

“Between Strain and Perceptions,” The Voices of Family Caregivers Involved in the Care of Children with Cerebral Palsy: Evidence from a Ghanaian Low Socioeconomic Setting

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Shafawu Adamu, BSc^{1,2}, Vivian Efua Senoo-Dogbey, PhD^{3,4} ,
Prosper Junior Anatsui, MPH³ , Monica Charlotte Akpagloh, MPH⁵ ,
Delali Adwoa Wuaku, PhD⁶ , Esther Anaba, BSc⁷,
and Wilson Atara Asakia, MBA⁸

Abstract

Background: In rural Ghana, families caring for children with cerebral palsy face physical, emotional, and financial challenges, yet little context-specific evidence exists. This study explored the lived experiences of caregivers at Upper East Regional Hospital.

Methods: Using a qualitative, descriptive, exploratory design under the ABC-X model, 15 purposively sampled caregivers of children ≤ 18 years with CP were interviewed. Data were analyzed via Braun and Clarke’s reflexive thematic approach.

Results: Two main themes, perceptions and role challenges, with 8 sub-themes emerged. Caregivers’ understanding ranged from accurate knowledge (eg, prematurity, birth complications) to misconceptions. Caregiving imposed physical, financial, and social burdens. Cultural beliefs and stigma influenced care, prompting navigation between traditional and biomedical treatments.

Conclusion: Caregivers face multidimensional burdens compounded by limited knowledge and stigma. Interventions should include CP education, psychosocial support, stigma reduction, and strengthened biomedical and community-based services to improve caregiver and child well-being.

Keywords

cerebral palsy, caregivers, lived experiences, caregiver burden, perceptions

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Introduction

Globally, the prevalence of CP (CP) is estimated at 1.6 per 1000 live births.¹ Though Ghana lacks national prevalence data, a study by Jahan et al² reported that approximately 80% of CP cases in the country are perinatally acquired. They also reported that more than half of affected children were born preterm (52%), and spastic triplegia and quadriplegia accounted for 55.9%.

CP places a substantial burden on caregivers, as children with the condition often require continuous support with activities of daily living, including feeding, mobility, communication, and personal care.³ In low-income countries such as Ghana, these caregiving responsibilities typically fall on family members, most often parents.⁴

¹Ghana College of Nurses and Midwives, Ghana

²Upper East Regional Hospital-Ghana Health Service, Bolgatanga, Ghana

³University of Ghana, Legon, Accra, Ghana

⁴Ghana Institute of Management and Public Administration, Accra, Ghana

⁵Nursing and Midwifery Training College, Pantang, Accra, Ghana

⁶Nursing and Midwifery Training College, Korle-Bu, Accra, Ghana

⁷Presbyterian Eye Clinic, Ghana

⁸Ghana Audit Service, Bolgatanga, Ghana

Corresponding Author:

Vivian Efua Senoo-Dogbey, Department of Public Health, School of Nursing and Midwifery, University of Ghana, P. O. Box LG 25, Legon, Accra, Ghana; Ghana Institute of Management and Public Administration, Greenhill Campus, P.O. Box LG 43, Legon, Accra, Ghana.

Emails: efuvivi@yahoo.co.uk; vesenoo-dogbey@ug.edu.gh



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Research shows that caregivers of children with CP experience significant physical, emotional, and social stress.⁵⁻⁷ For example, Mwinbam et al⁷ found that caregivers in northern Ghana faced discrimination, social isolation, limited support, economic hardship, and physical strain. Similarly, in 2025, Kisinna et al⁶ reported stigma, physical exhaustion, and work-related stress among family caregivers in the Tamale Metropolis. When caregivers' experiences and challenges remain poorly understood, they may not receive adequate support from the healthcare system, family networks, or the broader society. This can contribute to burnout and psychological distress, thereby impacting the quality of care provided to children with CP.

The ABC-X family stress and adaptation model, formulated by Reuben Hill in the 1940s, provides a conceptual framework for understanding family stress and coping processes. It proposes that the degree of crisis experienced by a family (X) arises from the interaction among a stressor event (A), the family's available resources (B), and the meaning or interpretation assigned to the event (C).^{8,9} The model underscores that a crisis is not determined solely by the stressor itself, but by how families perceive the event and the strengths or supports they can mobilize in response. Subsequent refinements incorporated wider social and environmental influences, and the framework was later extended into the Double ABC-X model to more comprehensively explain family stress adaptation and resilience over time.⁹⁻¹¹ The ABC-X model provided theoretical backing for this study since it is particularly appropriate for examining caregiver stress and adaptation because it provides a structured way to understand how stress develops and how families respond to it.

Although previous studies that utilized qualitative approach have provided valuable insights into caregivers' experiences in Urban settings of Northern and Southern Ghana,^{6,7,12} there remains limited localized evidence regarding the specific challenges faced by caregivers of children with CP, specifically in the rural and peri-urban areas of the Upper East Region. Poverty, prevailing sociocultural norms, and health system constraints in rural and peri-urban areas of northern Ghana can significantly influence how caregivers perceive and respond to the demands of raising a child with a chronic condition or disability. These contextual factors may differ considerably from those in more urbanized or economically advantaged parts of the country, thereby highlighting the need for focused research within this setting. This study seeks to generate context-specific evidence that can inform the development of culturally appropriate and locally responsive interventions and policies. At the clinical level, the results can guide healthcare providers in delivering more holistic,

family-centered care that recognizes caregiver burden, strengthens counseling services, and promotes multidisciplinary collaboration. Furthermore, the study can contribute to national efforts toward inclusive disability policies and improved rehabilitation services in Ghana, support regional health planning in underserved northern areas, and align with global health initiatives

Against this background, the present study aims to explore the lived experiences of family caregivers of children with CP at the Upper East Regional Hospital, with particular attention to their perceptions of the condition and the challenges they encounter in their caregiving roles.

Methods

Study Design

A descriptive exploratory design using a qualitative approach was employed in this study to gain insightful perceptions of people's experiences through the textual description of a given research issue. The study, guided by the ABC-X model, was deductive, such that it started with a theory or model and examined the data to see whether it supported or illustrated the theory. This method helped the researcher to have in-depth knowledge and understanding of the experiences of family caregivers of children with CP at the UERH. It also allowed the researcher to interpret and better understand the complex reality of a given situation and the implications of the data. The study recruited family caregivers of children aged below 12 years who were receiving treatment at the Upper East Regional Hospital.

Operational Definition of Terms

Guided by the ABC-X Model of Family Stress developed by Hill,⁸ perceptions refer to the meaning caregivers assign to their child's CP and caregiving responsibilities, which shape how they respond to stress. Challenges are the stressors associated with caring for a child with CP, including financial, physical, and social demands. Burden reflects the level of physical, emotional, and economic strain experienced as an outcome of the interaction between stressors, resources, and perceptions. Knowledge refers to the caregiver's understanding of CP and available support services, functioning as a resource that can reduce stress and strengthen coping capacity.

Study Setting

The study was carried out at the Outpatient Department and the physiotherapy department of the Upper East Regional Hospital, Bolgatanga. The health facility is the

largest secondary healthcare delivery facility in the Upper East region of Ghana, which was established in 1946 located in the Bolgatanga Municipality. The hospital was meant to serve the minority white population of the Gold Coast. The hospital had a bed complement of 258 serving a catchment population of 1 356 451 with a total staff strength of 769 (654 permanent and 115 temporaries).

Study Population

The study's target population included family caregivers caring for children below 18 years of age, diagnosed with CP and receiving treatment at the Upper East Regional Hospital, Bolgatanga.

Sample Size and Sampling Technique

Fifteen (15) participants were included in this study as data saturation, defined by the absence of new emerging themes, was reached after interviewing the 15th participant. In this study, recruitment of the study participants was not limited by time or feasibility. A purposive sampling technique was employed in recruiting participants who were the primary caregivers for children with CP in the Upper East Regional Hospital for the study. Purposive sampling was used to intentionally select primary caregivers of children with CP who could provide rich, relevant, and context-specific insights into their lived experiences, ensuring depth and alignment with the qualitative design and the ABC-X family stress model guiding the study.

The inclusion criteria were caregivers of children under 18 years of age diagnosed medically with CP and receiving care at the UERH physiotherapy unit and the pediatric specialist clinic. Care givers of children with other conditions apart from CP and those with other children with neurological and developmental disorders were excluded.

Data Collection Instrument

A semi-structured interview guide with open-ended questions was developed by the researcher with the objective of conducting an in-depth one-on-one interview to facilitate the collection of data. The instrument was organized to reflect the constructs of the ABC-X model, which provided the theoretical underpinning for this study. The interview guide consisted of 4 sections; section A contained questions on demographic data, section B related to questions on family caregivers' perception of CP, and section C had questions on the challenges faced by caregivers of children with CP at the Upper East Regional Hospital [UERH].

Data Collection Procedure

The research team gained access to family caregivers after receiving ethical and institutional approvals. Eligible participants were approached, and the objectives of the study were explained. They were informed that participation was entirely voluntary and that they could withdraw from the study at any time without consequence. Interviews were scheduled at a time, date, and venue convenient for each participant. All interviews were conducted face-to-face by the principal investigator at the physiotherapy unit. Prior to the interviews, informed consent was obtained, including permission to audio record the sessions. Each interview was conducted in English and lasted between 30 and 45 minutes on average. Data collection was guided by a semi-structured interview guide. Participants were asked to share their perceptions on CP, the challenges they face in caregiving, the strategies they adopt in caregiving roles, and the types and adequacy of support systems. To ensure accurate and rich data capture, the researcher created audit trails by taking field notes and transcribing the audio-recorded interviews verbatim, allowing for a faithful representation of participants' experiences, thoughts, and emotions.

Data Analysis

The data were analyzed using Braun and Clarke's reflexive thematic analysis.¹³ Braun and Clarke's 6-phase thematic analysis involves first familiarizing with the data and generating initial codes. Next, codes are organized into themes, which are reviewed, refined, and clearly defined. Finally, the themes are reported with supporting evidence to produce a coherent analytic narrative.

The data analysis was done manually, and the researcher transcribed the recorded audio verbatim by typing exactly what was recorded during the interview. The non-verbal cues and field notes that were taken during the interview section were taken into consideration where necessary. A hard copy of the transcripts was printed out for the supervisor to read and input, correcting minor grammatical mistakes before coding. The researcher thoroughly examined all the collected data to identify key themes that summarized the participants' perspectives. These themes served to summarize the core ideas expressed during the interviews. Coding was theoretically driven. The coded data were then organized under the constructs of the ABC-X model to ensure they accurately reflected the participants' views and, at the same time, aligned with the model underpinning the study. In defining each theme, the researcher also considered its relevance to the broader research question.

Table 1. Sociodemographic Characteristics of Caregivers with Children with CP.

Participant ID	Age of caregiver	Marital status of caregiver	Occupation of caregiver	Income level of caregiver	Age of child with CP	Level of education of caregiver
1	20-30	Married	Teacher	20 000-3000	9 months	Tertiary
2	30-40	Unmarried	Student	No income	3 years, 8 months	Tertiary
3	30-40	Married	Seamstress	500-1000	1 year, 9 months	Secondary
4	30-30	Married	Teacher	Above 3000	1 year, 2 months	Tertiary
5	30-40	Married	Librarian	500-1000	2 years, 5 months	Secondary
6	20-30	Married	Midwife	1000-20 000	1 year, 8 months	Tertiary
7	40-50	Married	Teacher	Above 3000	1 year, 3 months	Secondary
8	20-30	Unmarried	Student	No income	1 year	Tertiary
9	30-40	Married	Weaver	Below 500	4 years	Secondary
10	30-40	Married	Trader	1000-2000	2 year, 3 months	Secondary
11	40-50	Married	Trader	Less than 500	8 monthth	Secondary
12	20-30	Married	Librarian	500-1000	1 year, 4 months	Secondary
13	20-30	Unmarried	Unemployed	No income	1 year, 4 months	Secondary
14	40-50	Married	Receptionist	500-1000	1 year	Tertiary
15	30-40	Unmarried	Unemployed	No income	2 years	Secondary

Methodological Rigor

To ensure the trustworthiness of this study, several strategies were employed to enhance credibility, dependability, confirmability, and transferability.¹⁴ . Credibility was strengthened through member checking, allowing participants to review and confirm the accuracy of transcribed data and preliminary findings, and through prolonged engagement to gain a deep understanding of their experiences. Dependability was ensured by maintaining a detailed audit trail documenting all research decisions, data collection procedures, and analytical steps. Confirmability was supported through reflexive journaling, in which the principal investigator recorded personal reflections and potential biases throughout the research process. Transferability was enhanced by providing thick descriptions of participants, settings, and caregiving experiences, enabling readers to assess the applicability of the findings to other contexts. A thick description of the study context and methodology was provided to enhance transferability. Additionally, to establish credibility, the responses of participants are presented verbatim in the form of direct quotes, allowing readers to engage with the voices of the respondents themselves. The researchers acknowledged that their professional and cultural backgrounds could have influenced data collection and interpretation. To minimize potential bias, reflexive notes were maintained, neutral interview techniques were applied, and independent coding with peer review was conducted to enhance credibility.

Ethical Issues

Ethical approval for the conduct of this study was granted by Navrongo Health Research Centre (NHRCIRB702).

Introductory letters were presented to management and administrators of the facility. Informed consent was obtained from all individual participants included in the study. The study was guided by the principles set out by the Declaration of Helsinki.

Results

Sociodemographic Characteristics of Participants

Table 1 summarizes the demographic profile of 15 caregivers of children with CP, aged between 22 and 42 years. All the participants were females and biological parents of children with CP. This gender distribution of caregivers mirrors what was reported among caregivers in Ghana in previous studies.^{15,16} Most participants were married, and all identified as Christians. While 9 had completed senior high school and 6 had tertiary education, income levels remained low, with many earning little or no income. Participants held a mix of formal and informal occupations, including teaching, trading, and weaving, though some were unemployed or students. The number of children per caregiver ranged from 1 to 4, with the children's ages spanning from 8 months to 4 years, highlighting the significant demands associated with caring for young children with special needs during their early developmental years.

Summary of Themes and Sub-themes

From the analysis of the transcripts, 2 main themes and 8 sub-themes were identified. The themes and sub-themes are summarized in Table 2. Pseudonyms in the form of numbers were used to represent the caregivers.

Table 2. Themes and Sub-themes Generated from the Analysis.

Main theme	Sub-theme
1. Caregiver perceptions of CP	a. Unclear understanding of CP b. Accurate perception of Causes of CP
2. Caregiving role challenges	a. Perceived burden of care b. Physical exhaustion c. Financial challenges d. Strained interpersonal relationships and self-isolation e. Stereotyping f. Emotional strain

Quotes were used to provide highlights of the caregiver's narrations.

Main Theme 1: Caregiver Perception of CP

This theme describes caregivers' beliefs about CP and their perceptions about causes, caregiver impacts/burden, and cultural inclinations. Two (2) subthemes emerged from this main theme: Unclear understanding of CP, Perceived Causes of CP.

Unclear Understanding of CP

Many caregivers had limited knowledge of CP prior to their child's diagnosis. Their understanding was vague and mostly based on personal experience, with many only learning about the condition after observing developmental delays in their child.

Sincerely speaking, I don't know anything about CP; they say it is a condition that someone has a physical challenge **Participant 2**

Well, to the best of my knowledge, it is a disease that affects a child's development and delays the development; in terms of milestones, the child will delay as compared to every other normal child. **Participant 4**

For me, I didn't know about CP until I gave birth to a child with the condition. My junior sister is a midwife; she is the one who directed me to the Regional Hospital to go and see the specialist, because my child was not crawling or walking at his age. There, I was told what CP is, **Participant 9**

Accurate Perception of Causes of CP

Caregivers had various perceptions of the causes of CP. Some of the perceived causes of CP were delayed labor,

prematurity, low birth weight, medications, and jaundice. Perceptions of caregivers about the causes of CP were generally accurate. The following represent the narratives from the participants.

From what I read on the internet, prematurity and underweight can cause it, and my child was underweight and premature. They were even twins. She was 1.7kg, and the one that died was 1.5 kg. I think complications during pregnancy and the age of the mother can also cause it. **Participant 2**

To me, it is the challenge that children get during birth, for me, it was a delay, the child's head was out, but it was delayed, they say delayed the second stage, that is according to explanation they told me, I think that might be the cause, but if there are others, I can't tell. **Participant 6**

From what I've learned, it can be caused by delayed delivery, trauma during pregnancy, poor nutrition, or trying to abort the pregnancy. **Participant 5**

Some other caregivers narrated briefly by stating:

I am thinking, maybe because he was a preterm, that may be the problem. **Participant 3.**

Challenges Faced by Family Caregivers of Children with CP. One main theme that emerged under this construct was: caregiving role challenges.

Caregiving Challenges

This theme discusses the challenges faced by caregivers on a day-to-day basis while caring for children living with CP. These challenges border on financial, emotional, interpersonal, physical, and stereotyping. In essence, having a child living with CP has a general effect on the well-being of the caregivers. A total of 5 (6) subthemes emerged under the theme.

Perceived Burden of Care

This sub-theme highlights the social and economic burden caregivers perceived in caring for children with CP. Caregivers described the role as demanding and isolating, often leading to loss of income, limited personal time, disrupted social life, and abandoned personal goals. These were expressed as:

It is not easy. It is hard work, work without pay. It is not an easy thing to deal with, **Participant 1**

Because of her condition, I wanted to do some work, but because of her, I cannot do anything. I have to be indoors; she cannot sit well, and she needs much attention from me.

Because of her condition, I am not free to move around like I want to. **Participant 2**

Caring for the child has affected me a lot, because you are not able to do things that you used to do. You don't have time for yourself anymore, you can't attend social functions, a whole lot, and you can't do things on your own. The child determines what you do at what time, **Participant 4**

It has affected me. He won't go to anybody, even if I want to bathe, I have to hide, he will cry when somebody takes him, he won't go to anybody, to do something small for myself is even a problem now. My whole area, people call me a handbag, an original handbag, because I am always holding myself. You cannot work, and it's frustrating. **Participant 9**

Physical Exhaustion

This sub-theme describes the physical strain of caregivers, navigating daily caregiving, work, and other family routines. They narrate that their ability to maintain physical balance is gravely impacted and could lead to physical ailments. These are expressed as follows;

I have to always carry (her) everywhere I am going, and you can see, she is big now and heavy, I am always tired from caring for her, always in pain, **Participant 8** lamented.

Feeding like this, you have to be patient and feed him small, small. He does not eat solid foods. I feed him every 2 hours. I always make sure that I prepare his porridge at all times because the one they sell has too much pepper. It is a lot of work and very tiring. **Participant 7**

She is now big and heavy, and she cannot sit, just lying down. I am backing her most of the time; the weight is not small. I get tired and stressed from backing her up most of the time. Because of her weight, when I back, her, my body pains, especially my waist and my chest, will start painning me. **Participant 6**

Financial Challenges

Financial challenges were one of the overriding themes for the caregivers. Caring for these children required hefty financial expenditure for medications, labs, transportation, and the purchase of diapers, among others. Especially when caring for the children took away the opportunity for a productive work life. The caregivers expressed pain as quoted below.

We are always buying things that we believe will help her to walk. There is this wooden bicycle that children use to help them walk. You buy one for the house, buy one and keep it at the school. Buying fuel for the motorbike to come for physio, buying diapers, even though she is over 3 years old. **Participant 1**

You know am coming from Navrongo, I have to take transport and come here every week, and am not working, am a student nurse, her father too is doing some small business that he is always able to give me the fare to come, he is trying his best with that, but it is still not easy at all financially, buying drugs, coming for reviews at the specialist clinic and all that **Participant 2**

everything has to do with money, I come from Navrongo for this physio every week, you pay lorry fare in and out to come for physiotherapy which is not small money, we were also referred from here to Tamale to see the neuro-developmental, when we went, they asked us to do some lab test, and they also referred us to go and see the speech therapist, the speech therapy is also required twice in a month, this up and down is all about money, when I take my salary, almost everything is spent on her care. **Participant 6**

Strained Interpersonal Relationships and Self-Isolation

To avoid stigma, discrimination, and stereotyping from others, caregivers lived in isolation and had less association with others. The caregivers described their interpersonal relationships with others as poor.

You will see that he will be crying, he will be doing things that you don't know what to do, people will talk and complain about the noise he makes, I don't like to associate myself with people because of that, you will not like to go to functions because of all these things, **Participant 9**

My workplace has also been affected because I can't always go to work on time, and sometimes I have to leave early too, because I leave home early to go to work, my co-workers will be complaining that I'm always coming to work late and other things. Before her condition, I didn't face these problems at work **Participant 5**

Before I gave birth to him, I used to attend programs a lot, but now I am not able to do those things because of my child's health. His health is very important to me, because the drumming and dancing are the funerals there is a lot of dust. I think that if I send him there and he inhales the dust, he will become sick, that is why I don't go. **Participant 3**

When I first gave birth, I was doing a small business at home. Some people said they wouldn't buy from me because of the child. You can't go to anyone or anywhere with the child, **Participant 15**

Stereotyping

Caregivers narrated that there are stereotyped societal narratives around their children with CP. Mention was made of names such as "spirit child" dwarf, and evil child. Therefore, almost all the caregivers were resorting to local herbs along with the orthodox medicines they were using.

People will be like, it's not normal. . . , but spiritual. (As such) Her father, in particular, believes that, traditionally, she will be healed. We started with traditional treatment because her father believed it. **Participant 2**

Some say he is a dwarf; they say he is a dwarf because of the way the child is, the body is weak, and the legs are way, he is small and not growing well. **Participant 3**

Culturally, they were saying that maybe she is a spirit, they say she is a dwarf, they told me to bring the child, and they will do some local thing. If she is a spirit, she will die and go, but when they did, they said that, oh, she is a human being because she survived. I couldn't refuse. If you refuse, they will say they are trying to help, and you are refusing their help, so I agreed, then they started with the local treatment, they are still doing the local treatment, doing the orthodox treatment, everything that will make it work. **Participant 6**

Hmmmm, some koraa, they always say that this thing, they are not humans, they always they are always dwarfs. They will take them to the bush, and they will go back to where they came from. They say they are grown-ups who have come back to this world. **Participant 11**

Emotional Strain

Caregivers described the role of caring for their children with CP as emotionally stressful, as they feel guilty and sad about their child's condition. They expressed these as follows:

I feel guilty because of the other children, and sometimes I always use this child's anger on the brothers. **Participant 8**

It has affected me a lot, and I am not always happy. I am always tired and sad because I am always holding him or carrying or backing him on my back. **Participant 10**

It's stressful. Sometimes she cries the whole night, she won't sleep, she won't eat, you become confused, sad, and don't even know what to do again. **Participant 5**

Discussion

Perception of CP Among Caregivers of Children with CP

This study recruited caregivers of children diagnosed with CP, and was underpinned by the Hill ABC-X Model of Family Stress and Adaptation (ABC-X) and found that some caregivers had an unclear understanding of CP and only recognized the condition after seeking care at a health facility. The findings of this present study are consistent with what was reported in previous studies regarding the role of knowledge in shaping attitudes

toward CP and disability in general.¹⁷ The similarity in findings may be due to a shared gap in early education or awareness about developmental disabilities across both high- and low-resource settings. According to the ABC-X model, this reflects the "A" component, the stressor event, and in this case, the unexpected diagnosis of CP, which can disrupt family equilibrium and create a state of crisis if not well understood.¹⁸

In contrast, while some caregivers in this study had misconceptions at first, others demonstrated fairly accurate perception about the causes of CP, identifying factors such as prematurity, jaundice, and prolonged labor. This contradicts several earlier studies. For instance, a systematic review reported that, in non-Western contexts such as Botswana, Iran, Taiwan, and Ghana, caregivers often attributed CP to spiritual causes like witchcraft or punishment from God.¹⁹ Similarly, a study from Benin reported that 78% of mothers with children with CP believed CP was due to curses or God's will.²⁰ Likewise, in Ghana's Greater Accra and the Ashanti regions, it was found that many caregivers associated CP with spiritual causes, such as curses or ancestral punishment.^{21,22} In addition to perceiving curses as the cause of their child's condition, caregivers also believed that CP resulted from midwife-related factors, age-related disorders, or complications associated with premature or delayed labor.²²

The difference in findings may be due to growing public health education, increasing access to maternal and child health information, and exposure to biomedical explanations, especially in urban or semi-urban areas where this study was conducted. It could also reflect a shift in belief systems as caregivers are increasingly exposed to hospital-based care and professional advice, reducing reliance on traditional or spiritual interpretations. Within the ABCX framework, these accurate perceptions represent a more positive "B" factor- resources, such as access to health information and medical services, which help buffer the impact of the stressor (CP diagnosis).⁹

Challenges Faced by Family Caregivers of Children with CP

The current study also found that caregivers perceived a high burden of care, describing it as demanding and isolating. This is consistent with findings from a study that found that 85% of caregivers felt their children's dependency impacted their time and personal lives.²³ Similarly, 45% reported not having enough time for themselves. These findings are comparable because caregiving demands are inherently high in CP cases due to the child's long-term dependency and functional limitations. The similar burden across countries may be due to the intensive, daily care routines required,

such as feeding, bathing, and mobility support. Under the ABCX model, this high caregiving demand intensifies the “X” component, especially during a crisis, when “B” resources, such as respite care or social support, are lacking.¹⁸

This study found that caregivers of children with CP at the Upper East Regional Hospital faced many challenges. These included physical exhaustion, financial hardship, strained social relationships, isolation, and stereotyping. These findings are consistent with previous studies in different countries.

For instance, in China, a study found that caregivers of children with CP experienced exhaustion and often felt trapped in life.²⁴ Similarly, in Zambia, it was observed that caregivers were often overwhelmed and physically tired due to the demands of caring.²⁵ These findings are similar to those of the current study. A possible reason for this similarity is the intense and constant nature of care required for a child with CP. According to the ABCX model, this represents the “A” factor, the stressor event (the child’s disability), which disrupts family life. When support is limited, as observed in both studies, physical exhaustion becomes inevitable.

In the context of the present study, conducted in Northern Ghana, where all caregivers were women, the burden may be even more pronounced. Cultural norms that assign women the primary responsibility for caregiving, particularly for sick family members,^{26,27} likely intensify this strain. When these women have limited decision-making power or lack the voice to request support from their spouses in caring for their child, the caregiving demands become disproportionately heavy. This gendered expectation may possibly have contributed to the physical exhaustion reported in this study.

Caregivers in this study also reported financial difficulties. This aligns with studies from Nigeria, South Africa, and Ghana.^{21,28,29} These studies also reported that caregivers had to quit jobs, had low incomes, or were unable to meet the financial needs of their children with CP. The reason for this similarity could be due to the extra cost of therapy, hospital visits, medications, and assistive devices, which are often not covered by national insurance systems. Within the ABCX model, financial problems represent a lack of “B” factors (resources), such as financial support or stable employment. When these resources are missing, the stressor becomes more difficult to manage, and families are pushed closer to a crisis (X).¹¹

In this study population, the financial challenges reported by the women may be further explained by the socio-economic realities of Northern Ghana, where poverty³⁰ and illiteracy levels³¹ among women are relatively high compared to the southern parts of the country.

In these settings, many women are financially dependent on their spouses and have limited opportunities for stable employment due to low levels of educational attainment. For a woman caring for a child living with CP, this vulnerability is further intensified. When she does not have a regular source of income, and her spouse provides little or no financial support, the costs associated with caring for the child can quickly become overwhelming. This socio-economic reality likely contributed directly to the financial difficulties reported by the women in the present study.

The study further found that caregivers experienced strained relationships and social isolation.

This finding agrees with two Ghanaian studies that reported that caregivers in Ghana withdrew from social life and felt left out of community events.^{21,32} Also, researchers described how mothers became socially disconnected due to caregiving demands. A reason for this may be the time-consuming nature of caring for a child with CP, which leaves little time for socialization.¹⁹ In the ABCX model, the caregiver’s perception of the situation (C) influences how they cope. If they see caregiving as a burden that separates them from others, they are more likely to self-isolate.

Stereotyping was also a challenge reported by caregivers in the current study. Some participants said that their children were labeled as spirit children, dwarfs, and curses. This is similar to findings from Benin and Northern Ghana.^{7,20} Both studies reported that caregivers and their children faced stereotypes and rejection from society. In the context of Northern Ghana and other Ghanaian communities, negative perceptions from society may be partly explained by low levels of awareness and limited knowledge about childhood disabilities. In many communities, disabilities, particularly those affecting children, are often interpreted through spiritual or supernatural lenses. As a result, conditions such as CP may be attributed to curses, witchcraft, or spiritual punishment rather than understood as medical or neurological disorders. These beliefs can reinforce negative labeling, deepen stigma, and contribute to the social exclusion experienced by caregivers and their children in the present study.

Also, caregivers in this current study reported disruption in their personal and work lives. Some lost jobs or were unable to work full-time due to caregiving. This finding agrees with observations from a previous study that found that more than half of caregivers lost their jobs or faced reduced income.²⁸ Similarly, it was reported that the high cost of care, combined with unemployment, made caregiving difficult.³³ These results highlight how caring for a child with CP can reduce a family’s ability to remain economically stable. In the

ABCX framework, this again shows a lack of “B” factors, such as job flexibility or institutional support.

The study also revealed that caregivers experienced emotional strain, including guilt, anger, sadness, and confusion. This finding aligns with an Iranian study that found that mothers of children with disabilities often face psychological challenges, including self-blame and emotional distress.³⁴ These similar experiences could be explained by the universal emotional toll of raising a child with chronic needs, regardless of cultural context. This emotional response relates to the “C” component in the ABCX model, which focuses on the caregiver’s perception of the stressor. If the diagnosis is seen as overwhelming and unmanageable, emotional strain is heightened.³⁵

Strengths and Limitations of the Study

This study’s strengths include its context-specific focus in an under-researched, low-resource setting, its in-depth qualitative approach grounded in the ABC-X theoretical framework, its rigorous methodology to ensure trustworthiness, and its practical relevance for informing clinical practice and policy. This study has some limitations. The findings have limited generalizability because the research was conducted solely at the Upper East Regional Hospital, where unique contextual factors may not reflect caregiver experiences in other regions. To address this, detailed contextual descriptions were provided to support transferability. The study may be subject to researcher bias, a common challenge in qualitative research; however, reflexivity and the use of verbatim quotes during analysis helped ensure accurate representation of participants’ views. The small sample size, although appropriate for qualitative inquiry, may have limited the range of perspectives captured. This was minimized through purposive sampling to ensure participant variation and by monitoring data saturation. The challenges reported in this study could not be measured quantitatively; hence, a quantitative study can be designed and implemented using validated instruments to measure stigma, perceptions and others.

Implications for Policy, Practice and Research

The findings highlight the need for stronger disability-inclusive policies in Ghana, including expanded National Health Insurance Scheme (NHIS) coverage for rehabilitation services and targeted social protection to reduce the financial and gendered burden on caregivers. Community education is essential to address stigma surrounding CP. Clinically, integrating structured caregiver education, psychosocial support, and family-centered

multidisciplinary care into pediatric and rehabilitation services is critical. Strengthening community-based rehabilitation would improve access and reduce costs. Further quantitative and intervention research is needed to inform evidence-based policy and practice.

Conclusion

Based on the findings of the study, it is concluded that at the Upper East Regional Hospital (UERH), caregivers of children with CP often have a limited understanding of the condition, with many only becoming aware of CP after visiting a health facility. While caregivers were able to identify some accurate causes, such as delayed labor, prematurity, low birth weight, medications, and jaundice, initial awareness and knowledge about CP remain a challenge.

It is further concluded that caregivers at the UERH experience significant emotional strain and perceive their caregiving roles as physically and psychologically burdensome. Their caregiving responsibilities lead to physical exhaustion, financial difficulties, strained interpersonal relationships, self-isolation, and stereotyping.

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ORCID iDs

Vivian Efua Senoo-Dogbey  <https://orcid.org/0000-0003-4360-4747>

Prosper Junior Anatsui  <https://orcid.org/0009-0000-9386-9626>

Monica Charlotte Akpagloh  <https://orcid.org/0009-0003-8623-3664>

Delali Adwoa Wuaku  <https://orcid.org/0000-0001-6056-1676>

Ethical Considerations

Ethical approval for the conduct of this study was granted by the Navrongo Health Research Centre (NHRCIRB702). Introductory letters were presented to management and administrators of the facility. Informed consent was obtained from all individual participants included in the study.

Consent for Publication

Not applicable.

Author Contributions

Shafawu Adamu: Contributed to conception and design; contributed to acquisition, analysis, or interpretation; drafted the manuscript; critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work

ensuring integrity and accuracy. Vivian Efua Senoo-Dogbey: contributed to conception or design; drafted the manuscript; critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work ensuring integrity and accuracy. Prosper Junior Anatsui: drafted the manuscript; critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work ensuring integrity and accuracy. Monica Charlotte Akpagloh: drafted the manuscript; critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work ensuring integrity and accuracy. Delali Adwoa Wuaku: drafted the manuscript; critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work ensuring integrity and accuracy. Esther Anaba: drafted the manuscript; critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work ensuring integrity and accuracy. Wilson Atara Asakia: critically revised the manuscript; gave final approval; Agrees to be accountable for all aspects of work ensuring integrity and accuracy.

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Data Availability Statement

The data analysed for this study are published with this article

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