APPLICATION OF THE DYNAMIC MODEL FOR EVALUATION AND FAMILY INTERVENTION IN PALLIATIVE CARE

Aplicação do modelo dinâmico de avaliação intervenção familiar em cuidados paliativos

Aplicación del modelo dinámico de evaluación e intervención familiar cuidados paliativos

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ABSTRACT

Background: the needs of the family with patients in palliative care are complex, and they need ongoing assessment and support. The nurses who look after these families have the Dynamic Model for Evaluation and Family Intervention (DMEFI) as a theoretical and operational reference to assist them. **Objective**: determine the health benefits of implementing the DMEFI in the nursing of the family with patients in palliative care. **Methodology**: quantitative, descriptive and transversal study of 15 families. Data was collected at an oncology regional hospital where DMEFI was applied to family visits and care. **Results**: of the 271 diagnoses made, the DMEFI functional dimension represented 139 (51.3%). In the family process, 63 (45.3%) diagnoses were made, of which 47 (74.6%) were resolved. Professional caregivers identified, 76 (54.7%) diagnoses with, 54 (71%) been resolved. **Conclusion**: the DMEFI made it possible to obtain health gains among families, as collaborative interventions with families allowed the resolution of diagnoses in the functional dimension. The DMEFI demonstrated applicability in the functional dimension of care for families of people in palliative conditions.

Keywords: nursing diagnosis; family nursing; family relations; palliative care

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RESUMO

Enquadramento: as necessidades da família da pessoa em situação paliativa são complexas, necessitando ser avaliadas e apoiadas. Os enfermeiros, ao cuidar destas famílias, têm no Modelo Dinâmico de Avaliação e Intervenção Familiar (MDAIF) um referencial teórico e operativo que lhes serve de suporte. **Objetivo**: avaliar os ganhos em saúde na dimensão funcional da aplicação do MDAIF, no cuidar de enfermagem à família da pessoa em condição paliativa. **Metodologia**: estudo quantitativo, descritivo, transversal, com uma amostra de conveniência constituída por 15 famílias. A colheita de dados decorreu num hospital regional de oncologia, sendo a intervenção fundamentada no MDAIF aplicada, na prestação de cuidados e visita de familiares. **Resultados**: dos 271 diagnósticos elaborados, a dimensão funcional do MDAIF representou 139 (51,3%). No processo familiar produziram-se 63 (45,3%) diagnósticos, dos quais 47 (74,6%) foram resolvidos. No papel de prestador de cuidados foram identificados 76 (54,7%) diagnósticos, tendo sido resolvidos 54 (71%). **Conclusão**: o MDAIF permitiu obter ganhos em saúde junto das famílias, na medida em que as intervenções colaborativas com as famílias, permitiram resolução dos diagnósticos na dimensão funcional. O MDAIF demonstrou ter aplicabilidade na dimensão funcional do cuidado às famílias, de pessoas em condição paliativa.

Palavras-chave: diagnóstico de enfermagem; enfermagem familiar; relações familiares; cuidados paliativos

RESUMEN

Marco contextual: las necesidades de la familia del paciente en cuidado paliativo son complejas, necesitando ser apoyadas de manera continuada. Los enfermeros, en el acompañamiento de estas, tienen en el Modelo Dinámico de Evaluación e Intervención Familiar (MDAIF), referencia teórica y operativa que les sirve de soporte. **Objetivo**: evaluar los beneficios que la dimensión funcional de la aplicación del MDAIF tiene sobre la salud y sobre la enfermería en familias con pacientes en cuidado paliativo. **Metodología**: estudio cuantitativo, descriptivo y transverso de muestra constituída por 15 familias. Los datos fueron recogidos en un hospital oncológico regional, aplicado el MDAIF a la prestación de cuidados y visita de familiares. **Resultados**: de los 271 diagnósticos realizados, la dimensión funcional del MDAIF representó 139 (51,3%). En el proceso familiar se realizaron 63 (45,3%) diagnósticos, de los cuales 47 (74,6%) fueron resueltos. En el papel de prestador de cuidador se identificaron 76 (54,7%) diagnósticos, habiéndose resulto 54 (71%). **Conclusión**: el MDAIF permitió obtener beneficios en salud entre las familias, ya que las intervenciones colaborativas con las familias permitieron la resolución de diagnósticos en la dimensión funcional. El MDAIF demostró aplicabilidad en la dimensión funcional de la atención a familiares de personas en condiciones paliativas.

Palabras clave: diagnóstico de enfermería; enfermería familiar; relaciones familiars; cuidados paliativos

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INTRODUCTION

The increase in longevity leads to a higher prevalence of chronic and progressive diseases, making palliative care the most appropriate response. The person in a palliative condition and their family are inseparable in this process, thus the involvement of the family in the care network is imperative. This involvement of the family network, as support for the promotion of quality of life, prevention, and relief of suffering in the person in a palliative condition, is crucial (Decree-Law No. 52/2012). The MDAIF constitutes a useful tool for nurses, as a theoretical and operative model, to assess and intervene collaboratively with families throughout their life cycle and in situations of non-normative transition, such as the families of the person in a palliative condition (Figueiredo, 2012).

The general objective of this study is to evaluate the health gains sensitive to nursing care through the application of the MDAIF in the functional dimension to the family of the person in a palliative condition. Specific objectives include: evaluating the areas of attention, focuses, and judgments sensitive to nursing care of the family of the person in a palliative condition according to the functional dimension of the MDAIF; identifying nursing diagnoses and respective interventions regarding the family of the person in a palliative condition; determining the resolution of nursing diagnoses in the functional dimension of the application of the MDAIF in nursing care for the family of the person in a palliative condition.

BACKGROUND/THEORETICAL FRAMEWORK

Palliative care provides integrated and person-centered healthcare (WHO, 2021) through an interdisciplinary, holistic, and humanized approach. The proposed treatment approach for this type of care involves alleviating suffering, aiming to contribute to the best possible quality of life for the sick person and their family (Cardoso, Turpin & Valente, 2021). The physical, psychological, social, or spiritual relief of the patient and family is a global ethical responsibility (WHO, 2021). Palliative care must respect autonomy, will, individuality, dignity of the person, and the inviolability of human life (Decree-Law No. 52/2012), as they emerge as a health response in moments of high vulnerability for the person and family. During the course of the illness, the patient and family experience symbolic losses such as loss of social roles, autonomy, and identity (Espindola, Quintana & Farias, 2018). In this loss of autonomy, the caregiver assumes the role of assisting the person who has been affected by a disability and is dependent on others in some dimension of their care (McCauley, R., McQuillan, R., Ryan, K., & Foley, G. (2021). According to the role played, caregivers can be classified as formal caregivers and informal caregivers (Figueiredo, 2012; Araújo, 2022). Formal caregivers are considered healthcare professionals in this case. Informal caregivers, on the other hand, are those who provide continuous care and assistance, part-time or full-time, to a family member who has some form of dependence, without being remunerated for it (Araújo, 2022).

The family can be understood as a group of people who, beyond cohabiting in the same household, are interconnected by an affective relationship that gives it a unique character (Figueiredo, 2012). The concept of family health is an actively changing state, constantly seeking balance and well-being of the family as a system, depending simultaneously on the individual health/illness condition of each member that constitutes it (Pires, 2016). In this context, it is important to conduct a holistic assessment and intervention of the family unit and each of its members, considering also the surrounding environment and community.

It is recognized that when facing a family member's illness, the family experiences changes in its emotional level that compel it to alter family relationships, dynamics of daily life activities, and the family's overall dynamics (Figueiredo, 2012). In order to seek balance and adjust to this phase of suffering, the family undergoes a transition process, adjusting the roles assumed and activities carried out by its members (McCauley, R., McQuillan, R., Ryan, K., & Foley, G., 2021). In this regard, the family nurse intervenes as a support for family cohesion, as within their area of intervention, they care for the family in different stages of the life cycle (Ordem dos Enfermeiros, 2011). In a person's illness process, the family nurse should consider the impact that this experience has, not only on the individual but on the entire family unit. They should also listen to the meaning attributed by the family to the illness process in order to plan a personalized care plan (Figueiredo, 2012). Thus, the provision of a care plan focuses on the relationship between the family and the nurse (Pires, 2016), therefore the family should be listened to and included in the planning and execution of this plan (National Program of Palliative Care, 2015).

Seibel et al., 2017 also argue that the nurse should assume a protective role for the support network of the quality of intrafamily relationships and the family's own functioning. In this regard, Correia (2018) states that the family and the terminal patient are the unit to be cared for, and it becomes necessary to understand and evaluate the needs felt by the family, so that it is seen as the receiving unit of care and can thus fully perform its role as a caregiver.

The MDAIF emerges in nursing as a tool for assessing the needs of the family and its intervention, highlighting the strengths and potentialities of the family and promoting a connection between its members and the Family Health nurse (Figueiredo, 2012). The MDAIF is a theoretical and operative reference instrument in the development of practices aimed at the family. This model evaluates the family in three major dimensions: structural, developmental, and functional. For the applicability of the model, it is necessary to use an operative matrix, which allows organizing the family structure and understanding its relationships (Figueiredo, 2012). Despite the widely accepted importance of families in the care of people in palliative condition, little is known about the impact that terminal illness has on the family system and the best way to intervene and provide support to families. Therefore, there is a need to implement more empirical studies aimed at determining the influence of terminal illness on families, their support needs, and the intervention strategies that can best meet their needs (Areias, Major & Relvas, 2017). However, it is known that the unmet needs of family caregivers are multidimensional and affect their well-being and that of the person they care for (Zavagli, V., et al, 2019). With the growing evolution of Family Health Nursing, it is imperative to assess the needs of the family of the person in a palliative condition, as this is a topic with a scarcity of scientific evidence.

METHODOLOGY

A descriptive, cross-sectional, quantitative study was conducted to address the following research question: What are the health gains in the functional dimension of the MDAIF, sensitive to nursing care, for families of individuals in a palliative condition? This study utilized a convenience sample comprising 15 families of patients admitted to a palliative care unit at a Regional Oncological Center in the Central Region, and followed between September and November 2021. Inclusion criteria for the sample were: family caregivers over 18 years old, conscious and oriented, proficient in Portuguese language, accompanied by a specialized palliative care team, having a family member with oncological disease admitted in September to the palliative care unit of the Regional Oncological Center in the Central Region, and consenting to participate in the study.

Data collection took place between September (initial assessment of families) and November 2021 (final assessment of families), conducted by two investigators from the research team with experience in palliative care and proficiency in MDAIF. They analyzed existing nursing records in the computerized clinical process and conducted a face-to-face questionnaire with the family caregiver of the hospitalized oncological palliative care patient supported by specialized palliative care. The data collection instrument used consisted of a pre-defined record extraction grid and a questionnaire based on the MDAIF. This instrument included the assessment of: i) family characterization (family typology, family subsystem, contact intensity, relationships with the extended family, broader systems, social class, stage of the family life cycle, family with dependent member); ii) nursing diagnoses according to the three dimensions of the MDAIF; iii) nursing interventions according to the MDAIF; iv) nursing outcomes.

The two investigators conducted data collection independently from the clinical records of the families, aiming to standardize data categorization and reduce deviations. In case of disagreement, they sought consensus with a third reviewer. The questionnaire based on the operational matrix of the MDAIF was administered to the family through the family caregiver and was conducted by a single investigator.

The Statistical Package for the Social Sciences (SPSS), version 21, served as the basis for descriptive statistical analysis of the data. The relative and absolute frequency of the indicators under study (diagnoses related to the functional dimension of the MDAIF and respective interventions) was analyzed.

The ethical principles were upheld with the Ethics Committee of the Regional Oncological Center of the Central Region and the Research and Development Unit of the School of Health (opinion number 2021-017 dated 02/08/2021), and all ethical requirements were fulfilled with the participants (informed consent for data collection in the nursing process and for completing the questionnaire based on the operational matrix of the MDAIF).

RESULTS

The sample consisted of 15 families (n=15), the majority of which were nuclear families (n=6; 40%), followed by couple families (n=4; 26.6%), extended families (n=3; 20%), single-parent families led by a woman (n=1; 6.7%), and single-person families (n=1; 6.7%) (Figure 1). It was observed that 10 families (66.7%) had the couple subsystem in their composition, and all families had the parental subsystem.

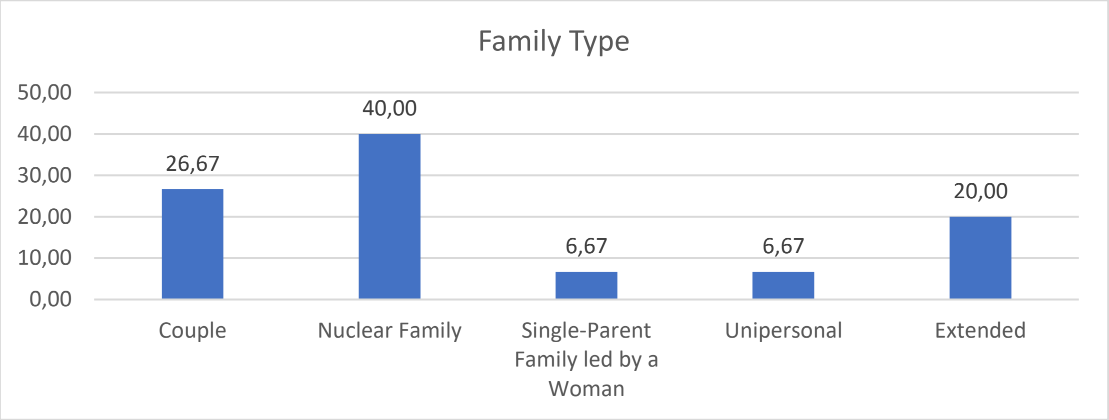

Figure 1

Graph representing the distribution of participants according to the type of Family

Regarding contact with the extended family, out of the 15 families, 13 (86.7%) established in-person contact and 7 (46.7%) had telephone contact. Of the contacts made with the extended family, 12 (80%) families established a daily frequency and intensity of contact, while the remaining 3 (20%) did so weekly.

The functional dimension of the MDAIF encompasses two areas of attention: the caregiver role and the family process. In terms of diagnoses, initially 76 (54.7%) were identified in the caregiver role and 63 (45.3%) in the family process. It was observed that 54 (71%) out of the 76 diagnoses related to the caregiver role were resolved, and 47 (74.6%) out of the 63 diagnoses related to the family process were resolved (Table 1).

Table 1

Evolution of the number of nursing diagnoses requiring interventions according to the functional dimension, which encompasses areas of attention, before and after nursing intervention

Functional Dimension	**Areas of Attention**	**Nursing Diagnosis**	**Before (n)**	**After (n)**	**Resolution of diagnoses (n)**
	Caregiver role	Inadequate Caregiver Role (n=15)	15	4	11
		Knowledge of Role Not Demonstrated (n=15)	13	3	10
		Non-demonstrated adherence behavior (n=15)	15	5	10
		Paper consensus: no (n=15)	12	4	8
		Role conflict (n=15)	7	3	4
		Paper saturation (n=15)	14	3	11
Total diagnosis of the Care Provider Role			76	22	54
	Family process	Dysfunctional Family Process (n=15)	13	4	9
		Ineffective family communication (n=15)	13	4	9
		Ineffective family coping (n=15)	12	2	10
		Ineffective Role Interaction (n=15)	12	3	9

		Dysfunctional Dynamic Relationship (n=15)	13	3	10
Total diagnosis of the Family Process			63	16	47
Total diagnoses of the Functional Dimension			139	38	101

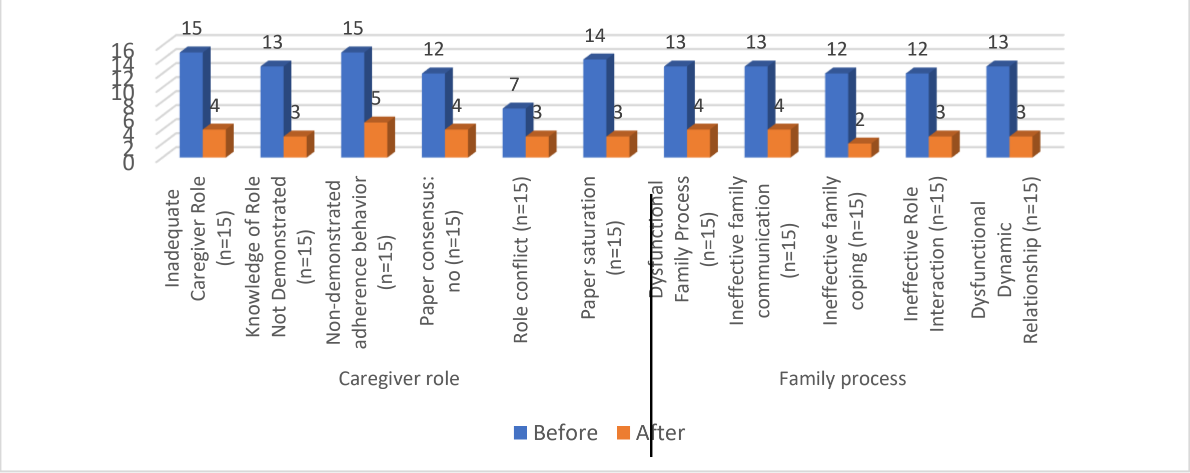

Figure 2

Graph representing the evolution of the number of nursing diagnoses requiring intervention in the areas of attention of the functional dimension of the MDAIF, before and after collaborative nursing intervention with families

In the initial nursing diagnoses, at the level of the functional dimension (specifically in the caregiver role), it was found that 15 families (100%) exhibited inadequate caregiver role performance and non-demonstrated adherence behavior, followed by the diagnosis of role strain (n=14; 93.3%), non-demonstrated role knowledge (n=13; 86.6%), role consensus non-demonstrated (n=12; 80%), and role conflict (n=7; 46%).

Furthermore, concerning diagnoses in the functional dimension, within the family process, it was observed that the diagnosis of ineffective family communication, dysfunctional dynamic relationship, and dysfunctional family process appeared in 13 (86%) families. In 12 (80%) of the families, ineffective family coping and ineffective role interaction were present.For a better understanding of the relevance of nursing interventions on diagnoses in the functional area, resulting in an improvement in diagnosis status or even a decrease in the number of nursing diagnoses, we will present these results and the nursing interventions implemented (with the aim of resolving the diagnosis or improving family organization and functioning in families without diagnosis).

After the elaboration of diagnoses in the 2 areas of attention, a total of 1612 nursing interventions were developed based on the MDAIF, with 1144 interventions targeting the caregiver role and 468 interventions targeting the family process. These interventions are presented in Tables 2 and 3, respectively.

Table 2

Nursing interventions on diagnoses in the functional dimension in the area of attention Caregiver Role

Area of Focus: Care Provider Role in the Functional Dimension of MDAIF (N=15 → N=4)
Nursing interventions (N = 1144)

Diagnoses	Interventions			
		Teach	**Instructor**	**Train**
Inadequate CP role / Non-demonstrated role knowledge	**Self-care hygiene (Int=221)**	**94**	**64**	**63**
	Interventions: Teach the Care Provider (CP) about the importance of promoting independence (n=15); Teach (n=15), Instruct (n=15), and Train (n=14) the CP on bathing technique, hair hygiene, and phlebotomy technique (14); Teach, Instruct, and Train the CP on tooth brushing technique (n=15); Teach (n=5) and Instruct and Train (n=4) on dental floss usage; and Teach about the frequency of tooth brushing (n=13).			
	Self-care clothing (Int. = 52)	**26**	**13**	**13**
	Interventions: Teach about appropriate clothing for the weather (n=13); Teach, Instruct, and Train on dressing and undressing (n=13).			
	Self-care eating and drinking (Int. = 160)	**78**	**38**	**44**
	Interventions: Teach the CP about the importance of promoting independence, teach CP about appropriate dietary patterns, plan diet with CP (n=14); Teach CP about food preparation (n=12); Instruct CP about food preparation, teach CP about feeding technique (oral or NGT), instruct CP about feeding technique (oral or NGT) (n=11); Train CP on feeding technique (oral or NGT) (n=10) and train CP on food preparation (n=9); Teach CP about the importance of promoting independence and teach CP about fluid intake pattern, plan fluid intake strategies with CP (n=14); Teach CP about fluid administration technique (n=13); Instruct CP about fluid administration technique (n=12) and train CP on fluid administration technique (n=9).			
	Self-care toileting (Int.= 60)	**30**	**15**	**15**
	Interventions: Teach CP about the importance of promoting independence (15), teach, instruct, and train CP on adaptive equipment (n=15).			
	Sleep and rest (Int =124)	**60**	**30**	**34**
	Interventions: Teach CP about the importance of promoting independence and the importance of restorative sleep, organizing sleep and rest hours (15), teach, instruct (n=15), and train (n=14) CP on strategies to promote sleep and rest.			
	Self-care recreational activity (Int. = 29)	**29**	**0**	**0**
	Interventions: Teach CP about the importance of promoting independence (n=15), maintaining and advocating for leisure activities, and motivating for leisure activities (n=14).			
	Self-care recreational activity (Int. = 73)	**43**	**15**	**15**
	Interventions: Teach the CP about the importance of promoting independence (n=15), maintaining and advocating for leisure activities, and motivating for leisure activities (n=14).			
Non-demonstrated adherence behavior Management of therapeutic regimen (Interventions = 180))	**Interventions:** Teach CP about the importance of promoting independence (n=15), the pathophysiology of the disease (n=15), measures to prevent complications (n=15), and therapeutic regimen (n=15). Motivate CP to encourage independence of the Dependent Family Member (DFM) to promote adequate hygiene (n=15), appropriate clothing (n=15), adequate nutritional intake for the DFM (n=15), motivate the family to acquire adaptive equipment for DFM's toilet use (n=15), motivate CP to promote appropriate sleep and rest behavior (n=15), and promote recreational activities suitable for DFM (n=15), motivate to assist DFM (n=15), and motivate to promote appropriate physical exercise pattern for DFM (n=15).			
Inadequate caregiver role/Consensus not demonstrated (Interventions = 90)	**Interventions:** promote expressive communication of emotions (n=15), assess non-consensual dimensions of role (n=15), motivate for role redefinition by family members (n=15), negotiate role redefinition by family members (n=15), provide guidance for social services (n=15), and request social service intervention (n=15).			
Inadequate caregiver role/Role conflict (Interventions = 80)	**Interventions:** promote expressive communication of emotions (n=13); assess role conflicts (n=9); motivate for role redefinition by family members (n=11); negotiate role redefinition by family members (n=10); provide guidance (n=8) and request social services (n=9).			
Inadequate caregiver role/Paper saturation (Interventions = 75)	**Interventions:** promote expressive communication of emotions (n=15), assess role saturation (n=15), promote coping strategies for the role (n=15), motivate and negotiate role redefinition by family members (n=15), and request health/social services (n=15).			

Table 3

Nursing interventions on diagnoses in the functional dimension in the area of attention Family Process

Area of Focus: Family Process in the Functional Dimension of MDAIF (N=15 → N=4)
Nursing interventions (N = 468)

Diagnoses	Interventions
Dysfunctional family process role/Ineffective family copin	**nterventions:** promote and negotiate adaptive coping strategies within the family
Dysfunctional family process/Ineffective or conflictual family role interaction	**nterventions:** promote expressive communication of emotions, promote family engagement, collaborate in identifying family roles, assess non-consensual dimensions of role, assess role saturation, motivate and negotiate role redefinition, provide guidance/request social/health services, promote coping strategies for the role, and provide family support.
Dysfunctional family process/dysfunctional dynamic relationship	**nterventions:** optimizing bonding patterns; promoting expressive communication of emotions; assessing role conflicts; motivating for role redefinition by family members; negotiating role redefinition by family members; and providing guidance and requesting social services.

At the beginning of the study, all families presented the diagnosis of inadequate Caregiver Role (CR), a result that was improved at the final evaluation, where resolution of the diagnoses was observed in 11 families participating in this study.

Thus, the diagnosis of inadequate Caregiver Role (CR) knowledge/non-demonstrated role, with a prevalence of 15 and 13 families, respectively, at the beginning of the study, improved at the end of the study to 4 and 3 families, respectively. For gains in health in self-care hygiene, the following interventions were provided to the families: teaching the caregiver about the importance of promoting independence (n=15); teaching (n=15), instructing (n=15), and training (n=14) the caregiver on bathing technique, hair hygiene, and phanerotomy technique; teaching, instructing, and training the caregiver on tooth brushing technique (n=15); teaching (n=5) and instructing and training (n=4) on dental floss use; and teaching about the frequency of tooth brushing (n=13). Regarding self-care clothing, several interventions were performed: teaching about appropriate clothing for the weather (n=13); teaching, instructing, and training on dressing and undressing (n=13). For self-care eating, the following nursing interventions were carried out: teaching the caregiver about the importance of promoting independence, teaching the caregiver about proper dietary patterns, planning diet with the caregiver (n=14); teaching the caregiver about food preparation (n=12); instructing the caregiver about food preparation, teaching the caregiver about feeding technique (oral or NGT), instructing the caregiver about feeding technique (oral or NGT) (n=11); training the caregiver on feeding technique (oral or NGT) (n=10) and training the caregiver on food preparation (n=9). For self-care drinking, the following nursing interventions were performed: teaching the caregiver about the importance of promoting independence, teaching the caregiver about fluid intake patterns, planning fluid intake strategies with the caregiver (n=14); teaching the caregiver about fluid administration technique (n=13); instructing the caregiver about fluid administration technique (n=12) and training the caregiver on fluid administration technique (n=9). Teaching the caregiver about the importance of promoting independence, teaching, instructing, and training the caregiver on adaptive equipment (n=15) were the interventions carried out to resolve the diagnosis associated with self-care toileting. The diagnosis associated with sleep and rest behavior self-care was managed through the implementation of interventions: teaching the caregiver about the importance of promoting independence and the importance of restful sleep, organizing sleep and rest hours, teaching, instructing (n=15), and training (n=14) the caregiver on sleep and rest promotion strategies.

Teaching the caregiver about the importance of promoting independence (n=15), maintaining and advocating for leisure activities, and motivating for leisure activities (n=14) were the interventions carried out to resolve the diagnosis associated with recreational activity self-care. The diagnosis associated with physical activity self-care was addressed through the implementation of interventions: teaching the caregiver about the importance of promoting independence (n=13); about appropriate exercise patterns (n=15), and teaching/instructing/training the caregiver on mobilization techniques and adaptive equipment (n=15). At the beginning of the study, all families presented the diagnosis of non-demonstrated adherence behavior (n=15), a result that improved at the final evaluation (n=5), where resolution of the diagnosis was observed in 10 families participating in this study. For the resolution of the diagnosis associated with therapeutic regimen management, the following interventions were implemented: teaching the caregiver about the importance of promoting independence, disease pathophysiology, measures for preventing complications, and therapeutic regimen (n=15). Motivating the caregiver to encourage independence of the Dependent Family Member (DFM), promoting proper hygiene, appropriate clothing, proper nutritional intake for the DFM, encouraging the family to acquire adaptive equipment for the DFM's toilet use, motivating the caregiver to promote proper sleep and rest behavior, and promoting recreational activities suitable for the DFM, motivating to assist the DFM (n=15), and motivating to promote appropriate physical exercise patterns for the DFM (n=12) were the interventions implemented to address the diagnosis of inadequate caregiver role/ non-demonstrated adherence behavior.

At the beginning of the study, 12 families had the diagnosis of inadequate caregiver role/undemonstrated consensus, a result that improved at the final evaluation (n=4), where resolution of the diagnosis was observed in 8 families participating in this study. The following interventions contributed to this result: promoting expressive communication of emotions, assessing non-consensual dimensions of roles, motivating for role redefinition by family members, negotiating role redefinition by family members, guiding to social services, and requesting social service (n=15).

At the beginning of the study, 7 families had the diagnosis of inadequate caregiver role/role conflict, a result that improved at the final evaluation (n=3), where resolution of the diagnosis was observed in 4 families participating in this study. For the resolution/improvement of the diagnosis status, the following interventions were implemented: promoting expressive communication of emotions (n=13); assessing role conflicts (n=9); motivating for role redefinition by family members (n=11); negotiating role redefinition by family members (n=10); and guiding (n=8) and requesting social services (n=9).

At the beginning of the study, 14 families had the diagnosis of inadequate caregiver role/role saturation, a result that improved at the final evaluation (n=3), where resolution of the diagnosis was observed in 11 families participating in this study. The following interventions contributed to the diagnostic resolution: promoting expressive communication of emotions, assessing role saturation, promoting coping strategies for the role, motivating and negotiating role redefinition by family members, and requesting health/social services (n=15).

Regarding the area of attention to family process, within the functional dimension of the MDAIF, at the

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beginning of the study, 12 families had the diagnosis of dysfunctional family process/ineffective family coping, a result that improved at the final evaluation (n=2), where resolution of the diagnosis was observed in 10 families participating in this study. The nurse intervened to promote and negotiate adaptive coping strategies within the family (n=12).

The diagnosis of dysfunctional family process/ineffective or conflictual family role interaction was identified in the participating families (n=12) at the beginning of the study. The following interventions were implemented for families with this diagnosis, as well as others: promoting expressive communication of emotions, promoting family involvement, collaborating in identifying family roles, assessing non-consensual dimensions of the role, assessing role saturation, motivating and negotiating role redefinition (n=15), providing guidance/referral to social/health services (n=14), promoting coping strategies for the role (n=15), and providing family support (n=14). After the intervention, only 3 families remained with the initial diagnosis, with the diagnosis resolved in 9 families.

Optimizing attachment patterns, promoting expressive communication of emotions and family involvement, optimizing communication within the family (n=13) and attachment patterns (n=12), and referring to family therapy (n=9) were some of the interventions performed to resolve the nursing diagnosis of dysfunctional family process/dysfunctional relationship dynamics initially identified in 13 families. As a result, only 3 families retained the diagnosis, with 10 families resolving it.

DISCUSSION

The studied families are mostly nuclear (40%), a fact corroborated by the 59% of Portuguese nuclear families identified in 2011, with a tendency towards a 2.6% increase in this type of family over the last ten years (Census, 2021). Family assessment reveals that the proximity of the palliative patient and families with extended family members is widely established (80%) in terms of daily frequency and intensity of contact, preferably through face-to-face (86.7%) and telephone (46.7%) contact. These data demonstrate the importance of family proximity as agents of emotional support, social companionship, support, and guidance for advice, material assistance, and access to services, supported by Seibel et al. (2017). These authors allude to the importance of the support network for protecting the quality of intra-family relationships and family functioning.

According to the National Palliative Care Program (2015), the family should be assessed, listened to, and included in the care plan, being themselves the object of care, both during illness and bereavement. In order for the relatives of the patient in palliative care to understand, accept, and collaborate with the demands and adjustments that the illness and the patient determine, it is necessary to identify and respond to their needs, providing them with support, information, training, and education.

This response is made possible and facilitated by the possibility of the caregiver family member being present 24 hours a day in the palliative care ward, extended family visits, the existence of a 24-hour support line, nursing telephone support available from Monday to Friday provided by the Intra-hospital Palliative Care Support Team, the availability of Palliative Care consultations, adjusted to the patient's needs, the possibility of enjoying a therapeutic weekend, and the availability of virtual visits.

Applying the MDAIF to the 15 families of patients admitted in palliative care allowed the identification of 271 diagnoses at the structural, developmental, and functional levels, with the functional dimension being the one presenting the majority of the diagnoses raised (n=139; 51.3%). In the study by Ferreira et al. (2020), the most prevalent domain in terms of diagnoses was the developmental dimension, followed by the functional one. However, that study involved a sample of families with a low level of patient dependency (27.6%), while in the present study, the dependency is 100%, demonstrating a high functional demand regarding the caregiver role and family process.

Nursing intervention in families of patients in palliative care led to a favorable change in 101 (72.7%) nursing diagnoses at the level of the functional dimension of the model, demonstrating health gains sensitive to nursing care, based on and respecting the philosophy of Palliative Care. In the presence of a chronic and evolving disease, the family collectively experiences impact, with implications for its dynamics and relationships, leading to a readjustment of the functions assumed in the family system (Guarda, Galvão, & Gonçalves, 2010). As caregivers of their sick family member, the family performs functions resulting from needs associated with the illness process. Therefore, they need to be instructed in symptom management, self-care dependence, and therapeutic regimen management, among other tasks. The continuity of the experience as caregivers throughout their family member's illness process differentiates the family in the provision of care (Araújo, 2022).

In the present study, the initial nursing diagnoses, at the level of the functional dimension (specifically in the caregiver role), appear in the entire sample. All 15 families present inadequate caregiver role/undemonstrated adherence behavior, followed by the diagnosis of role saturation (n=14; 93.3%), undemonstrated role knowledge (n=13; 86.6%), undemonstrated role consensus (n=12; 80%), and role conflict (n=7; 46%). Cruz et al. (2010) warned that the demanding nature of caregiving tasks and the reduced formal and informal support responses to caregivers in caregiving lead to caregiver isolation with an impact on their social life.

In the family process, it is observed that the diagnosis of ineffective family communication, dysfunctional dynamic relationship, and dysfunctional family process appear in 13 (86%) families. It is also identified that 12 (80%) families present ineffective family coping and ineffective role interaction. These results are justified by Sequeira (2018), demonstrating that it will be easier to understand the needs of family caregivers if they are listened to regarding sources of stress, rewards, and satisfactions of caregiving, effectiveness of coping strategies, received social support, motivation to provide care, and relationship with the person being cared for. It is essential for the family caregiver to ensure the well-being, comfort, and relief of suffering of their sick family member.

It is also important to mention that the need for information arises in the context of the illness, the care inherent to changes in family roles, the socio-economic resources to be activated, the emotional support in the face of loss and death, and the emotional management of the caregiver (Kristjanson & White, 2002). Caring for a palliative patient can trigger feelings of frustration, sadness, despair, and resentment in the family caregiver, associated with the reduction of the caregiver's free time, changes in the family budget, modification of family functioning, conflicts, and feelings of guilt (Correia, 2018).

The nursing interventions identified in this study are mostly aimed at promoting independence and teaching, instructing, and training self-care to the family caregiver. They also aim to promote expressive communication of emotions, interventions on family conflicts and dynamics, and promoting family communication.

Araújo (2022) validates the need for these interventions by alerting that, as the disease progresses, there is a need to readjust nursing interventions, mainly in the educational scope, in response to the difficulties of the patient and caregiver. Interventions with families, at the level of the caregiver's role and family process, mainly encompass the domains of cognition, affectivity, and behavior. In terms of communication and education, the importance of sharing information about the disease process and instituted therapeutic regimen stands out; instructing on community resources; supporting decision-making; educating and training the family to adapt to and manage the dependency process; teaching conflict resolution strategies and promoting communication with the patient and their relatives; and providing training on direct care provision.

CONCLUSION

The MDAIF is a theoretical and operational model aimed at family assessment, identifying the most affected dimensions by recognizing nursing diagnoses, and planning interventions in collaboration with the family. Through the MDAIF, nurses assessed families of patients in palliative care, hospitalized in a Regional Oncological Center of the Central Region, identified areas of concern, and collaboratively formulated diagnoses with them. After identifying the diagnoses, the most appropriate interventions were selected in response to each one.

From nursing intervention on diagnoses in the functional dimension, health gains resulted, with a positive modification in the status of the majority of diagnoses after implementing interventions in the family, reflecting health gains resulting from the nurse's intervention. When accompanied by participatory and collaborative methodologies, families can mobilize their strengths and resources to meet their needs. The MDAIF has proven to be a fundamental tool for nurses and families in this process, being an important tool for nurses in the palliative care context, facilitating a holistic understanding of the family system and the nursing process.

The results obtained reinforce the role of the nurse with families of individuals in palliative care, the growing need for advanced nursing capable of managing highly complex situations, and the usefulness of the MDAIF as support for nursing decisions regarding the needs evidenced in the family. Limitations of the study include its implementation during the Covid-19 pandemic, with greater difficulty in face-to-face contact with families, lack of uniformity in nursing records related to the family in the clinical process, and limited time for study execution.

More studies are needed to reinforce the results obtained through the application of the MDAIF, as a collaborative approach to the family as a client and care partner, disseminating it in more contexts of inpatient care in oncological and non-oncological palliative care. Its execution in the context of community teams in Palliative Care where the patient and family are embedded in the natural environment would also be pertinent.

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