

## ORIGINAL PAPER

# Nurse Navigator Program in maternity clinics as a quality component of family support services

**Alexander Hochmuth<sup>1,2</sup>** , **Christoph Dockweiler<sup>3</sup>** <sup>1</sup>*Faculty of Business Management and Social Sciences, Osnabrück University of Applied Sciences, Osnabrück, Germany*<sup>2</sup>*Practice Development in Nursing, Kreiskliniken Herford-Bünde (KKHB), Herford, Germany*<sup>3</sup>*Department of Social Sciences, Chair of Digital Public Health, Faculty of Arts and Humanities, University of Siegen, Siegen, Germany*

Received January 17, 2025; Accepted August 21, 2025. Copyright: This is an open access article under the CC BY-NC-4.0 license.

## Abstract

**Aim:** Exploration of counseling contents and the role of nurse navigators (NN) in maternity clinics to support parents (and parents-to-be). **Design:** A retrospective descriptive study. **Methods:** A content analysis along with the development of initial categories of selected characteristics was conducted based on the written documentation of NN conversations from the pilot phase, covering the period from January 2021 to December 2023 (36 months). **Results:** A total of  $n = 757$  conversations with pregnant women and parents (and parents-to-be) were documented, and  $n = 707$  were included. Consultations occurred in person (65.6%), by phone (27.4%), or both (6.9%). A total of 82.9% of parents and (parents-to-be) reported stressors, which were addressed individually. Key focus areas included health-related topics, referrals for postpartum midwives, contact with authorities and health insurance providers, and ensuring pediatric follow-up care. **Conclusion:** Introducing an Nurse Navigator Program (NNP) in hospitals creates opportunities but also challenges that require dialogue. Clear role delineation and collaboration with breast-care nursing and midwifery services are crucial for effective maternity care cooperation.

**Keywords:** case management, document analysis, family nursing, hospital, nurse navigator, obstetrics.

## Introduction

The healthcare system is increasingly characterized by a multitude of services, treatment options, and restructuring processes, leading to complex and ongoing fragmentation of care (Klauber et al., 2024). In particular, gynecology, obstetrics, and pediatric medicine are affected by regional disparities in care, alongside phenomena such as centralization and a shortage of professionals (e.g., midwives and gynecologists), all occurring amid a continued decline in birth rates (Blum et al., 2024; Federal Statistical Office [Destatis], 2024). This situation can create barriers to care for women and necessitates enhanced coordination to avoid service interruptions and to support the healthy development of children (Information and Technology North Rhine-Westphalia, 2024),

especially for families whose daily lives are shaped by chronic illness, low health literacy, or psychosocial burdens (Lorenz et al., 2022). From a nursing perspective, Meleis's Transition Theory (TT) (Meleis, 2010), Wrights and Leahey's Calgary Family Assessment Model (Shajani & Snell, 2019), and family system theories, such as Friedemann's framework of systematic organization (Friedemann & Köhlen, 2017), provide a theoretical framework for analyzing these complex experiences. They highlight the need for a comprehensive and supportive healthcare system as well as expanded nursing roles that address the diverse needs of parents (and parents-to-be). The transition to parenthood is characterized by changes across various system levels, including personal identity, social roles, and relational dynamics as well as contextual influences that arise when individuals experience parenthood (Ozkaya et al., 2024). Nursing interventions should focus on strengthening social support networks and family systems (e.g., through information and counseling, postpartum care,

---

*Corresponding author: Alexander Hochmuth, Faculty of Business Management and Social Sciences, Osnabrück University of Applied Sciences, Caprivistraße 30a, D-49076 Osnabrück, Germany; email: a.hochmuth@hs-osnabrueck.de*

---

and interdisciplinary team networking) to promote positive outcomes during this transition.

In response to these challenges, new nursing roles and patient-centered models have emerged in recent years in both international and national contexts. These include case managers, patient navigators (PNs), care coordinators, and health coaches who operate within various care settings as part of interdisciplinary treatment teams (Braeske et al., 2018). These roles have developed from different historical needs and professional concepts and often overlap in their functions and objectives. The diversity of terms (Kelly et al., 2019) highlights the conceptual ambiguity in the assignment of activity profiles. Reviews by Kelly et al. (2019) and Carter et al. (2018) demonstrate that nurse navigator (NN) and case manager are globally recognized roles that complement each other, significantly contributing to family care through communication in interdisciplinary teams, facilitating access to care, navigating the system, and supporting various target groups. In Germany, 55 projects with PNs (or similar initiatives) already exist and are structured around the case management cycle, focusing on care processes as well as clinical and economic outcomes (Coors et al., 2024). PNs differ not only in terms of the content and scope of their services but also with regard to qualifications, types of employment, and funding (Coors et al., 2024). They care for a diverse range of individuals with various health conditions, while sharing the common challenge of working with complex and multimorbid patient groups. A key characteristic of their work is multidisciplinary collaboration (Coors et al., 2024).

#### *Nurse Navigator Program in maternity clinic*

A concrete example of such support services is the Nurse Navigator Program (NNP) in maternity clinics. Studies show that establishing early contact with parents (and parents-to-be) is crucial for identifying potential stressors early and facilitating access to further support services (Lin-Lewry et al., 2024; Oh, 2024). In Germany, various initiatives and funding calls have led to the creation of numerous support and information services for parents (and parents-to-be) and families. These services, focusing on the period around childbirth and the early years of life, are typically integrated into early intervention networks within municipalities. However, parents often struggle to find the right service due to the number of options available. There is frequently a gap in support for parents and newborns, since assistance often starts only after a hospital stay. NNPs are free

outreach services aimed at families with special support needs or questions about infant care (Siewert et al., 2024). The goal is to systematically and proactively reach families experiencing high psychosocial or social burdens during pregnancy or immediately after birth, and to guide them toward appropriate help and local support services (Siefert & Haustedt, 2023). In addition to addressing nursing topics, the work of the NNs, who have nursing or midwifery backgrounds (including pediatric nurses with specialized training and bachelor's degrees), focuses on women and family education, as well as multiprofessional collaboration within existing care services, such as midwife-led birth rooms, parenting classes, and social medical aftercare (Hochmuth et al., 2024).

### **Aim**

The aim of this study was to gain in-depth knowledge about the actual activities for pregnant women and families that NNs offer. This analysis should provide insights into how the NNs offer support and which topics were most common among parents (and parents-to-be), allowing the target group to be characterized and the needs of the target group to be better understood. The following questions guided the study:

- 1) What sociodemographic characteristics do pregnant women who are visited by NNs have?
- 2) What are the subjects of the counseling sessions?
- 3) Why do pregnant women or parents seek support from NNs?
- 4) What support do NNs provide?

### **Methods**

#### *Design*

To answer the research questions, a descriptive and retrospective standardized content analysis described by Kessler et al. (2023) was conducted: a) planning phase: population and sampling procedure, b) development phase: creating the code book and developing categories, and c) application phase: coding training and main coding (Kessler et al., 2023, pp. 11–14) together with the development of initial categories based on the Grounded Theory Methodology (GTM) of Strauss and Corbin (Kessler et al., 2023; Strauss & Corbin, 2010). The aim of this analysis was to examine the selected NN documentation from various perspectives (Rommerskirch-Manietta et al., 2021; Salheiser, 2019). This analysis was carried out following the Guidelines for the Reporting

of Document Analysis (CARDA) (Cleland et al., 2023) and the Reporting Guidelines Squire 2.0 for presenting quality improvement measures (Ogrinc et al., 2016).

### **Sample**

The sample included all complete NN conversation documentation created between 2021 and 2023 ( $n = 757$  digital case documentations) as part of the quality assurance process of the NNP in a tertiary care hospital in North Rhine-Westphalia (Germany). The data were anonymized to ensure that neither the women nor the health professionals could be identified. Cases with missing sociodemographic data were excluded from the analysis. For the analysis of the free-text documentation, criteria for case selection were defined in collaboration with NNs in advance to account for various dimensions (see Table 1). A theoretically guided case selection process followed (Strübing, 2021, pp. 31–34).

### **Data collection**

Access to the NN documentation for analysis was obtained through the nursing management of the NNP at the hospital. The anonymized documentation was provided in a digital Excel format, including sociodemographic and disease-specific data, organizational aspects, and free-text fields detailing the process and content of the conversations (e.g., reason for consultation, materials provided, and outcomes). Ethical clearance was obtained, and the hospital management approved the use of project data. In addition to the treatment agreement with the clinic signed by each patient, the parents (and parents-to-be) were informed by the NN before each counseling session about the NNP project, the documentation, and the use of data for project development purposes, including this specific research analysis. Consent for participation in the project, including the quality-assuring research analysis for further development of the project, was obtained by the NN. Since the data for this analysis were evaluated retrospectively in anonymized form, taking into account the benefit-risk assessment and the feasibility of the study, no additional informed consent was required. Furthermore, no conclusions could be drawn about the women or their families, as no personal data was collected or pseudonymized. The data were processed in accordance with data minimization and purpose limitation principles. Only the data necessary for the specific research purpose were processed. Appropriate security measures were

implemented to protect the data. The ethics committee approved the procedure.

### **Data analysis**

Using Excel software, a content analysis of selected characteristics was performed by AH. The analysis aimed to abstract and visualize frequencies and distributions of variable characteristics such as age, consultation topics, and access to additional services. A defined coding protocol guided the process. For the pre-test of the coding protocol, Holsti's CR was used to assess reliability estimates (Mao, 2017). Two coders (AH and a trained research assistant) independently coded the first 50 documents, achieving a high level of agreement for formal variables ( $CR = 0.996$ ). Discrepancies were analyzed, and the coding protocol was adjusted. Missing values were not replaced. The results were presented to the coordinators of the NNP, and validity was discussed. To answer questions (a) and (b) we applied the GTM, utilizing open and axial coding steps (Strauss & Corbin, 2010, 39–46, 75–78). The texts were analyzed line by line and relevant passages were assigned initial codes (Strübing, 2021, pp. 16–20). These codes emerged inductively from the data material, without predefined categories. Subsequently, in an iterative process, axial coding was conducted. The initial codes were grouped into categories and related to each other. To ensure quality of analysis, memos were continuously written (Strübing, 2021, pp. 35–37). A preliminary category system was developed, gradually refined, and subsequently used to code the remaining data. The results of the coding were summarized in a category system that reflects the central themes. The analysis was conducted using MAXQDA 2024 (VERBI Software, 2024).

### **Results**

The sample included  $n = 707$  complete NN documentations out of a total of  $n = 757$ , representing 19.51% of the 3,880 pregnant women admitted as inpatients from 2021 to 2023. Of the  $n = 251$  cases with free-text documentation,  $n = 46$  were selected for detailed analysis. Fifty documentation cases were excluded due to missing information. The median age of the women was 31 years (range: 16–45 years), with only 16% being under 25 years old. At the time of the NN consultation, 36.5% of women had one child, while 63.5% were childless. The majority of women were married (68%,  $n = 481$ ), and fewer than 10% ( $n = 72$ ) were single parents. Among the women, 10.6% ( $n = 75$ ) had a chronic illness, and 15.9% had gestational diabetes.

*Type and timing of navigator consultations*

NNs, who are certified pediatric nurses with a bachelor's degree and / or specific additional training, provide counseling and information to parents (and parents-to-be) during pregnancy and in the postpartum period. During the initial contact with the “Mother and Child Medical Center (MCMC)” (e.g., at the registration interview or admission), an initial introduction to the NNP

is provided, along with a voluntary family history assessment.

The goal is to systematically identify familial stressors that could negatively impact a child's healthy development using an adapted “Babylotsen-Plus-Screeningbogen” (Fisch et al., 2016, p. 1303) and to provide individualized information and counseling support.

**Table 1** Criteria for case selection (ex-ante)

Category	Explanation
<b>Socioeconomic and demographic characteristics</b>	Education and income levels: Differences based on educational background or economic situation.
	Marital status: Single parents (and parents-to-be) versus parents (and parents-to-be) in partnerships.
	Age: Young parents (and parents-to-be) (e.g., under 20) versus older parents (and parents-to-be) (e.g., over 35 years).
	Migration background: Parents (and parents-to-be) with or without experiences of displacement or language barriers.
<b>Psychosocial and emotional burdens</b>	Stress levels: Parents (and parents-to-be) experiencing high emotional or psychosocial stress (e.g., due to high-risk pregnancies, mental health issues, or traumatic experiences).
	Support networks: Parents (and parents-to-be) with or without familial or social support.
<b>Medical and health-related factors</b>	Risk profiles: Parents (and parents-to-be) with high-risk pregnancies or chronic illnesses.
	Need for specific counseling: Parents (and parents-to-be) requiring particular information, e.g., about nutrition, care, or postpartum follow-up.

The NN contacts parents (and parents-to-be) as soon as they become aware of their situation (e.g., through consultations with nursing staff or after the planned admission interview for birth). In addition to this outreach service, direct contact can also be initiated by the pregnant woman at any time. Among our respondents, the type of consultation varied between in-person contact (65.6%), phone contact (27.4%), and a combination of both (6.9%). The timing of the contact occurred in 41.6% of cases both before and after birth, while in 57.1% of cases, it was exclusively after birth (see Table 2).

*Contents and identified support needs of the counseling sessions*

Counseling is supplemented by the distribution of diverse and multilingual informational materials, an NN folder containing all relevant contacts and services, as well as an individually compiled checklist (n = 628 cases) for the period following the stay at the MCMC. A language barrier existed for 13% of the parents (and parents-to-be) who sought assistance. In n = 11 cases, the NNs incorporated multilingual informational materials (e.g., video sequences and flyers) and interpreters

into the counseling process. Nursing and health-related topics accounted for 46.3% of the counseling content, alongside general information about the hospital and MCMC (60.8%), local services for families (56.1%), topics related to “Family and Work” (45.4%), and questions about the registry office and child custody (43.1%). Table 3 provides an overview of the various counseling topics.

*Support needs of parents (and parents-to-be) and nurse navigator interventions*

The NN and the parents (and parents-to-be) collaboratively planned the necessary steps to be taken after their stay at the maternity clinic. A total of n = 586 (82.9%) parents (and parents-to-be) exhibited various stressors (e.g., family life), which varied in intensity depending on the age group and were individually addressed by the NN. In addition to the lack of secured pediatric follow-up care, notable issues included the absence of a postpartum midwife, insufficient family support before and after childbirth, and nicotine use among expectant fathers (see Figure 1).

In  $n = 119$  cases, the NN successfully facilitated networking or support within the multiprofessional care team. With the consent of the women's or parents (and parents-to-be), they established contact with various services, including child and adolescent psychologists (36.1%,  $n = 43$ ), early intervention services (18.5%,  $n = 22$ ), breastfeeding and lactation counseling (15.9%,  $n = 19$ ), postpartum midwives (12.6%,  $n = 15$ ), the multiprofessional team of the maternity ward or neonatology (10.1%,  $n = 12$ ), various authorities, district pediatricians,

health insurance companies, pharmacies, and the local integration center.

A qualitative analysis of  $n = 46$  relevant cases, highlighted the role of NNs in navigating structured and supportive services, facilitating access to resources and networks through targeted counseling and educational measures. The analysis identified four categories that described the phenomenon “NNP as an orientation aid and support for parents and parents-to-be” (see Figure 2).

**Table 2** Socio-demographic characteristics of participants ( $n = 707$ )

Variable	Number of women (%)
<b>Age in years</b>	
under 20	18 (2.5)
21–25	95 (13.4)
26–30	190 (26.9)
31–35	248 (35.1)
36–40	121 (17.1)
41+	35 (5.0)
<b>Relationship status</b>	
with husband / partner	635 (89.8)
single	72 (10.2)
<b>Already children</b>	
no	449 (63.5)
yes	258 (36.5)
<b>Physical or mental health condition</b>	
no	519 (73.4)
yes	188 (26.6)
<b>Gestational phase and form of contact</b>	
before birth	9 (1.3)
in person	5
by telephone	4
by phone & in person	-
after birth	404 (57.1)
in person	205
by telephone	172
by phone & in person	27
before & after birth	294 (41.6)
in person	254
by telephone	18
by phone & in person	22

The category “Individual life situations of parents (and parents-to-be)” encompasses the diverse factors that influence pregnancy and preparation for parenthood. These include socioeconomic conditions, educational attainment, migration and refugee backgrounds and family circumstances. Single parents, parents with disabilities, and families with refugee or migration experiences, in particular, face specific challenges. Parents (and parents-to-be)

with a lower socioeconomic status exhibit a higher demand for counseling and information, especially when confronted with additional burdens such as financial constraints, lack of access to midwives, or language barriers. These uncertainties often lead to an increased use of support services. Fears, insecurities, and traumas shape the experiences of many parents (and parents-to-be). Furthermore, the analysis reveals various subcategories, such as “psychosocial and emotional stress”, “flight

and migration” and “illness and caregiving in daily life” often overlap and mutually reinforce one another. For instance, women with a refugee background who also have a chronic illness are exposed to heightened emotional stress, significantly increasing their need for support. Additionally, the dynamic nature of life situations means that they are not static but subject to continuous changes.

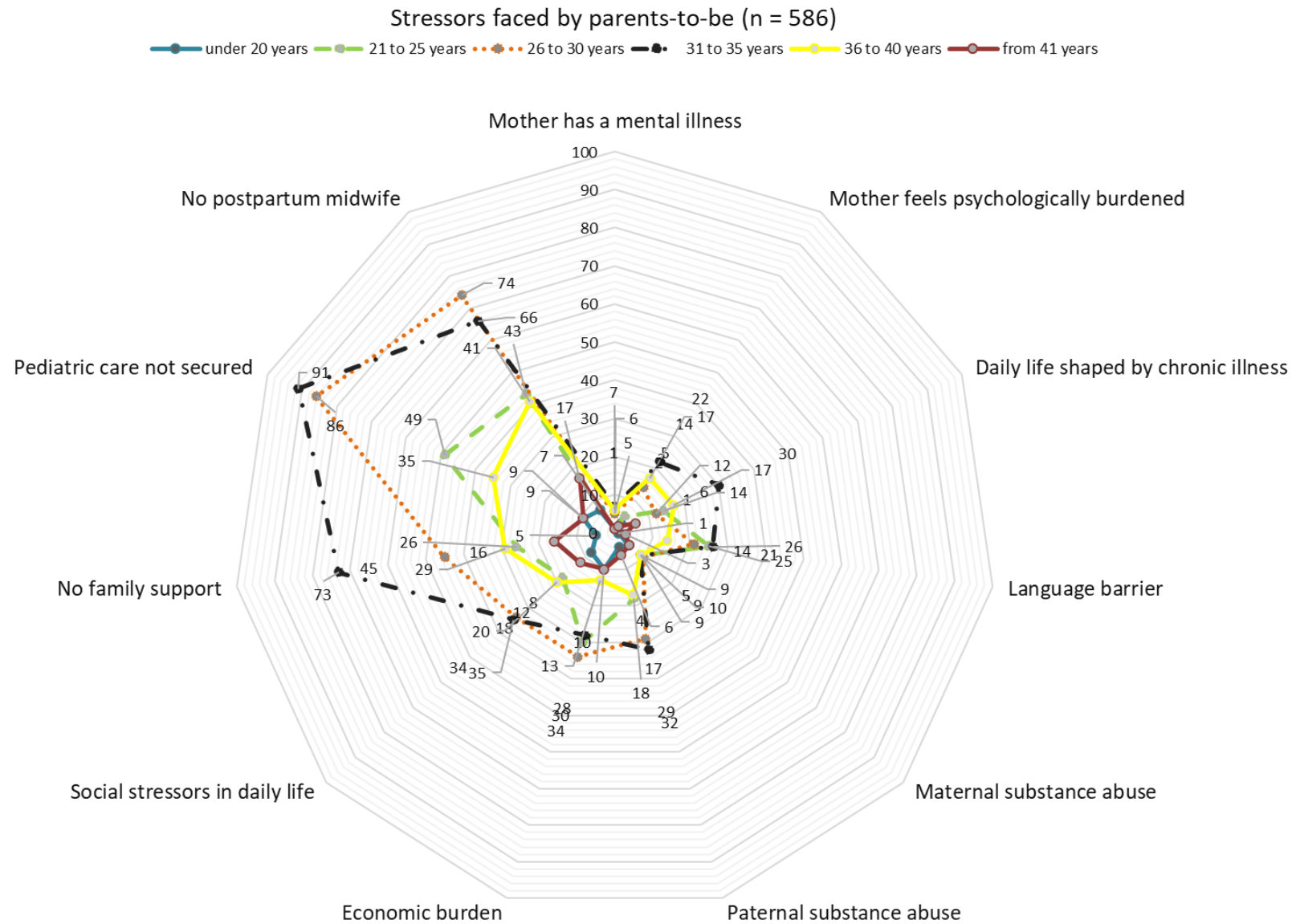
Financial conditions, health status and family structures may shift during pregnancy or after birth, presenting new challenges. These interdependencies underscore the necessity of a flexible and individually tailored support system that can adapt to the evolving needs of parents (and parents-to-be) and address them proactively.

**Table 3** Counseling topics (multiple coding possible for each parent [-to-be])

Topics	N (%)
Midwifery care & postpartum midwife care	701 (99.2)
Well-child checkups	645 (91.2)
Growing up mentally healthy	629 (88.9)
Attachment	626 (88.5)
Breastfeeding, bottle feeding & pumping and storing breast milk	611 (86.4)
Sudden infant death syndrome & safe sleep for babies	603 (85.3)
Violence	592 (83.7)
Bathing and washing	590 (83.5)
Kinesthetic / infant handling	589 (83.3)
Skin care	573 (81.1)
Crying infant	547 (77.4)
Tips and ideas for movement for babies and toddlers	530 (74.9)
Baby car seats	491 (69.5)
Perceiving, caring for, and observing newborns	435 (61.5)
Preventive check-ups	389 (55.0)
Puerperium bed	384 (54.3)
Baby sling	313 (44.3)
Mental health & postpartum depression	297 (42.0)
Birth follow-up conversation	249 (35.2)
Eating and drinking before and after childbirth	198 (28.0)
Nicotine abuse	184 (26.0)
Gestational diabetes	151 (21.4)
Exercise and sport: before, during, and after pregnancy	61 (8.6)
Postnatal recovery	61 (8.6)
Dealing with pets in everyday life	11 (1.6)
Intrauterine fetal death (IUFD)	4 (0.57)
Lady’s mantle tea during pregnancy	2 (0.28)
Information on cesarean section (C-section)	2 (0.28)
Coping with a premature birth	2 (0.28)
Information and advice about coping with grief	2 (0.28)

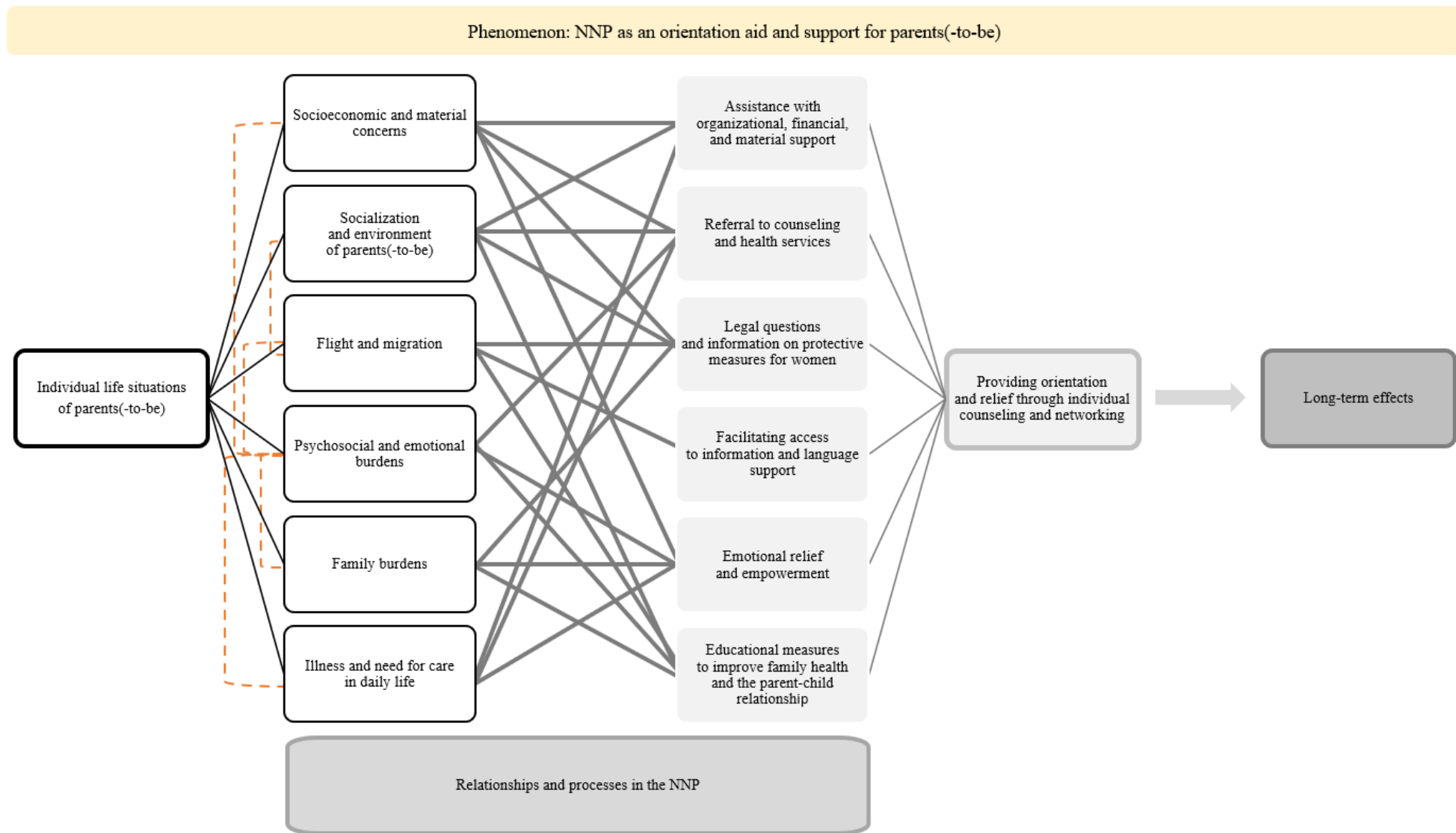
The category “providing orientation and relief through individual counseling and networking” emphasizes that NNs offer guidance tailored to the specific needs of parents (and parents-to-be). Through observation and assessment, NNs direct parents (and parents-to-be) to relevant resources, such as medical facilities, social-pedagogical services or parent-child groups. A central component of the NNP is the provision of information

specifically tailored to the life phase, for example, in the form of checklists. NNs convey (evidence-based) knowledge on topics such as nutrition, caregiving, parenting and legal matters, presented in a way that is accessible and practical for parents (and parents-to-be). Beyond factual support, the counseling also focuses on emotional relief.



**Figure 1** Stressors faced by parents (and parents-to-be)



**Figure 2** Category system



This is illustrated by the following documented observation: “[...] Due to her fear of not being a good mother and her medical history, she delayed her pregnancy for a long time. Ms. B requires a great deal of positive affirmation and encouragement. She cried during both the first and second sessions. For instance, she perceives her inability to breastfeed currently and her need to pump as a personal failing (‘I can’t even breastfeed’.)” (Case\_20241025\_11).

This example highlights how NNs create a trusting environment in which parents (and parents-to-be) can express insecurities and strengthen their self-confidence. The category “relationships and processes in the NNP” describes the role of NNs as central points of contact. The relationship between parents (and parents-to-be) and NNs is characterized by trust and personal connection, enabling sustained support. NNs not only provide “security” and “protection,” but also establish a safeguarded environment for pregnant women through their confidentiality obligations, for example, in cases of domestic violence. Additionally, NNs act as intermediaries to a network of health, education, and social institutions, coordinating and harmonizing access to these resources to facilitate their utilization. The findings highlight that the combination of orientation, networking, emotional relief, education and long-term resource development provided by NNs significantly contributes to promoting familial health and parental competencies.

## Discussion

In the context of this work, the perspectives and characteristics of parents (and parents-to-be) who utilized the NNP in a maternity clinic were comprehensively examined for the first time. Sociodemographic and disease-specific data, organizational aspects, the content of NN conversations, distributed informational material, and the outcomes of these discussions were analyzed. The results reveal a range of opportunities and challenges that warrant further exploration within a critical discussion framework.

### *Benefits of a Nurse Navigator Program in maternity care*

As indicated by the results of the Together for families (Zusammen für Familien [ZuFA]) – Monitorings (Scharmanski & Renner, 2019) and the multiperspective German Hospital Institute (“Deutsches Krankenhausinstitut” [DKI]) study on NNP in maternity and pediatric clinics (Steffen et al., 2022), the introduction of NNPs

in a maternity clinic can significantly enhance women’s health care. Theoretical assumptions discussed in the context of Meleis’ Transition Theory (Meleis, 2010), supported by international study results (Harris et al., 2023), suggest that NNPs sustainably improve counseling services for parents (and parents-to-be) transitioning to early parenthood. The flexible and accessible counseling provided by NNs, who are qualified health and pediatric nurses with additional qualifications (e.g., bachelor’s degree, further training), offers needs-oriented support for parents (and parents-to-be), aligning with current regulations and qualification requirements for NNs set by the German Society for Care and Case Management (“Deutsche Gesellschaft für Care und Case Management [DGCC] e.V.”) (Stegmeier & Löcherbach, 2022). Our qualitative analysis, which explored the support issues of parents (and parents-to-be) and the interventions of NNs in a maternity clinic, corroborates these findings. The categories “individual life situations of parents (and parents-to-be)” and “providing orientation and relief through individual counseling and networking” highlight how NNs address challenges arising from sociodemographic factors, medical conditions, and individual life circumstances.

Notably, parents with low socioeconomic status, migrant backgrounds, or health impairments benefit from the personalized support provided by NNs, who connect them to relevant resources and services. A key aspect is the role of NNs in addressing mental health issues, such as anxiety and depression, particularly among parents (and parents-to-be) with trauma histories or those facing increasing parenting stresses. Integrating Trauma-Informed Nursing Care approaches (Sperlich et al., 2017) and concepts such as “security and protection” may be crucial to enhancing the effectiveness of NNPs (Koçak et al., 2021). The findings also emphasize the importance of focusing on marginalized groups, including single parents, parents with disabilities, and refugee or migrant families. By offering tailored support and fostering a sense of belonging, NNs can help mitigate health disparities and improve parental health literacy, ultimately leading to better family health outcomes for these vulnerable populations.

The high uptake of personal contact (65.6%) and the supplementary use of telephone counseling (27.4%) demonstrate that NNs respond promptly to the individual needs of women, indicating significant demand from parents (and parents-to-be) and facilitating access through various

communication channels. These findings are consistent with those in both the national and international literature (Andresen et al., 2022; Carter et al., 2018; Kelly et al., 2019). Another aspect is the provision of multilingual informational materials and the involvement of interpreters in overcoming language barriers. Carter et al. (2018) emphasize the outreach role of NNs in accessing ethnocultural groups, racial-ethnic minorities, refugees and migrants. This raises the question of whether current interpreting measures in German hospitals are sufficient to ensure equitable information dissemination and counseling for parents (and parents-to-be) (Federal Association of Interpreters and Translators, 2024). Despite efforts to overcome language barriers, 13% of individuals have low to no proficiency in German or English, highlighting the need to further improve the availability and quality of multilingual services. Nowak and Hornberg (2023) arrive at similar conclusions, noting that linguistic barriers impede the utilization of health services and can lead to feelings of alienation and exclusion. As early as 2018, the National Center for Early Support (“Nationales Zentrum für Frühe Hilfen” [NZFH]) highlighted communication difficulties caused by limited German language skills among families in stressful life situations (Renner et al., 2018). Despite the increasing number of women experiencing communication difficulties due to poor German language skills, the legislator has not yet provided for the reimbursement of qualified language mediation in the healthcare sector (Federal Association of Interpreters and Translators, 2024). The results show that NNs in this context rely on multilingual informational materials and video sequences (e.g., offerings from the BzGA) or collaboration with local institutions such as municipal integration centers. As discussed by Bäckström et al. (2022), the use of digital health technologies could further support this effort. The implementation of NNPs further promotes interdisciplinary collaboration in obstetrics and strengthens family-centered care through networking with specialized areas such as child and adolescent psychology, breastfeeding, lactation counseling, and local offerings (e.g., early intervention services). Similar results are reported by Andresen et al. (2022) for the Baby Navigator Program in Frankfurt am Main, as well as by Kramer et al. (2012) in the study “Safe Mom, Safe Baby” (SMSB) and in the scoping review by Oh (2024). Andresen et al. (2022, p. 147) emphasize that interdisciplinary networking significantly depends

on the individual commitment and professional actions of NNs.

### *Challenges in implementing a Nurse Navigator Program*

Despite the mentioned advantages of NNPs, a central challenge remains in identifying and systematically capturing family stressors that could negatively impact a child’s healthy development (Andresen et al., 2022). Although the “Babylotsen-Plus-Screeningbogen” allows for structured assessment, as recommended by Fisch et al. (2016) and utilized in some NNPs, the psychometric quality of the instrument warrants critical examination. There is a risk that many families with no or only low risk may be incorrectly classified as needing support, as suggested by current findings. Furthermore, it cannot be ruled out that families with complex dynamics and psychosocial risks were specifically targeted in the initial phase of NNPs. In this context, Andresen et al. (2022) point to the general tension within early intervention services between a universal perspective on all families and a focus on specific risks. Additionally, there is a discrepancy between the identified support needs and the measures actually implemented. Although stressors in family life were identified in 82.9% of cases (including lack of family support, everyday life marked by chronic illness, lack of connection to midwives or pediatricians, etc.), it remains unclear to what extent these stressors were actually addressed by NNPs and what long-term effects the initiated measures have on the health, well-being, and perceptions of parents (and parents-to-be). A more in-depth analysis is necessary to better understand the actual benefits of NNPs for affected families. Furthermore, the results indicate potential issues in service delivery and accessibility of NN offerings for pregnant women under 20 and over 40 years old. In the age group of parents under 20, average stress levels are most pronounced (Lin-Lewry et al., 2024). As shown by the distribution of counseling topics, NNs with a nursing background serve as important guides in the transition from the healthcare system to the child and youth welfare system. Therefore, taking on the role of NN requires not only knowledge in child and youth social work and basic counseling skills but also nursing expertise in supporting parents (and parents-to-be) and caring for newborns (Carter et al., 2018; Oh, 2024). Coors et al. (2024) arrive at similar conclusions when comparing different national navigator projects. The various counseling topics highlight the density of information during this sensitive

time and the possible interest of parents (and parents-to-be) in care and health-related topics (Lorenz et al., 2022; Oh, 2024).

Issues such as mental health and postpartum depression (42%) or grief (0.28%) receive relatively little attention, indicating slow societal awareness and an increasing openness to discussing these topics (Böcker, 2022). The role of NNs in maternity clinics and emerging nursing roles in this area should not primarily focus on compensating for structural conditions and profession-specific issues. Coors et al. (2024) further emphasize the importance of continuous, women-centered, high-quality support for women with complex care needs provided by qualified and specialized professionals such as PNs.

In summary, NNs provide targeted support through psychosocial extensions of nursing and medical care to improve parental and newborn health outcomes. They systematically identify family stressors around childbirth, document them, activate family resources, provide individual counseling, and refer families to early intervention services and social services when needed (Coors et al., 2024).

#### *Implications for practice*

Our study shows that implementing NNPs in hospitals is associated with challenges. As described in other studies, our pilot phase also revealed that hospitals often do not provide ideal conditions for building trust during conversations (Kokorelias et al., 2021; Pratt-Chapman et al., 2021; Valaitis et al., 2017). In addition to the lack of adequate physical space, the regular hospital routine, interruptions due to examinations, and the presence of other women influence the conversation process. The “navigation process” is time-consuming and requires flexibility, while hospitals are characterized by short lengths of stay and clear procedural workflows. Our analysis showed that the average length of stay is three to four days and contact with parents (and parents-to-be) usually occurs during acute hospital admission or after birth. After discharge, the conversation process often breaks off which makes it difficult to reach potential families in a timely manner. To counteract this, involving NNs in gynecological or pediatric practices as well as in other outpatient settings, seems reasonable to ensure continuous support both before and after women discharge. When implementing NNPs in hospitals, it is essential to pay particular attention to the voluntary nature of the service. In these cases, and generally with proactive NNs in hospitals, strategies must be developed to maximize

the benefits of the service (Coors et al., 2024). Our evaluation also showed that there were overlaps between the work of NNs and other services in the hospital. Such role conflicts should be avoided by clear delineation criteria and job descriptions, as recommended in the quality criteria for NNPs in maternity clinics (Schmenger et al., 2020).

#### *Limitation of the study*

This study had several limitations that may have influenced the results. Firstly, it is important to note the exploratory nature of the study and the associated quality of the conversation documentation. Another limitation of this analysis of the internal conversation documentation of an NNP is that it was conducted monocentrically at a tertiary care hospital in North Rhine-Westphalia. This may introduce bias in the data, as pregnant women with a higher risk of a critical birth might choose to birth at the maternity clinic. Due to the involvement of only a single researcher in data extraction and coding, inter-rater reliability was not applicable in this study. Given the exploratory nature of the research, all relevant data were included without conducting a formal assessment of data quality. This approach aligns with the study’s aim of comprehensive exploration rather than selective analysis based on predetermined quality criteria. The NN conversation documentation was subject to intuitive interpretation by the NN, especially in the free text fields, which may have led to potential distortions. The lack of address information in the documentation hindered the ability to distinguish between cases based on different places of residence. Additionally, only a preliminary and explorative qualitative analysis of the documented case files of the NNP was possible, as additional information was sometimes missing. The goal was not to achieve theoretical saturation, but rather the analysis served as an initial exploration to inform further in-depth research.

Despite these limitations, the findings serve as a first step toward a more extensive development of a grounded theory using triangulation of multiple data sources. The results are not representative and should be considered as an initial attempt to outline the practice of NNs in German maternity clinic.

#### *Conclusion*

NNPs in maternity care address critical gaps in counseling, mental health support, cultural competence, and interdisciplinary collaboration. By acting as guides for parents (and parents-to-be), NNs bridge the transition from clinical care to early

intervention services, proactively addressing familial stressors and improving access to support networks. Grounded in holistic frameworks like Meleis' Transition Theory and informed by family-centered care approaches, NNs provide tailored and accessible care, particularly for vulnerable populations facing linguistic, economic, or social barriers.

Future efforts should focus on refining structural integration, enhancing language mediation services, and expanding interdisciplinary collaboration. The evolving role of NNs also underscores the need for advanced nursing qualifications and policy advocacy, aligning with ongoing discussions about the German Nursing Competence Act ("Pflegekompetenzgesetz [PKG]") (German Nursing Council, 2024). Further research is essential to explore these dynamics and optimize the implementation of NNPs in maternity care, ensuring equitable, family-centered support.

## Ethical aspects and conflict of interest

Ethical approval was obtained from the University of Applied Sciences Osnabrück (HSOS/2023/1/3), along with the approval of the hospital management to utilize the project data. CD declares that he has no potential conflicts of interest. AH was responsible for the implementation of the NPP in the maternity clinic.

## Funding

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

## Author contributions

Conception and design (AH), data analysis and interpretation (AH), manuscript draft (AH), critical revision of the manuscript (AH), final approval of the manuscript (AH, CD).

## References

- Andresen, S., Althaus, N., & Dietz, T. (2022). *Neugeborene willkommen heißen und ihre Familien unterstützen: Eine empirische Studie zu Frühen Hilfen und dem Lotsendienst »Babylotse Frankfurt am Main«* [Welcoming newborns and supporting their families: an empirical study on early childhood support services and the »Babylotse Frankfurt am Main« navigator service] (1st ed.). Beltz Juventa.
- Bäckström, C., Knez, R., Fahlgren, M., Synnergren, M., & Larsson, V. (2022). In the need of a digital cicerone in healthcare? – guidance for parents. *BMC Pregnancy and Childbirth*, 22, 863. <https://doi.org/10.1186/s12884-022-05120-0>
- Blum, K., Parloh, A. K., & Schenk, M. (2024). *Perinatalbefragung zur pflegerischen Strukturqualität: Gutachten des Deutschen Krankenhausinstituts für die Deutsche Krankenhausgesellschaft* [Perinatal survey on the structural quality of nursing care: report by the German Hospital Institute for the German Hospital Association]. Deutsches Krankenhausinstitut. [https://www.dki.de/fileadmin/user\\_upload/2024-02\\_Perinatalbefragung\\_final.pdf](https://www.dki.de/fileadmin/user_upload/2024-02_Perinatalbefragung_final.pdf)
- Böcker, J. (2022). Der Wandel der Anerkennung von Fehl- und Totgeburt als Geburt eines Kindes [The change in the recognition of miscarriage and stillbirth as the birth of a child]. *Österreichische Zeitschrift Für Soziologie*, 47(1), 59–82. <https://doi.org/10.1007/s11614-022-00470-7>
- Braeske, G., Huster, S., Pflug, C., Rieckhoff, S., Ströttchen, J., Nolting, H.-D., & Meyer-Rötz, S. H. (2018). *Studie zum Versorgungsmanagement durch Patientenlotsen* [Study on care management by patient navigators]. IGES Institut GmbH. [https://www.bundesgesundheitsministerium.de/fileadmin/Daten/5\\_Publikationen/Praevention/Berichte/IGES\\_Versorgungsmanagement\\_durch\\_Patientenlotsen\\_042018.pdf](https://www.bundesgesundheitsministerium.de/fileadmin/Daten/5_Publikationen/Praevention/Berichte/IGES_Versorgungsmanagement_durch_Patientenlotsen_042018.pdf)
- Bundesverband der Dolmetscher und Übersetzer (BDÜ) [Federal Association of Interpreters and Translators]. (2024, July). *Qualifizierte Sprachmittlung im Gesundheitswesen – wann kommt das Gesetz?* [Qualified language mediation in healthcare – when will the law come into effect?]. <https://bdue.de/mdue-online/kostenuebernahme-dolmetschen-im-gesundheitswesen>
- Carter, N., Valaitis, R. K., Lam, A., Feather, J., Nicholl, J., & Cleghorn, L. (2018). Navigation delivery models and roles of navigators in primary care: a scoping literature review. *BMC Health Services Research*, 18, 96. <https://doi.org/10.1186/s12913-018-2889-0>
- Cleland, J., MacLeod, A., & Ellaway, R. H. (2023). CARDA: Guiding document analyses in health professions education research. *Medical Education*, 57(5), 406–417. <https://doi.org/10.1111/medu.14964>
- Coors, M., Greiner, W., Harst, L., Schmitt, J., & Sundmacher, L. (2024). Optimierte Versorgung oder Orientierungshilfe: Im immer komplexer werdenden Gesundheitssystem brauchen Menschen Unterstützung [Optimized care or guidance: in an increasingly complex healthcare system, people need support]. *Deutsches Ärzteblatt*, 121(12), A816–A821.
- Deutschen Pflegerates e.V. [German Nursing Council]. (2024, September 30). *Wichtiges Signal für die pflegerische Versorgung und die Zukunft der Profession Pflege* [An important signal for nursing care provision and the future of the nursing profession]. Retrieved January 14, 2025, from <https://deutscher-pflegerat.de/profession-staerken/pressemitteilungen/wichtiges-signal-fuer-die-pflegerische-versorgung-und-die-zukunft-der-profession-pflege>
- Fisch, S., Keller, T., Nazmy, N., Stasun, U., Keil, T., & Klapp, C. (2016). Evaluation des Babylotse-Plus-Screeningbogens: Untersuchung eines einfachen Instruments zur Identifizierung psychosozial belasteter Eltern von Neugeborenen der Berliner Charité [Evaluation of the Babylotse-Plus screening form: evaluation of a simple instrument to systematically identify parents of newborns with severe psychosocial stress at Charité Berlin]. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 59(10), 1300–1309. <https://doi.org/10.1007/s00103-016-2425-5>

- Friedemann, M.-L., & Köhlen, C. (2018). *Familien- und umweltbezogene Pflege: Die Theorie des systematischen Gleichgewichts und ihre Umsetzung* [Family- and environment-oriented nursing: the theory of systemic balance and its implementation]. Hogrefe.
- Harris, S. A., Harrison, M., Hazell-Raine, K., Wade, C., Eapen, V., & Kohlhoff, J. (2023). Patient navigation models for mental health of parents expecting or caring for an infant or young child: a systematic review. *Infant Mental Health Journal: Infancy and Early Childhood*, 44(4), 587–608. <https://doi.org/10.1002/imhj.22075>
- Hochmuth, A., Hochmuth, A., Kühme, B., & Dockweiler, C. (2024). Familien frühzeitig erreichen und informieren. Eine Analyse von Webseiten- und Social-Media-Beiträgen über Lotsendienste in Geburtskliniken [Reaching and informing families at an early stage: an analysis of websites and social media posts about navigation services in maternity clinics]. *Pflegewissenschaft*, 26(2), 94–101. <https://doi.org/10.3936/q2612461>
- Information und Technik Nordrhein-Westfalen [Information and Technology North Rhine-Westphalia]. (2024, August 2). NRW: Im Jahr 2023 gab es rund 56 000 gemeldete Verfahren zur Einschätzung der Kindeswohlgefährdung [NRW: In 2023, there were approximately 56,000 reported procedures for assessing child welfare endangerment]. IT.NRW. Retrieved January 14, 2025, from <https://www.it.nrw/nrw-im-jahr-2023-gab-es-rund-56-000-gemeldete-verfahren-zur-einschaetzung-der-kindeswohlgefaehrung>
- Kelly, K. J., Doucet, S., & Luke, A. (2019). Exploring the roles, functions, and background of patient navigators and case managers: a scoping review. *International Journal of Nursing Studies*, 98, 27–47. <https://doi.org/10.1016/j.ijnurstu.2019.05.016>
- Kessler, S. H., Sommer, K., Humprecht, E., & Oehmer-Pedrazzi, F. (2023). Manuelle standardisierte Inhaltsanalyse [Manual standardized content analysis]. In F. Oehmer-Pedrazzi, S. H. Kessler, E. Humprecht, K. Sommer, & L. Castro (Eds.), *Standardisierte Inhaltsanalyse in der Kommunikationswissenschaft* (pp. 9–21). Springer VS Wiesbaden. [https://doi.org/10.1007/978-3-658-36179-2\\_2](https://doi.org/10.1007/978-3-658-36179-2_2)
- Klauber, J., Wasem, J., Beivers, A., Mostert, C., & Scheller-Kreinsen, D. (2024). *Krankenhaus-Report 2024* [Hospital Report 2024]. Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-662-68792-5>
- Koçak, V., Persson, E.-K., Svalenius, E. C., Altuntug, K., & Ege, E. (2021). What are the factors affecting parents' postnatal sense of security? *European Journal of Midwifery*, 5, 38. <https://doi.org/10.18332/ejm/140139>
- Kokorelias, K. M., Shiers-Hanley, J. E., Rios, J., Knoepfli, A., & Hitzig, S. L. (2021). Factors influencing the implementation of Patient Navigation Programs for adults with complex needs: a scoping review of the literature. *Health Services Insights*, 14. <https://doi.org/10.1177/11786329211033267>
- Kramer, A., Nosbusch, J. M., & Rice, J. (2012). Safe mom, safe baby: a collaborative model of care for pregnant women experiencing intimate partner violence. *The Journal of Perinatal & Neonatal Nursing*, 26(4), 307–316. <https://doi.org/10.1097/JPN.0b013e31824356dd>
- Lin-Lewry, M., Thi Thuy Nguyen, C., Hasanul Huda, M., Tsai, S.-Y., Chipojola, R., & Kuo, S.-Y. (2024). Effects of digital parenting interventions on self-efficacy, social support, and depressive symptoms in the transition to parenthood: a systematic review and meta-analysis. *International Journal of Medical Informatics*, 185, 105405. <https://doi.org/10.1016/j.ijmedinf.2024.105405>
- Lorenz, S., Sann, A., Ulrich, S. M., Löchner, J., Seilbeck, C., Liel, C., & Walper, S. (2022). *Lebenslagen und Belastungssituationen von Familien mit Säuglingen und Kleinkindern in Deutschland: Zentrale Ergebnisse der Studie »Kinder in Deutschland 0-3« (KiD 0-3 2015)* [Living conditions and stress situations of families with infants and toddlers in Germany: key findings from the “Children in Germany 0–3” (KiD 0–3 2015) study]. Nationalen Zentrum Frühe Hilfen (NZFH). [https://www.fruehehilfen.de/fileadmin/user\\_upload/fruehehilfen.de/pdf/Publikation-NZFH-Materialien-FH-15-Forschungsbericht-Lebenslagen-und-Belastungssituationen-von-Familien-in-Deutschland\\_bf.pdf](https://www.fruehehilfen.de/fileadmin/user_upload/fruehehilfen.de/pdf/Publikation-NZFH-Materialien-FH-15-Forschungsbericht-Lebenslagen-und-Belastungssituationen-von-Familien-in-Deutschland_bf.pdf)
- Mao, Y. (2017). Intercoder reliability techniques: Holsti method. In M. Allen (Ed.), *The SAGE Encyclopedia of Communication Research Methods* (pp. 740–743). SAGE Publications. <https://doi.org/10.4135/9781483381411.n258>
- Meleis, A. (2010). *Transitions Theory: middle range and situation specific theories in nursing research and practice*. Springer Publishing Company.
- Nowak, A. C., & Hornberg, C. (2023). Erfahrungen von Menschen mit Fluchtgeschichte bei der Inanspruchnahme der Gesundheitsversorgung in Deutschland – Erkenntnisse einer qualitativen Studie [Experiences of people with refugee backgrounds in utilising healthcare in Germany-findings from a qualitative study]. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 66(10), 1117–1125. <https://doi.org/10.1007/s00103-022-03614-y>
- Ogrinc, G., Davies, L., Goodman, D., Batalden, P., Davidoff, F., & Stevens, D. (2016). SQUIRE 2.0 (Standards for QUality Improvement Reporting Excellence): revised publication guidelines from a detailed consensus process. *BMJ Quality & Safety*, 25(12), 986–992. <https://doi.org/10.1136/bmjqs-2015-004411>
- Oh, J. (2024). Patient navigation in women's health care for maternal health and noncancerous gynecologic conditions: a scoping review. *Women's Health Nursing*, 30(1), 26–40. <https://doi.org/10.4069/whn.2024.03.15>
- Ozkaya, M., Korukuc, O., & Aune, I. (2024). Transition to motherhood of puerperal women with preterm birth in a challenging lifetime: Transition Theory-based study. *Research and Theory for Nursing Practice*, 38(1), 72–90. <https://doi.org/10.1891/RTNP-2023-0016>
- Pratt-Chapman, M. L., Silber, R., Tang, J., & Le, P. T. D. (2021). Implementation factors for patient navigation program success: a qualitative study. *Implementation Science Communications*, 2, 141. <https://doi.org/10.1186/s43058-021-00248-0>
- Renner, I., Scharmski, S., van Staa, J., Neumann, A., & Paul, M. (2018). Gesundheit und Frühe Hilfen: Die intersektorale Kooperation im Blick der Forschung [The health sector and early childhood intervention: intersectoral collaboration in research]. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 61(10), 1225–1235. <https://doi.org/10.1007/s00103-018-2805-0>



- Rommerskirch-Manietta, M., Roes, M., Palm, R., Albers, B., Müller-Widmer, R., Stacke, T. I., Bergmann, J. M., Manietta, C., & Purwins, D. (2021). Präferenzen des alltäglichen Lebens in der Pflegedokumentation: Eine explorative Dokumentenanalyse in verschiedenen pflegerischen Settings [Preferences for everyday living written in the nursing record: an explorative document analysis in various nursing settings]. *Pflege*, 34(4), 191–202. <https://doi.org/10.1024/1012-5302/a000811>
- Salheiser, A. (2019). Natürliche Daten: Dokumente [Natural data: documents]. In N. Baur & J. Blasius (Eds.), *Handbuch Methoden der empirischen Sozialforschung* (2nd ed., pp. 1119–1134). Springer VS. [https://doi.org/10.1007/978-3-658-21308-4\\_80](https://doi.org/10.1007/978-3-658-21308-4_80)
- Scharmski, S., & Renner, I. (2019). *Geburtskliniken und Frühe Hilfen: Eine Win-Win-Situation? Ergebnisse aus dem NZFH-Forschungszyklus "Zusammen für Familien" (ZuFa-Monitoring)* [Maternity hospitals and early help: a win-win situation? Results from the NZFH research cycle "Together for Families" (ZuFa monitoring). Nationales Zentrum Frühe Hilfen (NZFH)]. <https://doi.org/10.17623/NZFH:K-GebKliZuFa>
- Schmenger, S., Schmutz, E., Backes, J., & Scharmski, S. (2020). *Zentrale Qualitätskriterien für Lotsendienste der Frühen Hilfen in Geburtskliniken. Fachliche Anforderungen für die weitere Profilierung* [Central quality criteria for navigation services of early help in maternity hospitals: professional requirements for further profiling]. Nationales Zentrum Frühe Hilfen (NZFH). <https://doi.org/10.17623/NZFH:EPP-QkLFHG>
- Shajani, Z., & Snell, D. (2019). *Wright and Leahey's nurses and families: a guide to family assessment and intervention* (7th ed.). F. A. Davis Company.
- Siefert, S., & Haustedt, N. (2023). Sicherung von Teilhabe durch Lotsendienste [Securing participation through navigation services]. *Public Health Forum*, 31(2), 90–93. <https://doi.org/10.1515/pubhef-2023-0009>
- Siewert, S., Steffen, P., & Parloh, A. K. (2024). Lotsendienste in Geburtskliniken [Navigation services in maternity clinics]. *Hebammen Wissen*, 6, 48–51. <https://doi.org/10.1007/s43877-024-1244-4>
- Sperlich, M., Seng, J. S., Li, Y., Taylor, J., & Bradbury-Jones, C. (2017). Integrating trauma-informed care into maternity care practice: conceptual and practical issues. *Journal of Midwifery & Women's Health*, 62(6), 661–672. <https://doi.org/10.1111/jmwh.12674>
- Statistisches Bundesamt (Destatis) [Federal Statistical Office]. (2024, July). *Daten der lebendgeborenen, totgeborenen, gestorbenen und der gestorbenen im 1. lebensjahr* [Data on live births, stillbirths, deaths, and deaths in the first year of life]. <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Geburten/Tabellen/lebendgeborene-gestorbene.html>
- Steffen, P., Siewert, S., & Blum, K. (2022). *Viele Brücken zwischen Kliniken, Kommunen und Eltern gebaut, weitere möglich: Quantitative Studie zu Lotsendiensten in Geburts- und Kinderkliniken in Nordrhein-Westfalen als Angebot der Frühen Hilfen* [Many bridges built between hospitals, municipalities, and parents, further ones possible: quantitative study on navigation services in maternity and pediatric clinics in North Rhine-Westphalia as an offer of early help]. Deutsches Krankenhausinstitut. [https://www.dki.de/fileadmin/user\\_upload/Bericht\\_Lotsendienste\\_final.pdf](https://www.dki.de/fileadmin/user_upload/Bericht_Lotsendienste_final.pdf)
- Stegmeier, E., & Löcherbach, P. (2022, December 3). *Bestimmung und Qualifikation von Patientenlots:innen: Positionspapier der DGCC-Fachgruppe Patientenlots:innen* [Definition and qualification of patient navigators: position paper of the DGCC working group on patient navigators]. Deutsche Gesellschaft für Care und Case Management (DGCC). <https://www.dgcc.de/wp-content/uploads/2023/06/DGCC-Patientenlotsinnen-Bestimmung-und-Qualifikation-Dez-2022.pdf>
- Strauss, A. L., & Corbin, J. M. (2010). *Grounded Theory: Grundlagen qualitativer Sozialforschung* [Grounded theory: foundations of qualitative social research]. Beltz Psychologie Verlags Union.
- Strübing, J. (2021). *Grounded Theory: Zur sozialtheoretischen und epistemologischen Fundierung eines pragmatistischen Forschungsstils* [Grounded theory: on the social-theoretical and epistemological foundation of a pragmatist research style] (4th ed.). Springer VS Wiesbaden. <https://doi.org/10.1007/978-3-658-24425-5>
- Valaitis, R. K., Carter, N., Lam, A., Nicholl, J., Feather, J., & Cleghorn, L. (2017). Implementation and maintenance of patient navigation programs linking primary care with community-based health and social services: a scoping literature review. *BMC Health Services Research*, 17, 116. <https://doi.org/10.1186/s12913-017-2046-1>
- VERBI Software. (2024). *MAXQDA* [Computer software]. <https://www.maxqda.com/>