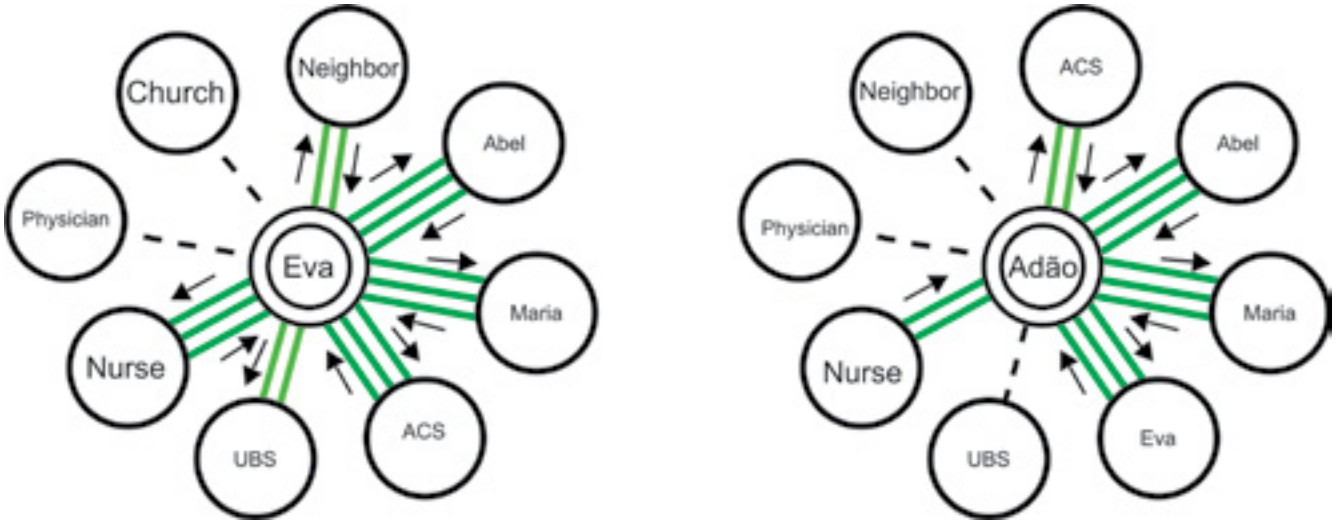
Family two, shown in Figure 3, only included Pedro, 70 years old, single, retired, without children and without close relatives; he possessed only three years of education, as he needed to work to contribute to the family income. Pedro suffered from arterial hypertension, diabetes mellitus, labyrinthitis and rheumatism. He stayed at home most of the time and did not use to talk to neighbors. As he lived alone, he did the housework himself, such as washing, ironing and cooking. During one of the home visits and in contact with the Family Health Strategy

team, it was verified that he hardly attended the primary care service and, when he did so, he complained of the delay to get care. He did not permit the community health agent's visit to his home either. According to him, however, the nurse and physician never visited his home and it was difficult to receive care.



LEGEND					
	Man		Marriage	HAS	Systemic arterial hypertension
	Woman		Separation	Def Aud	Hearing impairment
	Death		Close	TM	Mental disorder
	Live together		Near	CA	Cancer

Figure 1 – Genogram of Family 1. Maringá-PR-Brazil, 2012



LEGEND			
	Moderate bond		Energy flow
	Superficial bond	UBS	Primary Health Center
			Distant bond

Figure 2 – Ecomap of Family 1. Maringá-PR-Brazil, 2012

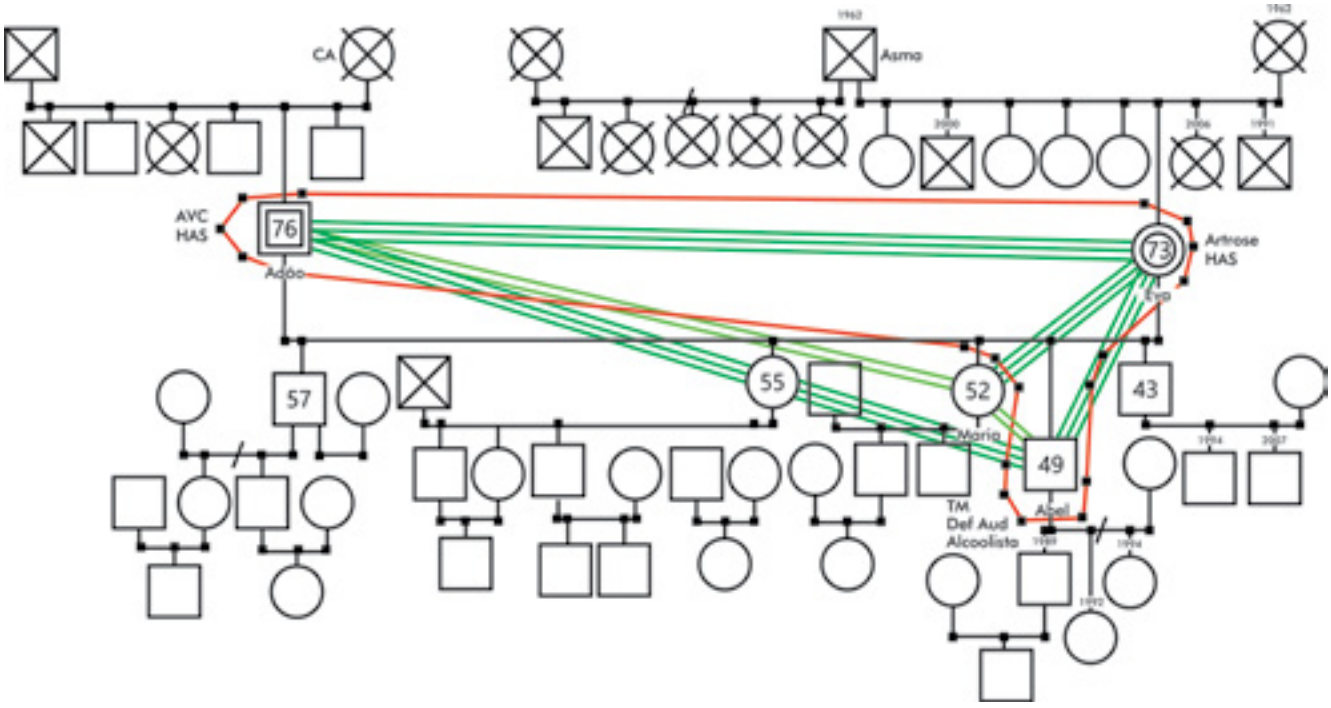
Pedro ignored all attempts to talk about his family, always trying to change the subject, and did not like to talk about his health either. The way found to get to know his history was through the CMFA, as he took interest in the construction of the genogram and ecomap and told a bit about his family. Pedro had six live brothers and all of them lived in other cities, which was the reason why he only sporadically met with them, although he kept telephone contact.

Joaquim, his youngest brother, suffered from a mental disorder and needed care and, therefore, he met him more. This relation was quite conflicting though, as Joaquim did not accept his situation and resisted any help from his brothers. The only relative Pedro had frequent contact and a harmonious relation with was his nephew Timóteo (Figure 4).

As regards health care, Pedro did not take his medication correctly, did not follow the recommended diet for diabetes and was neither concerned with care for his bodily hygiene, nor with cleaning and organizing the house. In addition, as he lived alone, he was responsible for his food and did not take males correctly. According to him, most of the times, he replaced his lunch and dinner by fruit, such as orange and banana. During most of the visits, he showed a visible lack of oral hygiene and wore dirty clothes and, sometimes, it was possible to suggest he had not washed himself for some day.

His backyard served as a deposit for rubbish and construction material, which accumulated water when it rained. During the home visits, Pedro always received the researchers in the backyard and on the veranda at most; at that distance, it could be observed that the inside of the house seemed hardly clean, with a lot of rubbish and material in the kitchen and living room, which he may pick up from the streets, although he denied this activity.

Pedro survives from his retirement gains extra as a bricklayer and carpenter. He affirmed that the extra work was necessary because his retirement benefit was not sufficient to buy food and even less to buy some medicines the primary health care network does not offer. He also reported that, sometimes, he needed to ask his nephew for help to pay his bills, and sometimes to buy food. At the time of the visits, however, the lack of food he mentioned could not be perceived, as there was always food, including plenty of fruit.



LEGEND					
	Man		Marriage	HAS	Systemic arterial hypertension
	Woman		Separation	DM	Mental disorder
	Death		Close	AVC	Cerebrovascular accident
			Index person		Conflict

Figure 3 – Genogram of Family 2. Maringá-PR-Brasil, 2012

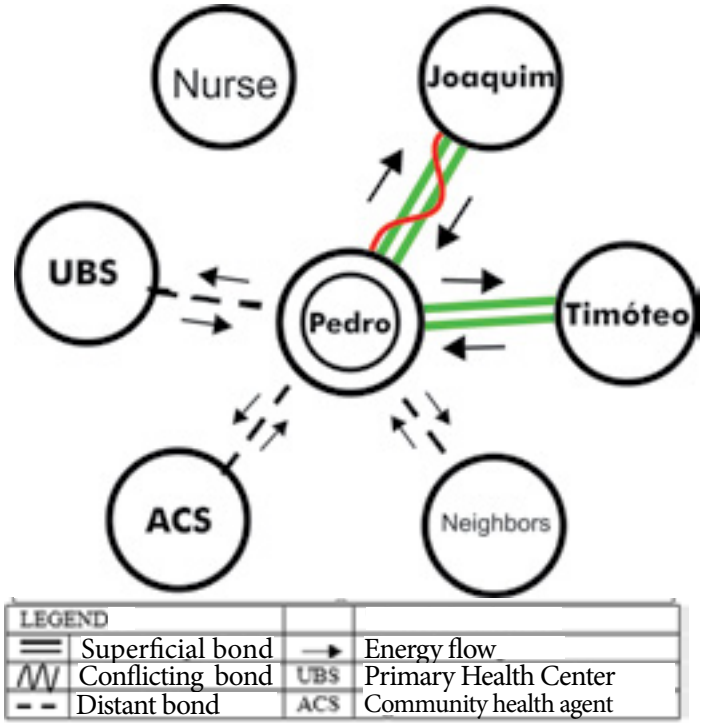


Figure 4 - Ecomap of Family 2. Maringá-PR-Brazil, 2012

DISCUSSION

The two families were of different types. The first was a nuclear family, represented by the mother, father and single son, while the second included only one person. Together with aging, challenges emerge the individual needs to overcome. For elderly people living alone, these confrontations get worse, due to the fact that they are deprived of any company that can help them to accomplish their activities. These challenges are related to self-care, the diseases they need to cope with, economic insufficiency, among others[4].

Thus, when elderly individuals live alone, mainly without family contact, they tend to experience greater difficulties to recover their health condition. In fact, elderly people who live with others, whether family members or not, seem to get more support with regard to the attention paid to their health problems[4]. Solitude interferes in the person's quality of life, as the deprival of contact and social isolation cause suffering, making them sad and limited[2,5]. This fact was observed in the second family, as Pedro did not get company in his daily life.

Pedro did not get support from his family of origin because they lived far off, nor from his own family, as he did not build one. That hampers the coping with the chronic condition and the accomplishment of activities of daily living, like the preparation of appropriate meals for example, the correct administration of continuous prescription drugs, the monitoring of health conditions through regular consultations; aspects that hamper the disease control, health maintenance, quality of life and prevention of illnesses[2,5].

Therefore, family support to chronic patients is fundamental, as becoming ill includes the experience of series of personal and family changes, highlighting that, depending on the gravity of the disease, changes in the family's way of life are needed. At the same time, the changes are often considered unnecessary, especially in those cases when the diseases have no evident signs and symptoms[2].

The worsening of the condition, in combination with the biological, psychological and physiological changes characteristic of aging, generally lead to motor, sensitive and sensory limitations, altering the elderly's life dynamics and restricting the daily activities[6], which gives rise to some kind of dependence, demanding the restructuring of all family members' roles[4], as the elderly lose their autonomy to another person[6]. At this moment of dependence, the family's kindness and respect contribute decisively to a happy end of life[5].

In these cases, the caregivers are commonly chosen based on their level of affinity with the

patients, because they do not have a paid job and, often, simply because they are women[7]. This fact reflects the Brazilian cultural standard, in which the role of the main caregiver is still seen as a female function. Like in the case of family 1, however, the son also served as a caregiver, helping his father with the basic and instrumental activities of daily living[8]. It should be highlighted that, almost always, the caregivers feel overburdened because of their functions, mainly if they live with the elderly. That was expressed in family 1 as, although the care was divided between mother and son, both were constantly exposed to the care demands and also had to perform other activities[7]. Therefore, one way to minimize the difficulties faced in dependent individuals' demand for care is the monitoring, orientation and support the health professionals offer[7].

It is common for caregivers to experience social exclusion, affective isolation, depression and sleep disorders[6], as they absorb levels of anxiety in the care process[7]. It should be highlighted that it is common for the elderly's caregivers to be other elderly, who are already fragile due to aging and likely to fall ill[9], with physical exhaustion, reduced strength and agility, besides other disease[10], like in family 1.

Another aspect that should be reminded is the transformation of the relation between patient and caregiver, which used to be reciprocal and becomes marked by dependence, so that the caregivers experience constraints in their own life[10]. Hence, the nursing team needs to play its role of psychologically supporting and promoting the family caregivers' health, as their physical and mental wellbeing interfere directly in the care that is to be delivered[10-11].

It is also important to know the caregivers' education, as they receive information and orientations from the health team and health education is linked to people's learning skills[9]. When limited due to low education, the caregivers' knowledge interferes in care for the elderly, reducing the quality of care delivery[8], as they will experience the daily disease reality and its implications and will look for ways to cope with that reality[12].

In that sense, the low socioeconomic condition of the families studied by itself already represents a great obstacle for care. In one family, it makes it difficult for the patient to maintain a good quality of life and, in the other, it makes it difficult for the caregiver to offer appropriate care, as financial resources are needed that permit the acquisition and purchase of food, medicines, besides transportation and other needs that come with the dependence[7]. In view of this fact, the nurses and their team are responsible for knowing the reality and needs of the assisted family, with a view to planning interventions in line with the individuals' actual needs and appropriate to their financial condition[4].

Nevertheless, other factors interfere in high-quality care and assistance, including the patients' acceptance of their situation and mainly of the treatment, whether involving medication or not. In both cases, the patients were reluctant with regard to treatment compliance, which can be explained by their low education level, comprehension difficulty and even lack of confidence and bonding with family members and health professionals.

Treatment compliance is a joint process involving patients and professionals, so that the former not only obey, but understand, agree and follow the orientations, signaling a therapeutic alliance among team, patient and family, in which each shares his/her part of the responsibilities in the process(13). In that sense, it is important to join efforts to improve resources and strategies, involving all stakeholders in the process, as the treatment compliance, whether medication-based or not, is important with respect to elderly individuals[14].

Health professionals commonly perceive non-compliance with treatment as a frustration(14) and, if the patients do not comply with the treatment, they need care, affection and orientation to achieve their objectives. In view of non-compliance, they need to advise and explain the consequences to the patients and their family, who should understand the importance of accepting the therapeutic regimen[13]. Nursing has a fundamental role in this context, aiming not only to influence the patients' behavior towards changes, but also towards their maintenance, suggesting slight and gradual transformations, which the patients and families can adopt more easily[14]. In addition, training and supervision of the caregivers' activities are needed with a view to high-quality care delivery, but without impairing their own health[2].

The meanings of chronic illnesses are not exclusive to the patients, however, but are the property of all family members and their social network, as they are mutually shared and direct or indirectly influence the course of the disease, helping to reduce or increase the difficulties, or to hamper or facilitate the treatment[15]. For this and other factors, the individual approach, to the detriment of the family approach, can lead to a limited assessment and therefore intervention, showing the lack of preparation in the health services and the professionals involved in care for the elderly, representing an obstacle that compromises the competency and quality of elderly health care[16].

Finally, it is highlighted that all human beings need to live with other people with a view to biopsychosocial wellbeing. The social relations stimulate the mind and thinking and benefits health, contributing to improve the entire family's quality of life[5]. As a science that takes care, nursing should always include the family in care, with a view to reducing the individual burdens, avoiding the transformation of caregivers into people who may need care in the future[9].

FINAL CONSIDERATIONS

In view of the challenges of aging, together with the problems the chronic diseases entail, the patients need help with the different daily activities, showing disparities and similarities between the families. Having a caregiver in the family is a factor of less stress for the patients, as the care is humanized and respects their customs and beliefs, but also a factor of greater stress for the caregivers, who have to give up their own needs to the detriment of the patient's. Besides the family's support and monitoring, however, chronic patients need to understand their conditions and actively participate in the decisions made, adhering to the treatment and minimizing the chances of complications.

REFERENCES

1. Figueiredo MHJS, Martins MMFS. Avaliação familiar: do Modelo Calgary de Avaliação da Família aos focos da prática de enfermagem. Cienc. cuid. Saúde. 2010;9(3):552-9.

2. Santos AL, Cecilio HPM, Teston EF, Marcon SS. Conhecendo a funcionalidade familiar sob a ótica do doente crônico. Texto Contexto Enferm. 2012;21(4):879-86.

3. Wright LM, Leahey M. Enfermeiras e famílias: um guia para avaliação e intervenção na família. 3ª ed. São Paulo: ROCA; 2002.

4. Ramos JLC, Menezes MR, Meira EC. Idosos que moram sozinhos: desafios e potencialidades do cotidiano. Rev. baiana enferm. [Internet] 2010;24(1/3):43-54 [acesso em 10 abr 2013]. Disponível: http://www.portalseer.ufba.br/index.php/enfermagem/article/view/5527/3979

5. Lopes RF, Lopes MTF, Camara VD. Entendendo a solidão do idoso. RBCEH. [Internet] 2009;6(3):373-81 [acesso em 10 abr 2013]. Disponível: http://www.upf.br/seer/index.php/rbceh/article/view/362/818

6. Costa JBE, Guimarães RM, Ananias SP. Análise do impacto de um programa de orientação/ educação na sobrecarga e qualidade de vida de cuidadores de idosos. Rev. Tecer. [Internet] 2008;1(0):37-47 [acesso em 10 abr 2013]. Disponível: http://pe.izabelahendrix.edu.br/ojs/index.php/tec/article/view/268/228

7. Uesugui HM, Fagundes DS, Pinho DLM. Perfil e grau de dependência de idosos e sobrecarga de seus cuidadores. Acta Paul. Enferm. [Internet] 2011;24(5):689-94 [acesso em 15 mai 2013]. Disponível: http://dx.doi.org/10.1590/S0103-21002011000500015

8. Santos AA, Pavarini SCI. Funcionalidade familiar de idosos com alterações cognitivas: a percepção do cuidador. Rev Esc Enferm USP. [Internet] 2012;46(5):1141-7 [acesso em 15 mai 2013]. Disponível: http://dx.doi.org/10.1590/S0080-62342012000500015

9. Araújo JS, Silva SED, Santana ME, Conceição VM, Vasconcelos EV. O perfil representacional dos cuidadores de pacientes acometidos por acidente vascular cerebral. Gestão & Saúde [Internet] 2012;3(3):852-64 [acesso em 10 mai 2013]. Disponível: http://gestaoesaude.unb.br/index.php/gestaoesaude/article/view/183/pdf_1.

10. Oliveira WT, Antunes F, Inoue L, Reis LM, Araújo CRMA, Marcon SS. Vivência do cuidador familiar na prática do cuidado domiciliar ao doente crônico dependente. Cienc. cuid saúde. 2012;11(1):129-37.

11. Feliciani AM, Santos SSC, Valcarenghi RV. Funcionalidade e quedas em idosos institucionalizados: propostas de ações de enfermagem. Cogitare enferm. [Internet] 2011;16(4):615-21 [acesso em 10 abr 2013]. Disponível: http://ojs.c3sl.ufpr.br/ojs/index.php/cogitare/article/viewFile/22456/17047

12. Garcia RP, Budó MLD, Oliveira SG, Schimith MD, Wünsch S, Simon BS. Cotidiano e aprendizado de cuidadores familiares de doentes crônicos. Cienc. cuid

saúde.2011;10(4):690-6.

13. Marques EIW, Petuco VM, Gonçalves CBC. Motivos da não adesão ao tratamento médico prescrito entre os idosos de uma unidade de saúde da família do município de Passo Fundo – RS. RBCEH. [Internet] 2010;7(2):267-79 [acesso em 15 abr 2013]. Disponível: http://www.upf.br/seer/index.php/rbceh/article/view/865/pdf.

14. Dourado CS, Macêdo-Costa KNF, Oliveira JS, Leadebal ODCP, Silva GRF. Adesão ao tratamento de idosos com hipertensão em uma unidade básica de saúde de João Pessoa, estado da Paraíba. Acta Scientiarum. 2011;33(1):9-17.

15. Ferreira HP, Martins LC, Brga ALF, Garcia MLB. O impacto da doença crônica no cuidador. Rev. Soc. Bras. Clin. Med. [Internet] 2012;10(4):278-84 [acesso em 10 abr 2013]. Disponível: http://files.bvs.br/upload/S/1679-1010/2012/v10n4/a3045.pdf.

16. Silva L, Bousso RS, Galera SAF. Aplicação do Modelo Calgary para avaliação de famílias de idosos na prática clínica. Rev. bras. Enferm. [Internet] 2009;62(4):530-4 [acesso em 13 mai 2013]. Disponível: http://dx.doi.org/10.1590/S0034-71672009000400006