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CONCEÇÃO DE CUIDADOS USANDO A ONTOLOGIA DE ENFERMAGEM: UM ESTUDO DE CASO EM ENFERMAGEM DE SAÚDE FAMILIAR

ONTOLOGY-DRIVEN NURSING PRACTICE: A CASE REPORT IN FAMILY NURSING

CONCEPCIÓN DE CUIDADOS USANDO LA ONTOLOGÍA DE ENFERMERÍA: UN INFORME DE CASO EN SALUD FAMILIAR

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RESUMO

Introdução: Esta prática de enfermagem, orientada pela ontologia, foca-se na família como uma unidade, considerando também as necessidades individuais, promovendo um cuidado personalizado e inclusivo.
Objetivo: Caraterizar o plano de cuidados de uma família em transição para a parentalidade, incluindo a integração do novo membro na família.
Métodos: Estudo de caso, seguindo as diretrizes CARE para relatos de casos clínicos.
Resultados: O plano de cuidados demonstra a autonomia da prática de enfermagem ao enfatizar a saúde individual e a importância dos processos familiares durante esta transição, promovendo a capacitação para o papel parental, a autorregulação, resiliência e cuidados inclusivos.
Conclusão: É enfatizado o cuidado à família e seus indivíduos por parte do enfermeiro especialista em saúde comunitária na área de saúde familiar, destacando a interdependência da saúde individual e dos processos familiares durante esta transição, defendendo uma abordagem holística e flexível, apoiada por um sistema de informação em saúde que melhora a comunicação entre os profissionais de saúde e promove o bem-estar geral da família.

Palavras-chave: estudo de caso; família; ontologia de enfermagem; transição

ABSTRACT

Introduction: This ontology-driven nursing practice focuses on the family as a unit while also considering individual needs and promoting personalized and inclusive care.
Objective: To characterize the care plan for a family transitioning to parenthood, including integrating the new family member.
Methods: Case report supported by the CARE guidelines for clinical case reporting.
Results: The care plan demonstrates the autonomy of nursing practice by emphasizing individual health and the importance of family processes during the transition to parenthood while also empowering parental roles and promoting self-regulation, resilience, and inclusive care.
Conclusion: The report highlights the role of community family nurse specialists in supporting individuals and families during the transition to parenthood, emphasizing the interconnection between personal health and family dynamics. It advocates for a holistic, flexible approach, supported by a health information system, fostering communication among healthcare professionals and improving family well-being.

Keywords: case study; family; nursing ontology; transition

RESUMEN

Introducción: Esta práctica de enfermería, orientada por la ontología, se centra en la familia como una unidad, considerando también las necesidades individuales y promoviendo un cuidado personalizado e inclusivo.
Objetivo: Caracterizar el plan de cuidados de una familia en transición hacia la parentalidad, incluyendo la integración del nuevo miembro en la familia.
Métodos: Informe de caso, siguiendo las directrices CARE para estudios de casos clínicos.
Resultados: El plan de cuidados demuestra la autonomía de la práctica de enfermería al enfatizar la salud individual y la importancia de los procesos familiares durante esta transición, promoviendo la capacitación para el rol parental, la autorregulación, la resiliencia y el cuidado inclusivo.
Conclusión: Se destaca el cuidado a la familia y a sus individuos por parte del enfermero especialista en salud comunitaria en el área de salud familiar, subrayando la interdependencia entre la salud individual y los procesos familiares durante la transición a la paternidad. Defiende un enfoque holístico y flexible, apoyado por un sistema de información de salud que mejora la comunicación entre los profesionales de salud y promueve el bienestar familiar.

Palabras Clave: família; estudio de caso; ontología de enfermería; transición

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INTRODUCTION

This case study is part of a professional internship report conducted from September 2023 to January 2024 as part of a master's program in Community Health Nursing, specializing in Family Health Nursing. The case presented here involves a nuclear family with a young child, comprising both the parental and marital subsystems. The aim of this article is to characterize the care plan developed for this family during the internship period, with a focus on the first three months of parenthood and the integration of the new family member. This analysis seeks to contribute to the understanding of how nursing care can empower families in transition to parenthood, particularly those who, due to the principles of self-organization and self-regulation inherent in family systems (Feinberg et al., 2022; IFNA, 2017), require less direct intervention and more targeted support and guidance. While the internship's primary goal was the practical application of nursing interventions and care planning, this article aims to synthesize those experiences into a reflective and analytical framework, providing insights into the continuous monitoring and empowerment strategies that can prepare families for this critical transition.

The care planning was directed toward the family as a unit of care, considering the interactions among its members as carriers of needs and targets for nursing interventions (Kaakinen, 2018). This aligns with the competencies of the specialist nurse in community and family nursing (CFN) (Regulation No. 428/2018 of the OE). The health of the family unit is intrinsically linked to individual health (Feinberg et al., 2022). Thus, the CFN, while viewing the family as a unit of care, also focuses on individuals and the transitions they experience. In this case, these are notably developmental transitions associated with parenthood.

The design of care planning for this family and its members was grounded in family- and person-centered assumptions and theories, including the Calgary Family Assessment and Intervention Model (CFAIM), the Family Strengths Model by Gottlieb, Olson's Model, and the Transition Theory. The last one highlights the importance of preparation, adaptation, and resource mobilization during significant life transitions (Meleis et al., 2010). Olson's Model, on the other hand, focuses on cohesion and adaptability, which are key indicators of family functioning (Olson, 2000). Gottlieb's Model focuses on family resilience and the utilization of internal resources (Gottlieb, 2013, 2014, 2017). The CFAIM assesses family structure, development, and functioning (Shajani & Snell, 2023; Wright & Leahey, 2013, 2021). Together, these models and theories provide an evidence-based, integrative framework that supports inclusive and personalized care for families and their members. The care plans were based on the Nursing Ontology reference model, as approved by the Portuguese Nursing Council (OE, 2023, 2024) and implemented using the E4Nursing® platform. This web-based educational software for care planning supports the development of clinical decision-making in nursing. It incorporates nursing ontology in its backend in a "plug and play" configuration (Campos et al., 2022[a,b],2024). Furthermore, integrating a health information system offers a conceptual framework and shared language, enabling better understanding and communication among healthcare professionals (Bastos et al., 2022). It offers a framework that defines the discipline's key concepts and their interconnections, providing a formal representation of nursing knowledge (Bastos et al., 2022). This system helps address both individual and family health concerns, fostering more effective and personalized care. This approach emphasizes the interdependencies within the family system, ensuring that data, diagnoses, objectives, interventions, and outcomes are tailored to these dynamics.

1. STATE OF THE ART

The transition to parenthood is one of the most significant life events, requiring profound adjustments in lifestyle, roles, and relationships that impact family health and functioning (Araújo, 2019). Both the parental and marital subsystems must adapt to accommodate the new family member, with parents working together to balance child-rearing, household responsibilities, and relationships with the extended family and the broader community (Wright & Leahey, 2021). Families must mobilize internal and external resources, adjusting roles and dynamics to maintain a safe, healthy environment (Kuersten-Hogan, 2021; Zhao et al., 2024). Household management, including cleanliness, sanitation, and space management, also becomes crucial to ensure the well-being of all family members (Góes et al., 2021). CFNs play a vital role in this process, helping families adapt through comprehensive support that addresses both individual and collective needs. They support families in organizing daily routines, enhancing communication, and adopting shared decision-making while also helping them recognize their strengths, reflect on how they have coped with past challenges, and mobilize these strengths in the present to promote self-regulation (Silva et al., 2021; Kaakinen, 2018). Meeting with the family can serve as both a diagnostic activity and an intervention, encouraging open dialogue about current challenges, allowing family members to share concerns, and redefine meanings (Campos, 2008). This open communication is essential for successful adaptation, as it fosters better-coping strategies, resilience, and overall family health during crises (Olson, 2000). Additionally, self-regulation within the family system aids in maintaining stability while adapting to new circumstances, enhancing both parental competence and problem-solving abilities (Linhares & Martins, 2015). CFNs leverage family strengths and resources to ensure a healthy adaptation to new roles. The inherent changes associated with this transition significantly impact family dynamics, including roles, norms, and interactions (Kuersten-Hogan & McHale, 2021; Zhao et al., 2024). Therefore, it is essential to support families and their members throughout this process, particularly in enhancing the dyadic relationship between parents and children (César-Santos et al., 2024). Early home visits are critical in preventing both postpartum and neonatal complications, as well as empowering families

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and fostering children's motor and cognitive development (UNICEF, 2018; Silva et al., 2022). These visits provide personalized care, address both physical and emotional needs, and support crucial parental tasks like breastfeeding and newborn care, enhancing family health and overall outcomes (Oliveira et al., 2020; Piro et al., 2020).

2. METHODS

This case study complies with the CARE guidelines for Clinical Case Reporting (Gagnier et al., 2013; Riley et al., 2017), and incorporates a qualitative analysis. Case reports serve as concise communications that share clinical experiences, and the lessons learned from their management (Ngene & Rees, 2024). In this case study, we aim to highlight the needs of a family undergoing a developmental transition and the role of the CNF throughout this process. The study was conducted in accordance with ethical principles and regulations in force in Portugal regarding the protection of personal data. It was approved by the Porto Superior Nursing School (ESEP), under registration number ADTE_164/2023. The professional internship report, which forms the basis of this article, is publicly accessible through the Open Access Scientific Repository of Portugal (RCAAP) (César Santos, 2024). Additionally, informed consent for the care process was obtained directly from the family during the provision of care.

2.1 Clients

Family A is a nuclear family with a young child, consisting of the parental and marital subsystems. The family members are Mrs. A1 and Mr. A2, both 28 years old and their female child, A3. Both Mrs. A1 and Mr. A2 are employed, and assume the roles of household organizers and financial providers. Neither have any significant medical history. They have been cohabitating since 2020 and have owned their home since then. There are no domestic animals in the house. The initial contact with the family took place during a home visit, five days postpartum. Mrs. A1 had had an uncomplicated pregnancy and vaginal delivery at 40 weeks of gestation, and A3 was born via spontaneous vaginal delivery, weighing 3135g, measuring 48.5cm, head circumference of 33.7cm, presenting an APGAR score of 9/10/10. A3 had received the hepatitis B vaccine in the hospital, before being discharged. The red reflex test and the neonatal hearing screening through otoacoustic emissions showed no abnormalities at birth. The family maintains daily personal contact with the extended family members, particularly with Mrs. A1's parents, who live near the family's home, while contact with Mr. A2's parents occurs on a weekly basis. Both of them perceive these contacts as satisfactory, providing social companionship, emotional support, and assistance with caring for A3, especially during this stage of the family life cycle (FLC). Figure 1 displays the family genogram:

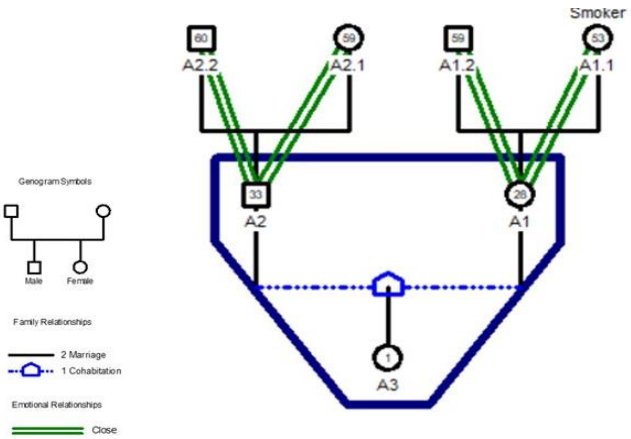

Figure 1 – Family A Genogram

2.2 Data collection techniques

During the follow-up, the consultations (C), conducted both at the family health unit, and in the family's home, utilized various data collection techniques, including family and individual interviews, physical examinations, and direct observations. Additionally, it involved assessing interactions among the family members and evaluating the residential building conditions whenever necessary. This process was guided by an interactive and spiral approach, aiming to foster a healthy transition during this critical period for both individuals and the family as a whole. During the initial interactions with the family and/or its members, data were collected, diagnoses established, and the care plans formulated and implemented. In subsequent encounters, the process became cyclical, driven by the ongoing implementation of care, with interventions, continuous evaluation, and the identification of new needs through updated data collection. The focus of attention—designated here as domains—along with the diagnoses,

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objectives, interventions, and outcomes for each individual and for the family- is presented in a schematic format in the results section. It also incorporates the nursing ontology adapted for each nursing care planning process. The discussion section will explain the decision-making rationale, including an overview of the nursing process and a description of the activities that were carried out to implement the specified interventions. In total, three visits were conducted with the entire family (F): five days postpartum (FC1), two weeks postpartum (FC2), and six weeks postpartum (FC3). Mrs. A1 had three individual consultations, all coinciding with the latter group visits (A1C1, A1C2, A1C3). Mr. A2 had two individual contacts, at the second and sixth weeks postpartum (A2C1, A2C2). Regarding A3, a total of five visits were conducted: on the fifth day of life (A3C1), during the second week (A3C2), at four weeks (A3C3), at six weeks (A3C4), and at twelve weeks of life (A3C5).

3. RESULTS

All the data, diagnoses, objectives, interventions, and outcomes have been represented, collectively reflecting the autonomous dimension of nursing practice during the care of this family and its members. Several domains did not lead to diagnoses when the initial data did not reveal any immediate issues. Other data that did lead to diagnoses did not require intervention; instead, these domains were monitored during the follow-up period in accordance with national guidelines, as summarized in Table 1.

Table 1 – Focuses on attention requiring continuing monitoring and/or not leading to diagnoses.

CLIENT: MRS. A1
D: *Postpartum*
Dg: *Puerperium*
Dt:
(A1C1; A1C2; A1C3) Contracted uterus; amount of lochia as expected;
(A1C1; A1C2; A1C3) Knowledge of postpartum self-care and postpartum complications: facilitator.
(A1C1; A1C2; A1C3) Adopts self-management behaviors of postpartum recovery; Mentions satisfaction with postpartum recovery self-management.
O:
Determining evolution of postpartum recovery.
Promoting postpartum recovery self-management.
E:
Evaluating postpartum recovery.
Evaluating postpartum recovery self-management.
D: *Breastfeeding behaviors*
Dg: *Breastfeeding*
Dt:
(A1C1; A1C2; A1C3) Able to offer the breast when recognizing signs of hunger. Able to adopt a comfortable position to facilitate sucking. Able to finish breastfeeding when recognized signs of satiety. Able to use strategies to stimulate sucking. Adequate latch to breast.
(A1C1; A1C2; A1C3) Knowledge of breastfeeding, and ability in breastfeeding: facilitator.
(A1C1; A1C2; A1C3) Self-efficacy to breastfeeding, and awareness of the relationship between a number of feeds and breastmilk production: facilitator.
(A1C1; A1C2; A1C3) Meaning attributed to breastfeeding: not a barrier.
O: Determining the evolution of breastfeeding.
E: Evaluating breastfeeding behaviors.
D: *Skin and Mucosae*
Dg: *Surgical Wound*
Dt:
(A1C1) Perineal wound; three absorbable sutures; no inflammatory signs.
(A1C1) Knowledge of promoting surgical wound healing: facilitator.
(A1C2) Healed surgical wound.
O: Determining evolution of surgical wound.
E: Evaluating surgical wound.
D: *Milk secretion and excretion*
Dg: *Lactation*
Dt:
(A1C1) Intends to breastfeed. Breast turgid before milk extraction and soft after. Presence of milk in breast. Absent signs of breast engorgement.
(A1C3) Knowledge of lactation, storage, and use of breast milk, and ability in extracting breast milk: facilitator.
D: *Parent-child attachment behaviors*
Dt:
(A1C1) Mother-child attachment characteristics: facilitator.
D: *Health Seeking behaviors*
Dt: (A1C1) Vaccination status: completed.
D: *Cardiovascular System*
Dt:
(A1C1) Blood Pressure (BP) = 112/63mmHg; Pulse (P) = 70bpm, medium and regular amplitude, rhythmic pulse. No pain.
(A1C2) BP = 120/65 mmHg; P = 70bpm, medium and regular amplitude, rhythmic pulse; No pain.
O: Determining evolution of blood pressure and pulse.

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E: Evaluating the evolution of blood pressure and pulse.
CLIENT: MR. A2
D: *Emotion*
Dt: (A1C1) Without traces of depressive mood.
D: *Parent-child attachment behaviors*
Dt: (A2C1) Father-child attachment characteristics: facilitator.
D: *Adult development*
Dt: (A2C1) Weight: 70kg; Body Mass Index (BMI): 22.86 kg/m2. With current work activity, there is an absence of chemical/biological contamination, exposure to radiation/dust/aerosols/noise/intense stress, and the occurrence of work accidents. (A2C1) Knowledge of immunization schedule: facilitator. (A2C1) Meaning attributed to vaccination: not a barrier. (A2C1) Knowledge of healthy eating patterns and of exercise on health: facilitator. (A2C2) Knowledge of testicle self-surveillance, male reproductive system cancer, and of health surveillance examination: facilitator.
CLIENT: A3 (Child-parent Dyad)
D: *Psychomotor development* ***Dg:*** *Infant development.* ***D: Physical development*** ***Dg:*** *Growth.*
Dt: (A3C1) Weight: 3.15 kg; Weight percentile: P(25); Length: 49.00 cm; Length percentile: P(25); Cephalic perimeter: 34.00 cm; BMI: 13.12 kg/m²; BMI percentile: P(25). Without impairment of fontanelle closure. Without alarm signals. (A3C2) Weight: 3.38 kg; Weight percentile: P(25); Length: 51.00 cm; Length percentile: P(25); Cephalic perimeter: 36.00 cm; BMI: 13.00 kg/m²; BMI percentile: P(25). Without impairment of fontanelle closure. Without alarm signals. (A3C5) Weight: 6.30 kg; Weight percentile: P(50); Length: 62.00 cm; Length percentile: P(50); Cephalic perimeter: 41.00 cm; BMI: 16.39 kg/m²; BMI percentile: P(25). Without impairment of fontanelle closure. Without alarm signals. **O:** Determining evolution of infant development. Determining evolution of growth progression. **E:** Evaluating infant development. Evaluating growth.
D: *Child-parent bonding behaviors*
Dt: (A3C2) Bonding behaviors: seeks to attract the presence of an adult through crying or smiling or babbling or, looking or waving arms; behavior directed to any person because cannot distinguish adults.
D: *Newborn*
Dt: (A3C1) Umbilical cord stump: no complications. (A3C1) Meaning attributed by parents to umbilical cord stump treating: not a barrier. (A3C1) Mother/father's knowledge of newborn health surveillance and promotion: facilitator. (A3C1) Meaning attributed by parents to vaccination: not a barrier. (A3C2) No umbilical cord stump. (A3C2) Mother/father's knowledge of promoting the newborn safety; ability to transport the newborn safely: facilitator. (A3C3): Mother/father's knowledge of infant development in the newborn period, of the newborn growth, and of strategies to promote infant development in the newborn period: facilitator. **O:** Determining evolution of the umbilical cord stump. **E:** Evaluating umbilical cord stump status.
D: *Infant*
Dt: (A3C3): Parent knowledge of growth and development during the infant period and of strategies to promote infant development in the infant period: facilitator. (A3C4) Parent knowledge of child nutritional intake, of child hygiene, sleep, promoting child safety, surveying and promoting child health, and of infant crying: facilitator. (A3C4) Parent's ability to feed the child, maintain the hygiene of the child, transport the child safely, and use strategies to deal with infant crying: facilitator. (A3C4) Parent meaning attributed to bathing and vaccines: not a barrier.
CLIENT: FAMILY (As a Unit of Care)
D: *Organization of home functioning*
Dt: (FC1) The family ensures shopping, homemaking, food storage, food preparation, and accompanying a family member to healthcare service.
D: *Residential building*
(FC1) Family residential building with health conditions; with water supply; safe to children; without architectonic barriers to children; with sufficient space to include a new member.

Note: D = domain; Dt = data; Dg = Diagnose; O = Objectives; E = Evaluation.

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Table 2 summarizes the domains leading to diagnoses and requiring intervention, along with the associated objectives, interventions, evaluations, and outcomes for each client:

Table 2 – Focuses on attention leading to diagnoses and requiring intervention

CLIENTS: MRS. A1 AND MR. A2			
D: *Sleep* ***Dg:*** *Impaired sleep;* *Readiness to enhance knowledge of promoting sleep.*			
ID	**O**	**I and E**	**PD**
(A1C2) Slept for short periods; Non restorative and intermittent sleep. (A1C2) Knowledge about sleep promotion: needs improvement to progress toward mastery; it is the appropriate time to intervene. (A1C2) Meaning attributed to sleep commitment: not a barrier.	Determining the progression of sleep; Promoting adherence: sleep-promoting strategies.	I: Teaching about promoting strategies for sleep. E: Evaluating sleep; E: Evaluating knowledge on promoting sleep; E: Evaluating adherence to promoting sleep strategies.	(A1C3) Restorative sleep [IMPROVED]. (A1C3) Knowledge of promoting sleep: facilitator [IMPROVED]; Adopts promoting strategies of sleep as recommended, and mentions satisfaction with self-management of promoting strategies of sleep.
CLIENT: A3 (Child-parent Dyad)			
D: *Newborn* ***Dg:*** *Readiness of parent to enhance ability in performing hygiene of the newborn;* *Readiness of parents to enhance meaning attributed to bathing;* *Readiness of parents to enhance knowledge of the newborn sleep;* *Readiness of parents to enhance knowledge of the newborn crying;* *Readiness of parents to enhance the ability to use strategies to deal with the newborn crying.*			
ID	**O**	**I and E**	**PD**
(A3C1) Parent knowledge of the newborn hygiene: facilitator. (A3C1) Parent's ability in the hygiene of the newborn needs improvement to progress toward mastery; it is the appropriate time to intervene. (A3C1) Parent meaning attributed to bathing: risk of accidents. (A3C2) Poor quality and duration of the child's sleep. (A3C2) Parents' knowledge of newborn sleep needs improvement to progress toward mastery; it is the appropriate time to intervene. (A3C2) Parent knowledge of the newborn crying: facilitator. Parents' ability to use strategies to deal with the newborn crying needs improvement to progress toward mastery; it is the appropriate time to intervene.	Promoting developmental parent role: hygiene and comfort. Promoting developmental parent role: sleep and rest. Promoting developmental parent role: deal with crying.	I: Instructing parents about bathing; I: Training parents about bathing; I: Assisting parent with analyzing meaning attributed to bathing; I: Teaching parents about sleep; I: Teaching parents about promoting sleeping habits; I: Instructing parents about strategies to deal with crying; I: Training parents about using strategies to deal with crying; I: Instructing parent about child massaging; I: Training parents about child massaging E: Evaluating parent ability in the newborn hygiene; E: Evaluating parent meaning attributed to bathing; E: Evaluating developmental parent role: hygiene and comfort; E: Evaluating parent knowledge of the newborn sleep; E: Evaluating developmental parent role: sleep and resting E: Evaluating parent's ability to use strategies to deal with the newborn crying; E: Evaluating developmental parent role: dealing with crying.	(A3C2) Child's clothing: appropriate for environmental conditions and anthropometric measures. (A3C2) Meaning attributed to bathing: not a barrier. [IMPROVED]; (A3C2) Parent ability in the hygiene of the newborn: facilitator [IMPROVED]. (A3C3) Good quality and duration of the child's sleep [IMPROVED]; (A3C3) Parent knowledge of the newborn sleep: facilitator [IMPROVED]. (A3C3) Parent ability in using strategies to deal with the newborn crying: facilitator [IMPROVED]; (A3C3) Parent adopts behaviors to deal with crying as recommended [IMPROVED].
CLIENT: FAMILY A (As a Unit of Care)			
D: *Family preparing for the arrival of the newborn* ***Dg:*** *The readiness of the family to enhance knowledge of adaptation, facilitating strategies for the reorganization of the family process to care for the infant.*			
ID	**O**	**I and E**	**PD**
(FC1) Family knowledge of adaptation facilitating strategies of the arrival of the newborn: facilitator. (FC1) Meaning attributed by family to the arrival of the newborn: not a barrier. (FC2) Family communication, family coping, and family role interaction: facilitator.	Promoting family process: arrival of a newborn.	I: Teach the family about facilitating strategies for reorganization of the family process to care for the infant. E: Evaluating family knowledge of adaptation facilitating strategies about the reorganization of the family process to care for the infant; E: Evaluating family process: arrival of a newborn.	(FC3) Family manifests satisfaction with the process of the arrival of a newborn. (FC3) Family knowledge of adaptation facilitating strategies about the reorganization of the family process to care for the infant: facilitator [IMPROVED].

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(FC3) Family knowledge of adaptation facilitates strategies about the reorganization of the family process to care for the infant's needs and improvement in progress toward mastery; it is the appropriate time to intervene.			
D: *Family planning*			
Dg: *Readiness of family to enhance knowledge of family planning.*			
ID	**O**	**I and E**	**PD**
(FC2) Without the intention of getting pregnant, without a history of unplanned pregnancy, without a history of pregnancy loss. (FC2) Family knowledge of family planning needs to be improved to progress to mastery, and it is the proper time for intervention.	Promoting family process: family planning.	I: Teaching family about family planning. E: Evaluating family knowledge of family planning. E: Evaluating family process: family planning.	(FC3) Family knowledge of family planning: facilitator [IMPROVED]. (FC3) Family is satisfied with the planning process.

Note: D = domain; Dg = Diagnose; ID = initial data; O = Objectives; I = Intervention; E = Evaluation; PD = Progression Data.

4. DISCUSSION

The transition to parenthood is acknowledged as a multifaceted and challenging period (Silva et al., 2021). The implementation of coping strategies within families is essential for better adaptation to stress, enhancing the well-being of both individual family members and the family system as a whole (Silva & Ponciano, 2022). In this matter, the family demonstrated resilience by leveraging internal resources and coping strategies during this developmental transition. Through targeted assessments of family interactions, a deeper understanding of these dynamics is attained, revealing the necessity for families to adopt effective strategies as they adjust to the arrival of a newborn. The organization of home functioning, as well as the conditions of the residential building, are critical in integrating the new family member. Furthermore, the evaluation of role interactions within the family provides insights into how its members distribute responsibilities and their satisfaction with these arrangements. Both partners reported sharing domestic responsibilities prior to A3's birth, with Mr. A2 now taking on some additional tasks, but still resulting in mutual satisfaction with it: "We always divided the household chores" (sic Mrs. A1); "We feel ok with the way we manage our tasks; it works for us" (sic Mr. A2). The couple also expressed appreciation for the support from their parents, which enhanced both their dyadic relationship and familial connections. They felt that they could count on their extended family members as they navigate this new phase: "Our parents also help a lot... which is a huge help and gives us some free time to be together as a family" (sic Mr. A2). Optimized communication, as emphasized by Olson (2000), plays a significant role in how families navigate crises. Consequently, targeted questions directed to Mrs. A1 and Mr. A2 were used to explore their communication patterns and satisfaction levels. This topic was identified as another significant family strength, as Mrs. A1 and Mr. A2 reported expressing their feelings openly, with both revealing satisfaction with their communication style: "We always talk about everything, especially about what we feel" (sic Mr. A2). Their ability to articulate emotions positively influenced family dynamics, suggesting that both verbal and non-verbal communication were effectively utilized.

The overall family planning also focused on anticipatory care and supporting informed decision-making regarding reproductive goals (Floyd, 2020; Freeman-Spratt et al., 2022). The couple was encouraged to engage in discussions about their family vision, expectations for parenthood, and considerations regarding future children. Topics also included counseling about the timing for resuming sexual activity, intervals between pregnancies, and the relationship between breastfeeding and fertility, highlighting that exclusive breastfeeding is not a reliable contraceptive method (Makins & Cameron, 2020). Furthermore, education about postpartum contraception options, taking into account prior methods and preferences, was provided to guide them in selecting suitable options for their immediate and future needs (Floyd, 2020; Makins & Cameron, 2020; Zelalem et al., 2021).

As Mrs. A1 prepared to return to work after maternity leave, assessing the family's strategies for reorganizing childcare was essential. The family was commended for implementing effective practices, such as maintaining breastfeeding through expressed milk, gradually introducing bottle-feeding, and utilizing the support of grandparents for childcare, which included starting with frequent visits and naps at their home so that the child could gradually get used to it. The importance of maintaining a predictable routine to facilitate adaptation was also discussed (Ferreira et al., 2018). Additionally, the significance of open discussions involving grandparents about care expectations was emphasized to prevent any future conflicts and to promote organized care strategies (Lo & Lindsay, 2022).

During the follow-up with Mrs. A1, the focus of care included monitoring her postpartum recovery. As such, the postpartum domain was identified due to the potential for complications during this phase, such as hypertensive disorders (Mello e Silva et al., 2019), and therefore, the cardiovascular system was also monitored. The domain of health-seeking behaviors was established to facilitate the early self-detection of any other potential complications. The skin and mucous membranes domain was noted due to Mrs. A1's episiotomy, observing proper wound healing management (Cheffer, Nenevê & Oliveira, 2020). Maintaining vigilance around breastfeeding was also crucial, given its benefits for maternal and infant health (Piro & Ahmed, 2020). Mrs. A1 had knowledge and skills in milk extraction and

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storage as she prepared to return to work, aiming to continue exclusive breastfeeding until her baby reached six months. Additionally, she demonstrated strategies for maintaining breastfeeding despite work-related challenges, emphasizing the importance of a supportive environment (Martinhago Borges Fernandes et al., 2020; Zhang et al., 2018).

The heightened vulnerability perceived during the postpartum period underscores the need for healthcare professionals to empower families in reducing stress and anxiety, thereby enhancing their ability to cope with new circumstances (Høifødt et al., 2020). These factors significantly impact parental engagement and overall caregiving capacity (Dlamini et al., 2023). Therefore, it is crucial to adopt a comprehensive approach to family care during this period, addressing not only the physical recovery but also the overall well-being (Dlamini et al., 2023). Accordingly, it is important to assess the emotional status and the parent-child attachment behaviors during this stage, which is why these domains were outlined. In the domain of sleep, Mrs. A1's reported experiencing disrupted sleep patterns due to her baby's colic and frequent waking. Changes in the quantity and quality of sleep during the transition to motherhood can negatively affect the mother's well-being, which in turn can influence her ability to care for the newborn (Angelhoff et al., 2018). Although Mrs. A1 didn't perceive sleep deprivation as having a significant impact on her well-being at the time and understood it as a natural part of her daughter's development, she expressed the need for assistance in finding strategies to achieve more restorative sleep. In this context, she was given guidance and encouraged to adhere to sleep-enhancing strategies, such as establishing a sleep routine, sharing responsibilities with her partner, and utilizing the child's nap times to rest (Angelhoff et al., 2018; Hajipour et al., 2021; Hopwood, Clerke & Nguyen, 2018).

Overall, Mrs. A1 demonstrated strong self-efficacy, bolstered by prenatal education on breastfeeding and newborn care, which eased her transition into the postpartum phase (Dlamini et al., 2023). Her surgical wound showed no complications, and her sleep quality improved over time due to the strategies implemented. As her adaptation to motherhood progressed naturally, the CFN's role was primarily supportive, allowing Mrs. A1 to build confidence in her ability to manage this new phase of life effectively (Høifødt et al., 2020; Dlamini et al., 2023).

Regarding Mr. A2's care planning, the domains of emotion and father-child attachment were addressed, similarly to the case of Mrs. A1, as the challenges of parenthood impact both partners, and the father-child bond must also be valued (Vidaurreta et al., 2022). A father's involvement in the transition to parenthood goes beyond instrumental tasks to include emotional and affective connection, making it crucial for fathers to be engaged in establishing a bond with the child (Franco et al., 2021). The transition to parenthood is a time when men undergo various adaptation processes, which, in some cases, may lead to imbalances (Pereira, 2020). This potential impact on well-being during the postpartum period can result in depression affecting not only the mother but also the father (Santos et al., 2018). Despite often being clinically overlooked, this phenomenon has an estimated prevalence of 8.4% to 10.4% among fathers during the perinatal period, highlighting the importance of planning care during this phase (Pereira, 2020).

Effective involvement of individuals in their own healthcare requires them to be prepared to assume this responsibility, which necessitates access to information that empowers them to make informed choices (Silva et al., In Amendoeira, 2022). Therefore, the domains of adult development and health-seeking behaviors were identified within a framework of monitoring and promoting healthy behaviors.

Regarding sleep, the intervention mirrored that of Mrs. A1, focusing on promoting rest periods and encouraging a division of tasks. For the newborn, emphasis was placed on establishing a somewhat consistent routine to provide a sense of predictability regarding sleep patterns, adaptation to the sleeping environment, and reinforcement of a safe sleeping position (McDonald et al., 2019; Meaklim et al., 2020; Torres et al., 2021). Additionally, both parents were encouraged to attend to the baby's needs calmly during nighttime, minimizing stimulation to help the baby return to sleep more easily.

Mr. A2 also identified having participated in the childbirth preparation course as a facilitator of the transition, as he, like his wife, felt more prepared to handle the changes associated with this phase. He demonstrated being involved during this process, providing emotional support to his wife, and showing confidence in caring for his daughter. Thus, similar to Mrs. A1's case, the role of the CFN mainly involved monitoring and supporting the transition process.

The primary objectives for A3 were to assess the progression of child development and growth from the neonatal stage to the infant stage and to promote the parental role in relation to the child's hygiene and comfort, sleep/rest, and handling of crying. The first month of life, corresponding to the neonatal period, represents a critical time for a child's survival (UNICEF, 2024). During this phase, it is essential to assess physical and psychomotor development to identify potential needs and intervene early when/if necessary (Nguélé et al., 2022). Monitoring growth, particularly weight gain, is vital, as it is closely related to socioeconomic, environmental, and cultural determinants (Hantmann et al., 2022; Monteiro, 2016; Gaíva et al., 2018, as cited in Hantmann et al., 2022). As the child transitioned from the neonatal stage to the infant stage, the terminology was updated to reflect the significant developmental changes that occurred during this period (Silva et al., 2022). The identified dimensions included care for the umbilical stump, hygiene, sleep, nutrition, and health promotion. There was an observed progression of inappropriate growth and development, along with effective parental responses to their daughter's individual needs.

The social interaction between the child and parents was emphasized as a crucial aspect of developing bonding (Trevarthen, 2011; Tronick, 1989, as cited in Høifødt et al., 2020; Vidaurreta et al., 2022). Regarding sleep, promoting an appropriate pattern is crucial for optimal child development (De Beritto, 2020). Sleep disturbances, particularly in early life, can negatively impact neurological

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development and emotional well-being (De Beritto, 2020; Parsons et al., 2023). In this case, the sleep disturbances were linked to episodes of abdominal colic, a condition that can be distressing for both the baby and the parents (Castillo Ramírez & Vargas Durán, 2017). Non-pharmacological methods, such as infant massage and the "5 S's technique", were recommended to alleviate pain associated with colic and improve sleep patterns (Mangat et al., 2018; Castillo Ramírez & Vargas Durán, 2017; Mrljak et al., 2022). In terms of promoting child health, the parental role in ensuring age-appropriate vaccinations is also essential (Savci et al., 2023). As such, CFNs play a key role in providing accurate information to parents regarding the importance of vaccinations (Kalantari, Borisch, & Lomazzi, 2022). Additionally, ensuring the child's safety is critical, encompassing safe transportation and an appropriate sleep environment to prevent sudden infant death syndrome (SIDS) (Moon et al., 2022; Newberry, 2019). Regarding hygiene care, Mrs. A1 expressed anxiety about bathing her daughter. Reflective and circular questions were used to explore her feelings and perceptions, helping her analyze the meaning she attributed to the task and reframe bathing as a more manageable experience (Freire, 2019; Jude, 2018). The reframing technique, one of the most common techniques in systemic intervention, involves helping families redefine their view of the problem in a more systemic way, where factors do not cause each other but mutually influence, contributing to the construction of new views and solutions (Hardy et al., 2020). In this case, the goal was to reduce the negative expression, strengthen family relationships and bonds, maintain the focus on the family strengths, and reinforce positive patterns (Robbins, Alexander, & Turner, 2000, as cited in Hardy et al., 2020). Thus, emphasis was placed on the positive mother-daughter connection and the potential of Mr. A2 as a valuable resource to help overcome this fear.

The systemic approach to family health outlined in this report centers on caring for the family as a unit while also addressing the health of individual members. This holistic approach enables tailored nursing care during the transition to parenthood, emphasizing the importance of understanding family dynamics and interactions in community care, and mainly at home. The evidence underscores the crucial role of the parental subsystem, the need for empowering parental roles, and the importance of fostering parent-child interactions for a healthy transition. Despite facing challenges, the family's self-regulation demonstrates their capacity to establish a new equilibrium. Ultimately, the role of CFNs encompasses supporting families in their responses to life transitions. Nurses must adeptly understand each family's uniqueness to provide inclusive care that recognizes and celebrates diversity. This understanding is especially critical during vulnerable periods, such as the integration of a new family member, as it ensures that care is centered on the overall well-being of the family. Anticipatory care is essential in preparing families for the challenges associated with a newborn's arrival. In this context, CFNs should promote family self-regulation while addressing both individual and collective needs, as different family members engage in various developmental tasks that influence the entire family system. An in-depth understanding of life cycle phases enables nurses to identify vulnerabilities and leverage family strengths for resilience. Systemic family interventions, which include techniques like reflexive, systemic, and circular questioning, as well as reframing, enhance the family's perspective and promote resilience. Systemic family interventions were applied as activities that operationalize each defined intervention. Therefore, they are not viewed in isolation or as separate interventions but as part of a larger framework, specifically a nursing therapeutic approach directed toward a concrete problem. In the case of this family, the emphasis was placed on fostering parental roles and facilitating the integration of the new family member. The family's self-regulation was evident throughout monitoring, with the nurse's role focusing on support and reinforcement of their internal strengths. Systemic interventions shifted attention from individual needs to family dynamics and interactions, which are vital for effective care. Recognizing the diverse models and theories that inform systemic practice is essential, especially as families navigate the complexities of integrating new members and adapting to changing roles and responsibilities.

CONCLUSION

The study outlines the delivery of care to families as a unit and to its individual members, emphasizing the interdependence of individual health and the overall functioning of the family system. It highlights the crucial role of the CFNs during the transition to parenthood and the integration of a new family member, advocating for an integrated healthcare approach that considers both individual needs and family dynamics throughout the FLC. A holistic approach to family care is essential, as it recognizes the processes influencing family health. This necessitates a health information system that provides a common language and conceptual framework for understanding factors affecting individual and family health, thereby enhancing communication among healthcare professionals and improving care delivery. Data used for diagnoses included the health conditions of family members and contextual factors such as communication, support networks, and available resources. Nursing interventions were designed to be flexible, respecting the family's autonomy and promoting active participation in their care. This approach acknowledges the interconnections within the family system, recognizing that changes in one member can impact the entire unit.

The integration of scientific evidence is vital for guiding clinical practice, although challenges in health service organizations and policies hinder the implementation of family-centered care. There is a need for a paradigm shift to value the family as a unit of care, supported by relevant health policies and indicators while recognizing that CFNs also provide care to individuals throughout the life cycle. This dual focus ensures both family-centered and individual care is prioritized.

Key insights from the follow-up of the family revealed that individual and family health are interconnected, particularly during transitions such as parenthood. In this family, where they are self-organized with minimal external intervention by mobilizing their strengths, the

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parental subsystem is central to the CFN's action. This includes preparing for the integration of the new members, understanding the meanings they assign to this process, and redefining roles. At the same time, the focus is also on individual needs, particularly the mother's postpartum recovery and the care of the newborn. The dyadic relationship between parents and children is crucial for healthy development, and providing culturally sensitive care is essential. Anticipatory care empowers parents by addressing challenges related to new caregiving responsibilities.

Holistic and integrated care, particularly through home visits, allows for tailored interventions that meet families' unique needs. By focusing on the family's strengths and decision-making capacities, this comprehensive approach improves overall family well-being and enhances collaboration between nurses and families. The resulting integration leads to better health outcomes and facilitates healthy transitions to parenthood.

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AUTHORS' CONTRIBUTION

Conceptualization, B.C.S, F.B., and J.C.; data curation, B.C.S.; formal analysis, B.C.S.; methodology, B.C.S, F.B. and J.C.; project administration, B.C.S; supervision, F.B., and J.C; validation, B.C.S, F.B., and J.C.; visualization, B.C.S, F.B., and J.C.; writing-original draft, B.C.S.; writing-review and editing, B.C.S, F.B., and J.C.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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