



RESEARCH ARTICLE

Experiences of Interactions within Parental Couples of Children with Sickle Cell Disease: The Case of Four Cameroonian Couples

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Sickle cell disease (SCD) is a chronic and potentially life-threatening genetic disorder that affects approximately 5% of the global population, with particularly high prevalence rates in sub-Saharan Africa and in Cameroon, where it reaches 8.34%. Beyond its medical complications (such as recurrent pain crises, anemia, and frequent hospitalizations) SCD has profound psychosocial consequences that extend to the entire family system. In particular, it reshapes parental roles, responsibilities, and emotional experiences within couples. This study aimed to explore how parental dyads in Cameroon interact while caring for a child with SCD, with specific attention to communication patterns, emotional experiences (anger, distress, support), and negotiation of caregiving responsibilities. A qualitative design was employed, involving semi-structured interviews with four couples. Data were analyzed using inductive thematic content analysis. The findings reveal that functional communication, shared decision-making, and mutual emotional support strengthen parental coping and cohesion. Conversely, limited dialogue, unequal caregiving involvement, and lack of emotional reciprocity contribute to heightened stress and psychological distress, particularly among mothers. These results highlight the importance of considering the couple as a relational unit in pediatric chronic illness management. Clinical implications suggest that interventions focused on enhancing couple communication, promoting equitable caregiving roles, and strengthening dyadic support may improve both parental well-being and child health outcomes.

Keywords: Sickle Cell Disease; Parental Dyads; Couple Communication; Family Interactions; Cameroon; Social Support

INTRODUCTION

Sickle cell disease (SCD) represents a major public health challenge, particularly in Africa, where it ranks fourth in disease burden after malaria, HIV, and cancer (Anaemene, 2017; Makani et al., 2013). This inherited, recessive genetic disorder affects hemoglobin, leading to recurrent pain crises, anemia, increased susceptibility to infections, and potentially life-threatening complications (Higgins et al., 2022; Taher et al., 2025). Beyond its physiological impact, SCD imposes considerable economic and psychosocial costs on affected individuals and their families, disrupting education, employment, and overall well-being (Makani et al., 2013; Ms et al., 2019).

In Africa, and specifically in Cameroon, the prevalence of SCD is particularly high, estimated at 8.34% of the population, and it is closely linked to elevated rates of child morbidity and mortality (Njifon Nsangou & Scelles, 2020; Weatherall & Clegg, 2001). Children living with SCD often experience frequent pain episodes and hospitalizations, which may contribute to psychological stress, behavioral challenges, and difficulties adhering to prescribed treatments (Compas et al., 2012; Habeeb et al., 2015; Higgins et al., 2022). These challenges not only affect the child's health but also create complex demands on the family system, particularly on parents who serve as the primary caregivers.

Although substantial research has focused on individual parental experiences in managing SCD, relatively few studies have examined the dynamics within parental couples. Understanding these interactions is critical because parents function as a dyadic unit within the family system, and their relational patterns (communication, emotional support, negotiation, and shared caregiving responsibilities) can significantly influence both the child's outcomes and parental well-being (Weitkamp et al., 2021; Yadav, 2024). In this study, "interactions within couples" are operationally defined as the processes through which partners communicate, provide emotional support, negotiate responsibilities, and collaboratively manage the care of their child, viewed through the theoretical lens of family systems theory.

The present research aims to answer the following question: *How do parental couples interact when caring for*

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a child with SCD in Cameroon? Specifically, the study seeks to explore both supportive and conflictual dynamics within couples and to examine how these interactions shape coping strategies, emotional resilience, and caregiving practices. By focusing on these dyadic processes, this study contributes to a more nuanced understanding of the family context in SCD care, with implications for interventions aimed at strengthening parental collaboration and improving child health outcomes.

METHODS

Study Setting and Participants

Participants were recruited primarily from the Bafoussam Regional Hospital via the ALDREO association, complemented by home visits. Four parental couples with at least one child diagnosed with SCD participated. All participants were in a relationship, aged 31–63, and diverse in education and occupation. Only one father participated; three fathers declined, reflecting possible cultural or personal sensitivities regarding discussing their child's illness.

Researcher Reflexivity

The lead researcher is a clinical psychologist with prior experience in pediatric chronic illnesses. Reflexivity considerations included acknowledging potential biases, ensuring neutral facilitation during interviews, and maintaining professional boundaries.

Data Collection

Data were collected via semi-structured clinical interviews conducted in participants' homes. Each participant was interviewed twice (30–45 minutes each). Interviews were audio-recorded with consent, transcribed verbatim in Word, and recordings destroyed post-transcription to ensure confidentiality. The interview guide focused on experiences of SCD and interactions within the parental couple.

Ethics

Ethical approval was obtained from Bafoussam Ethics Committee (Ref: N°/006/27/03/2024/CE/CRERSH-OU/VP). Participants provided informed consent and were assured of

anonymity and the right to withdraw at any time. Pseudonyms were assigned to maintain confidentiality.

Data Analysis

Data were analyzed using **inductive thematic content analysis** (Paillé & Mucchielli, 2012). Coding was conducted systematically to identify recurring themes related to parental interactions, emotional experiences, and coping strategies. Only participants' reported experiences were interpreted; unmeasured constructs were described cautiously as apparent or observed patterns.

RESULTS OF STUDY

This part presents the main findings of the study, focusing on couples who have a child with sickle cell disease. The results are organized in two sections. The first section describes the characteristics of the participating couples and their children, providing context about their age, education, profession, and family composition. This information helps to understand the social and familial environment in which the children live. The second section focuses on the interactions within the couples, highlighting how partners communicate, share responsibilities, and support each other in caring for their child. By exploring these dynamics, the study aims to identify both supportive and challenging aspects of parental collaboration and their impact on coping strategies.

Presentation of the participants

Clem's and Mbeleh

Clem's and Mbeleh are a couple in which Clem's is the woman and Mbeleh the man. All Bamiléké and originally from Menoua, aged 54 and 63 respectively, Clem's and Mbeleh are married and have 4 children together, including 2 boys and 2 girls. These parents having lost a child with sickle cell disease, the boy occupying the fourth rank in his family has sickle cell disease. In this couple, the woman has a secondary education level and works as a teacher in a public school in the city and the man who has a higher education level is a retired engineer who worked in several cities and mainly in the city of Bafoussam.

Table 1. Sociodemographic Characteristics of Participating Couples and Children with Sickle Cell Disease

Couple	Ethnicity	Age (Woman / Man)	Profession Woman / Man	Number of Children	Child with Sickle Cell Disease	Father Participation
Clem & Mbeleh	Bamiléké	54 / 63	Teacher / Retired	4	1 son	Yes
Anita & X	Bamiléké	35 / -	Housewife / -	5	1 son	No
Chantou & X	Bamiléké	51 / -	Teacher / -	6	1 son	No
Fifi & X	Bassa	31 / -	Housewife / -	3	1 son	No

Note: X = man or husband who did not agree to participate.

Couple Anita and X

Anita and X are a couple where Anita is the woman and X is the man. All Bamilékés and originally from Bamboutos, the woman is 35 years old and the man we did not have his characteristics due to the fact that he did not participate in

our research. Anita and X are married and together have 05 children including 01 boy and 04 girls. The boy, aged 09, is the only one with sickle cell anemia among his sisters, occupying the fifth rank in his family. Anita, the boy's mother, has a primary education level and is a housewife.

Couple Chantou and X

Chantou and X are a couple where Chantou is the woman and X is the man. All Bamileke and from Bamboutos, the woman is 51 years old and the man we did not have his characteristics due to the fact that he did not participate in our research. Chantou and X are married and together have 06 children including 01 boy and 05 girls. The boy aged 19, is the only one with sickle cell anemia among his brothers and sisters occupying the second rank in his siblings. Anita the mother of the boy having already lost two children so one was sickle cell, at a secondary level of education and is a teacher.

Couple Fifi and X

Fifi and X are a couple so Fifi is the woman and X the man. All Bassa and from the center, the woman is 31 years old and the man we did not have his characteristics due to the fact that he did not participate in our research. Chantou and X are married and have 3 children together, including 21 boys and 1 girl. The 3-year-old boy is the only one with sickle cell disease among his siblings, and is the second-oldest in his family. Fifi has a secondary education and is a housewife.

Results from the Interviews

This section presents the findings from the interviews, focusing on the ways couples interact while caring for a child with sickle cell disease. It examines how parents communicate, negotiate responsibilities, and provide emotional and practical support to each other. The results highlight both positive and negative interaction patterns and their impact on parental stress, emotional well-being, and caregiving effectiveness. The section is organized around three main themes: marital support, negotiation and communication, and the emotional consequences of interactions within the couple. By exploring these themes, the study aims to provide a deeper understanding of how couples manage the challenges of caring for a child with a chronic illness.

Marital Support

The first major theme that emerged from the interviews was **marital support**, encompassing both emotional and practical assistance between partners in caring for their sick child. For Mrs. Clem, her husband's presence was a source of comfort and joy, visibly reflected in her expressions and smiles. She shared, "Do I even have a problem, he is always there, even morally, he is there to support the child and me too, who am his mother." This verbalization shows how her husband's involvement not only provides practical help but also strengthens her emotional resilience. Mrs. Clem further emphasized how his presence helped her cope with distressing moments: "You see, he often came home like that, he finds you sad, he comes and holds your hand, saying that it will pass, it feels good." These interactions illustrate a high level of emotional containment and mutual support within the couple, helping them navigate the challenges posed by their child's illness.

Mr. Mbeleh's perspective complements this view. He emphasized the importance of mutual support in maintaining both parents' well-being: "Since we were following the illness together, which means that when there was something, we supported each other, and when you feel that the other is already very discouraged, you have to try to cheer him up and tell him that no, it will be fine, don't worry.

So that depression does not set in." According to him, emotional support between partners facilitates adequate care for the child while limiting the risk of psychological distress in the affected spouse. Together, these statements demonstrate that close relational bonds within the couple promote cohesion, reduce stress, and enhance caregiving capacity.

Negotiation and Communication

A second key theme involved **negotiation and communication** between partners. Mrs. Clem described the fluid and collaborative nature of discussions with her husband: "We talk like friends as simply as possible when there is a subject... someone starts with a story and everyone tells it, that's how it is." This reflects a clear and open communication style, which facilitates joint problem-solving around the child's care. She further detailed their coordinated approach to caregiving: "Regarding the child's illness we take care of him together... each one provides support in his own way. So when the pain is there, we try to find solutions together... the father goes with him one week, the next week I go, so we take turns... we think together." These practices highlight active negotiation, shared responsibility, and collaboration, which ensure that both parents contribute meaningfully without overburdening either partner.

Other couples exhibited varying degrees of communication effectiveness. For Fifi, functional and attentive communication within the couple supported the child's well-being: "We communicate as always, eh, him and I, it's good whether it's with me or the children... he plays a lot with the children." This demonstrates that both parents are emotionally engaged and act as a unit, highlighting the positive impact of coordinated parental interaction on coping with the child's illness.

Conversely, some couples experienced **lack of communication**, which generated stress and frustration. Anita highlighted her husband's limited availability and the absence of dialogue: "Do we even say what? We don't say anything to each other. He goes out in the morning, comes home late, he's tired... We don't really talk." She added, "When he does like that, it annoys me, no... but what am I going to do." The lack of communication in her relationship contributes to feelings of anger, isolation, and maternal stress. Similarly, Chantou described dysfunctional interactions with her spouse: "Communication is very complicated with him... he is very sneaky and difficult to understand... as soon as you bring up a subject, he acts like his face changes." These statements indicate that poor communication within some couples exacerbates emotional distress and may hinder both parental coping and the child's recovery.

Emotional Consequences of Interactions

The interviews revealed that the quality of marital interactions has clear **emotional consequences**. Functional and supportive interactions provided relief and strengthened parental well-being. Fifi noted, "I feel happy and supported because my husband participates actively in the child's care," reflecting how engagement and collaboration enhance both parental satisfaction and resilience. Conversely, the absence or dysfunction of communication led to negative emotions such as anger, sadness, and despair. Anita expressed frustration over the imbalance of caregiving responsibilities: "Let him know that he too can get up one morning and go to the hospital with the child... I often see men who accompany their wife

with the child.” For her, limited paternal involvement compounded stress and amplified the sense of isolation.

Chantou similarly conveyed regret and emotional strain due to her husband’s behavior: “Even when I was still engaged, there was his older brother’s wife who told me about his behavior... if I am here today, it is for my children.” She highlighted that dysfunctional communication and the absence of mutual support exacerbated her emotional burden, illustrating the negative impact of poor dyadic interactions on parental coping.

Overall, these findings underscore the centrality of marital support, negotiation, and functional communication in mitigating stress, enhancing emotional well-being, and promoting collaborative caregiving in couples with a child affected by sickle cell disease.

DISCUSSION

The present study explored the dynamics within parental couples caring for a child with sickle cell disease (SCD) in Cameroon. The findings highlight the centrality of marital support, negotiation, communication, and the emotional consequences of these interactions, offering nuanced insights into the family processes that shape coping and caregiving.

Marital Support as a Protective Factor

One of the most salient findings was the critical role of marital support, both emotional and practical, in mitigating parental stress. Couples like Clem and Mbeleh exemplify high-functioning support systems, where the husband’s presence and engagement provide emotional containment and reassurance during challenging moments. Mrs. Clem described her husband’s involvement as a source of joy and relief: “Do I even have a problem, he is always there, even morally... he supports the child and me.” This aligns with previous research indicating that emotional support from a spouse reduces caregiver burden and enhances resilience (Bowen, 1992; Cohen & Wills, 1985). Similarly, Mbeleh emphasized the importance of reciprocal support to prevent depressive feelings, highlighting the dyadic nature of coping within the family system. This finding supports family systems theory, which posits that the functioning of individual members is interdependent, and that mutual support within couples can buffer the negative impact of chronic illness (Bowen, 1992; Minuchin, 1974).

In contrast, couples with limited paternal engagement, such as Anita and X or Chantou and X, experienced heightened maternal stress and feelings of isolation. The absence of active support from fathers not only increased the caregiving burden for mothers but also undermined emotional stability. This echoes findings from other African contexts where paternal disengagement in chronic pediatric illness exacerbates maternal psychological distress (Adegoke & Kuteyi, 2012; Zvara et al., 2013). These results reinforce the idea that the presence of both parents in caregiving roles is crucial for sustaining family cohesion and promoting effective disease management.

Negotiation and Communication: Facilitators of Collaborative Care

Another central theme was negotiation and communication between partners. Effective communication, as observed in the Clem and Mbeleh dyad,

facilitated collaborative decision-making, equitable sharing of caregiving responsibilities, and adaptive problem-solving around the child’s care. Mrs. Clem’s description of turn-taking in hospital visits “the father goes with him one week, the next week I go, so we take turns... we think together” demonstrates functional coordination that prevents caregiver burnout and maintains parental equilibrium. This supports research by Gérain & Zech, (2019), which shows that dyadic negotiation improves parental coping and adherence to treatment regimens in children with chronic illnesses.

Conversely, poor communication was associated with negative outcomes. Anita and Chantou reported limited dialogue and misunderstanding with their spouses, resulting in emotional frustration and conflict. Poor communication has been widely documented as a risk factor for parental stress, marital dissatisfaction, and reduced caregiving effectiveness (Banihani et al., 2025; Vessey, 2015). These findings underscore that communication is not merely a conduit for practical coordination but also a mechanism for emotional support, validation, and shared problem-solving.

Emotional Consequences of Interactions

The study highlights the profound emotional implications of dyadic interactions. Positive interactions, characterized by empathy, mutual engagement, and shared responsibility, were associated with emotional relief and satisfaction, as reported by Fifi: “I feel happy and supported because my husband participates actively in the child’s care.” These observations align with research suggesting that supportive parental dyads experience less stress and greater emotional well-being, which in turn positively affects the child’s health outcomes (Compas et al., 2012; Langer et al., 2020)).

In contrast, dysfunctional interactions, characterized by poor communication, lack of support, and unequal caregiving, led to anger, sadness, and feelings of despair. The experiences of Anita and Chantou demonstrate that maternal burden intensifies in the absence of spousal participation, potentially impairing the family’s ability to manage the child’s illness effectively. These results corroborate studies indicating that parental conflict and imbalance in caregiving are risk factors for both parental and child psychological difficulties in chronic disease contexts (Cousino & Hazen, 2013; Wonkam et al., 2013).

The findings must also be interpreted within the Cameroonian and broader African context. Patriarchal norms and cultural expectations often designate mothers as primary caregivers, while fathers are traditionally seen as financial providers (Okelo et al., 2021). This cultural framework partly explains the observed disparities in paternal involvement across the study’s participants. Importantly, couples who challenged these norms by sharing caregiving responsibilities (such as Clem and Mbeleh) demonstrated better emotional resilience and family functioning, highlighting the potential benefits of promoting egalitarian caregiving practices.

The study’s findings have important practical implications. Interventions aimed at supporting families of children with SCD should target both parents, emphasizing the importance of communication skills, shared caregiving, and emotional support. Family-centered care models that foster dyadic collaboration could reduce parental stress, enhance coping strategies, and improve the child’s adherence to treatment and overall quality of life (Carlson et al., 2022; Chow et al., 2024) Moreover, culturally sensitive

programs should address gender norms and encourage fathers' active participation in caregiving.

CONCLUSION AND IMPLICATIONS

This study examined the interactions within parental couples caring for a child with sickle cell disease (SCD) in Cameroon, focusing on communication, negotiation, marital support, and the emotional consequences of these dynamics. The findings demonstrate that couples who engage in effective communication, shared caregiving, and mutual emotional support experience enhanced parental resilience, reduced stress, and improved caregiving practices. In contrast, limited communication, unequal distribution of responsibilities, and lack of spousal support exacerbate maternal burden, emotional distress, and potentially hinder the child's well-being.

These results underscore the importance of understanding parental dyadic processes as a central component of family functioning in the context of chronic pediatric illness. Cultural factors, particularly gender norms influencing caregiving roles, further shape these interactions, highlighting the need for culturally sensitive interventions. Promoting equitable caregiving, functional communication, and active paternal involvement can enhance parental coping, strengthen family cohesion, and improve health outcomes for children with SCD.

Overall, this research contributes to the growing body of literature emphasizing the dyadic and systemic nature of caregiving in chronic illness and provides practical implications for family-centered interventions, policy development, and supportive programs aimed at improving the well-being of both parents and children affected by SCD.

DECLARATIONS

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Not applicable.

Consent for publication

Not applicable.

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The authors declare that they have no conflicts of interest.

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ADDITIONAL INFORMATION

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