Family dynamics and structural barriers to antenatal care among a pregnant woman with severe anaemia in rural Ghana: A qualitative single-case study

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ABSTRACT

Severe anaemia in pregnancy remains a major maternal health concern, particularly in rural areas, where poverty and ignorance worsen the plight of women who fall victim to it. While biomedical determinants are well-documented, the social and familial mechanisms that allow anaemia to reach life-threatening severity before any intervention occurs remain inadequately characterised in the case-report literature. This qualitative single-case examined the familial, sociocultural and structural circumstances surrounding delayed antenatal care access for a 23-year-old unmarried pregnant woman from the Bonakye sub-district of Nkwanta South Municipality in the Oti region of Ghana. At approximately 15 weeks of gestation, she presented with a haemoglobin level of 2.7 g/dL, consistent with severe anaemia. Data were drawn from structured field observations, interviews with selected family members and a review of clinical records from the Bonakye Health Centre and Nkwanta South Municipal Hospital, organised chronologically and interpreted through Bronfenbrenner's Social Ecological Model and Anderson Behavioural Model of Health Services Utilisation. Family accounts pointed to conflict surrounding the pregnancy, limited support from her household, financial constraints, lapsed health insurance and transportation difficulties as factors behind the delayed and inconsistent care she received. After referral, she was given two units of blood, oral iron and folic acid supplementation, nutritional counselling and follow-up care, and her haemoglobin rose to 7.1 g/dL before discharge. At subsequent follow-up, her haemoglobin had fallen to 6.2 g/dL and she had miscarried, though the available clinical information could not establish the cause. This case shows how household and structural barriers can combine to delay the recognition and management of severe maternal health conditions in rural communities. Strengthened community-based antenatal outreach, family-sensitive health promotion, social support and better access to health insurance and transportation may help such women reach care earlier.

Keywords: severe anaemia; antenatal care; family support; healthcare access; case study; Ghana

I. INTRODUCTION

Maternal health is a critical indicator of a nation's overall health status and socio-economic development. (Rahman et al., 2024). In many low- and middle-income countries, including Ghana, maternal health outcomes are a significant public health concern, with disparities between rural and urban settings, as well as other population sub-groups (Jakperik et al., 2023).

The World Health Organization (WHO) has emphasised the importance of antenatal care (ANC) in improving pre-pregnancy outcomes and reducing maternal mortality (WHO, 2023). Regular ANC visits allow for the early detection and management of pregnancy-related complications, such as anaemia, hypertension and infections, among others, which are known to contribute significantly to maternal mortality (Chilot et al., 2023). However, the utilisation of ANC services is influenced by a multitude of factors, including access to quality healthcare services, socio-economic status, and the level of family support. (Amungulu et al., 2023). In some rural, deprived areas, both geographical and economic access hinder women's utilisation of healthcare services. In most instances, family support plays a crucial role in maternal health, particularly for young women. (Mane et al., 2024). Family support can influence a woman's decision to seek care and her ability to adhere to healthcare recommendations. (Nabieva & Souares, 2019).

Furthermore, the occurrence of an unintended pregnancy outside marriage, can worsen the challenges faced by pregnant women in rural areas. (Merga et al., 2021). Unintended pregnancies are associated with negative maternal health outcomes, including delayed ANC initiation, inadequate care during pregnancy, and higher risks of maternal depression and anxiety. (Wado et al., 2013). There is also the tendency to terminate such pregnancies, usually adopting crude methods, with dire consequences.

Severe maternal anaemia cannot always be understood through its biomedical determinants alone. Its progression to a life-threatening level may also reflect delayed recognition, limited use of antenatal services, and the interplay of household, sociocultural, financial, and health-system barriers. A close examination of one woman's care trajectory can offer context-specific insight into how these barriers work together over time.

This study traced the antenatal-care trajectory of a pregnant woman with severe anaemia in the Bonakye sub-district of Nkwanta South Municipality, paying particular attention to the family relationships, sociocultural circumstances, economic constraints, and health-service barriers that shaped the timing and continuity of her care. It does not claim to represent the experiences of all pregnant women in rural Ghana. Instead, it offers an in-depth account of one case through which broader maternal healthcare challenges can be considered. Understanding these factors, policymakers and healthcare providers can develop targeted interventions to improve maternal health and work towards achieving Target 3.1 of the Sustainable Development Goals by 2030.

1.1 Statement of the Problem

Anaemia remains common among pregnant women in Ghana, and women in rural and socioeconomically disadvantaged settings face additional barriers to its timely detection and management (Ampiah et al., 2019; Ayensu et al., 2020). The clinical causes and consequences of anaemia in pregnancy are well studied. Less is known about how family relationships, pregnancy-related stigma, financial insecurity, and health-system barriers interact as a single case of severe anaemia develops and progresses.

Antenatal care offers a key opportunity for haemoglobin (Hb) assessment, nutritional counselling, and early management of pregnancy complications, but availability does not guarantee use. Whether a pregnant woman attends and follows through on care depends on her financial resources, transportation, active health insurance, family support, and her own authority to make healthcare decisions. These enabling conditions matter most for young or unmarried women who rely on relatives or partners for material support.

Ghanaian studies have identified transportation costs, household decision-making, limited male-partner involvement, financial constraints, and sociocultural norms as barriers to maternal healthcare (Atuoye et al., 2015; Ganle et al., 2015; Kyei-Nimakoh et al., 2017). These studies are largely cross-sectional and population-level, which means they can identify which factors matter but not how those factors interact within one woman's deterioration and care-seeking trajectory. A single, in-depth case can close that gap: it can show where along the trajectory an opportunity for earlier intervention was delayed or missed, and how family, financial, and system-level barriers compounded rather than acted alone. The case reported here, involving a rural pregnant woman whose anaemia progressed to a critical stage, is used to trace that interaction directly.

1.2 Research Objective(s)

i. To examine how family dynamics, socio-cultural norms, and interpersonal relationships acted as barriers to timely antenatal care and medical intervention in a rural community of the Nkwanta South Municipality, Ghana.
ii. To document the clinical management and trajectory of a severe anaemia case in pregnancy and to identify the points at which timely intervention was obstructed within both household and health system settings.
iii. To provide evidence-base recommendations for strengthening community-level maternal health support systems and addressing socio-cultural barriers to antenatal care utilisation in rural Ghana.

II. LITERATURE REVIEW

2.1 Theoretical Review

This analysis examines maternal healthcare use by drawing on two theories and considers both structural and behavioural factors. The Social Ecological Model and Andersen's Behavioural Model of Health Services Utilisation help explain how broader constraints and personal factors interact to shape care-seeking behaviour.

2.1.1 Bronfenbrenner's Social Ecological Model

Bronfenbrenner's Social Ecological Model conceptualises human experiences and outcomes as products of interactions across multiple levels of the social environment. In maternal healthcare, these levels may include individual knowledge and perceptions, household relationships, community norms, healthcare institutions and wider social or policy structures. The model is useful for examining how barriers at one level may be reinforced or reduced by conditions at another level (Bronfenbrenner, 1977).

Within this study, the model provided an organising framework for examining the interaction of individual circumstances, family relationships, community-level service access and broader healthcare-system arrangements. It was not used to establish causality, but to support a multi-level interpretation of the circumstances surrounding the woman's care trajectory.

2.1.2 Andersen's Behavioural Model of Health Services Utilisations

Andersen's Behavioural Model of Health Services Utilisation proposes that healthcare use is influenced by predisposing characteristics, enabling resources and perceived or evaluated need (Andersen, 1995). Predisposing characteristics include social and demographic circumstances that may influence attitudes towards care. Enabling resources include income, insurance, transportation, family support and the availability of services. Need-related factors concern the recognition and severity of a health condition.

The model was applied in this study to examine why the presence of an urgent clinical need did not immediately result in healthcare utilisation. Particular attention was given to the availability of household support, transportation, financial resources, health insurance and the recognition of the severity of the woman's condition.

2.2 Empirical Review

Anaemia in pregnancy contributes substantially to maternal and foetal morbidity, particularly where women enter pregnancy with existing nutritional deficiencies or limited access to preventive and curative care. In Ghana, anaemia remains prevalent among pregnant women in both rural and urban settings, though rural residence often brings added nutritional, financial and geographical disadvantages (Ampiah et al., 2019; Ayensu et al., 2020). Regular antenatal attendance allows for Hb testing, iron and folic acid supplementation, nutritional counselling, and the identification of infections or other conditions linked to anaemia.

Even where antenatal services are available, women may delay using them because of transportation difficulties, indirect costs, and limited access to well-resourced facilities. Atuoye et al. (2015) found transportation barriers to be a significant obstacle to maternal and child healthcare in rural Ghana. These barriers can persist even when consultation or treatment itself is covered, since women still need money for travel, accommodation, laboratory tests, medicines, or an accompanying relative.

The National Health Insurance Scheme was introduced to reduce financial barriers to healthcare, including maternal health services. But enrolment gaps, expired membership, administrative hurdles, and residual out-of-pocket costs continue to limit access for poor and rural women (Akweongo et al., 2021; Anarwat et al., 2021; Asem et al., 2024). Formal entitlement to care means little if a woman lacks the resources to register, renew her membership, or reach a facility in the first place.

Family and partner support shape maternal healthcare use as well. Pregnant women often depend on partners and relatives for transportation, money, food, permission, decision-making, and accompaniment to health facilities. In Ghana, decision-making within the extended family can either ease or delay access to maternal care (Ganle et al., 2015). A lack of male-partner support has similarly been identified as a significant barrier to obstetric care across sub-Saharan Africa (Kyei-Nimakoh et al., 2017).

Pregnancy intention and social circumstances can also affect when antenatal care begins. Unintended pregnancies have been linked to delayed initiation and lower use of maternal health services (Wado et al., 2013; Tolossa et al., 2020). When a pregnancy occurs outside marriage, fear of social judgment or family conflict may reduce the emotional and material support available to the woman, though this varies across individuals and communities.

Existing studies offer valuable evidence on individual barriers to maternal healthcare, but few document how family conflict, financial disadvantage, transportation barriers, insurance status, and clinical deterioration interact within a single, traceable care trajectory. A qualitative single-case study can contribute to this literature by examining these interactions in depth, while recognising that findings from one case cannot be statistically generalised.

III. METHODOLOGY

3.1 Research Design

This study employed a qualitative, single-case study design to provide an in-depth and contextually grounded examination of how family dynamics, socio-cultural expectations, and structural barriers shaped the antenatal care trajectory of a pregnant woman. This approach was appropriate because case studies allow real-life phenomena to be examined holistically, particularly when the phenomenon cannot be clearly separated from its wider context (Yin & Campbell, 2018). Both frameworks together supported a theoretically grounded interpretation of why an urgent clinical need did not translate into timely access to care, with attention to the social, structural, and clinical vulnerabilities that contributed to the patient's outcome in rural settings (Yin & Campbell, 2018).

3.2 Study Area

Nkwanta South is one of the eight (8) Municipal and District Assemblies in the Oti Region of Ghana. It lies between latitudes 7' 300 and 8' 450 North and longitudes 0'100 and 0'450 East. It is about 540 km north of the national capital, Accra. The main economic activity of the people is subsistence agriculture, which relies mainly on rainfall. Poor rainfall sometimes leads to low yields, further compounding the already precarious economic situation and causing food shortages and nutritional challenges.

The health delivery system is managed by the Municipal Health Management Team (MHMT), which is headed by the Municipal Director of Health Services. Among the services provided by the MHMT are Health Administration, Health Promotion and Curative Services, Maternal and Child Health/Family Planning Services, and Disease Control and Preventive Services.

The present study was conducted in the Bonakye sub-district, one of the municipality's five health sub-districts. Health care in this sub-district is delivered mainly through primary health care facilities, including CHPS compounds, with referral support from higher-level facilities within the municipality, particularly those in Nkwanta. This sub-district-level arrangement makes Bonakye an important unit for examining access to frontline health services and the organisation of community-based care in the municipality (Nkwanta South District Assembly, 2021).

3.3 Data Collection

Data for this case study were collected through three principal methods. Direct structured observation was conducted during home visits and clinical encounters throughout the study period (7th June to 24th June 2023). This encompassed observations of the patient's physical condition, living environment, and the social interactions between the patient, her family members, and the research team. Observational notes were noted by members of the field team and subsequently compiled into a chronological case narrative.

In-depth interviews were conducted with key family members specifically the patient's mother and her maternal cousin to elicit first-hand perspectives on the social and cultural dynamics governing their responses to the patient's pregnancy and healthcare needs. The interviews were open-ended questions designed to explore decision-making processes, perceived obligations, cultural norms, and the sources of interpersonal conflict that influenced support withdrawal. Interviews were conducted in the local language by a team member with proficiency in the community dialect; responses were transcribed and translated into English, with attention to preserving meaning and tone. Finally, clinical records from the Bonakye Health Centre and the Nkwanta South Municipal Hospital were reviewed and extracted to document the patient's Hb trajectory, gestational history, clinical management interventions, and treatment outcomes throughout the reporting period. Data from these three sources were triangulated to ensure internal consistency of the case narrative and to contextualise clinical findings within their social and structural determinants (Creswell & Poth, 2017).

3.4 Timeline

Table 1: Timeline from case identification to follow-up after discharge

Date	Key event/activity
07/06/2023	The field team, comprising of Mr Bright Akpornorvi, Fred Newton Binka School of Public Health students, the team driver, and Sister Meimunatu of Dogo-Ketewa) visited Bonakye as part of routine home visits and follow-up of pregnant women in the community.
09/06/2023	Nutrition officers from the Nkwanta South Municipal Health Directorate were involved in managing the case. The team bought a crate of eggs to help cushion the nutritional needs of the client, and one of the UHAS students willingly donated blood.
12/06/2023	The client was then discharged home with an Hb of 7.1 g/dL (moderate anaemia)
24/06/2023	Routine post-discharge follow-up of the client was conducted.

3.5 Ethical Considerations

This case emerged from field practice rather than a pre-approved research protocol. Ethical safeguards were secured before the case was developed for documentation and publication. Permission to document and report the case was obtained from the Nkwanta south Municipal Health Directorate. Written informed consent was sought from all participants.

IV. FINDINGS & DISCUSSION

4.1 Findings

4.1.1 Case Presentation

The case study of this young lady in this community reveals the impact of an unintended pregnancy on her ability to access timely and appropriate healthcare services. The lady's story is a poignant reflection of the challenges faced by women in rural Ghana, where maternal health is intertwined with socio-cultural dynamics and family support. The lady found herself grappling with an unintended pregnancy, compounded by a lack of familial backing that severely hindered her access to essential healthcare services. In a region where maternal health outcomes are already precarious, her experience highlights the critical barriers that many women encounter, including financial constraints, inadequate antenatal care services, and the stigma surrounding unintended pregnancies out of wedlock.

4.1.2 Narrative

During a community field visit by postgraduate students on the 7th of June 2023, the field team identified a 23-year-old pregnant woman who appeared pale and had swelling of the face and feet (Table 1). Information obtained during the visit indicated that the pregnancy was unintended and she had not attended antenatal care consistently and had experienced several weakness and episodes of fainting. Recognising the severity of the situation, the team convinced the woman to seek immediate medical attention. Her Hb concentration was undetectable at the Bonakye Health Centre, necessitating an urgent referral to the Nkwanta South Municipal Hospital, approximately 18.8 km away. Efforts were made to reach and locate the lady's mother, who had temporarily travelled for work. Once her mother was informed of the situation, she accompanied the lady to the referral facility (Hospital).

At the referral hospital, the pregnancy was assessed at approximately 15 weeks of gestation and her Hb concentration was measured at 2.7 g/dL , indicating severe anaemia (Table 2), necessitating urgent blood transfusions. She received two units of blood donated by one of the UHAS students in the team and was placed on oral iron and folic acid supplements. She was monitored and counselled by the nutrition department in both the referral hospital and the municipal health directorate on iron-rich foods common in her community such as beans and jute leaves. The team also crate of eggs (Table 1). Her condition temporarily improved, with her Hb concentration rising to 7.1 g/dL and was discharged.

Following her discharge, follow-up visits indicated an initial improvement in the lady's appearance, and her mother confirmed that she was receiving adequate nourishment, suggesting some recovery in her health and overall well-being. This improvement was not sustained. Subsequent visits identified poor compliance with medication, attributed to gastrointestinal side effects such as nausea and constipation, alongside persistent difficulty accessing transportation to the hospital. A later clinical assessment recorded a haemoglobin concentration of 6.2 g/dL, together with abdominal pain and a subsequent miscarriage. The available clinical records did not establish the cause of the miscarriage.

Table 2: Patient's Diagnostics

Type	Value	Unit
07/062023		
Height	155	cm
Weight	50	kg
Hb	2.7	g/dL
09/06/2023		
Height	155	cm
BP	99/63	mmHg
2023-06-12		
Weight	48	kg
Hb	7.1	g/dL
BP	98/66	mmHg

4.1.3 Perspectives

The perspectives presented below reflect the mother's and the cousin's viewpoints, shaped by individual experiences and emotions, as well as by a lack of knowledge about the consequences of their actions and inaction.

Mother's Perspective

From the mother's point of view, she explained her difficulty, as the sole caregiver, in caring for her children, including the woman under study. Also, the boy responsible for the pregnancy and his family refused to take responsibility for the pregnancy. The victim's mother had to travel to another village to engage in trading to raise money for the lady's health needs, including the renewal of her health insurance, the lack of which had prevented her from

receiving necessary medical care. The mother insists she had not abandoned her daughter, but was working to gather resources, while the lady's cousins had refused to help her with food or take her to the hospital.

> "*When we sent her to the hospital earlier, they told us that she did not have sufficient blood. You see, I [mother] am the only person taking care of her and her children, with their deceased father. The boy who also impregnated her had run away and was not willing to take responsibility for the pregnancy. It was not until recently that the boy's relatives got to know that the girl's father was ill and that I was the only one taking care of her. They tried to talk to the boy, but he did not listen. I met relatives in Nkwanta, the next town, and they told me that the boy's failure to take responsibility was due to the influence of his mother and brother. I also decided to get money by going to a nearby village to prepare and sell gari (a local foodstuff). It was not that I had abandoned her; that is why you did not meet me here when you came. Her cousins refused to give her food and also refused to send her to the hospital. It is not that way; she did not have a valid health insurance ID, so I decided to get money so I could buy motor gasoline and pay for some guys to send her to the National Health Insurance Office so that she could renew her ID card and visit the health facility*" (Mother, Bonakye, 8/06/2023).

Cousin's perspective

The cousin's perspective is centred around personal grievances. He describes the lady as disrespectful and dangerous, recounting an incident where she allegedly raised a hoe at him on the farm, which he interpreted as an attempt to kill him. Due to this incident, he felt justified in refusing to help her. He also emphasised that even if he wanted to assist, he would need approval from his father (late) and the gods, reflecting the influence of cultural and spiritual beliefs on his decisions.

> "*The girl has been very disrespectful to me, and I will not mind her. It is not possible to send her to the hospital. I can do that, but she tried to kill me at the farm by raising a hoe at me. Even if I sent her to the hospital, I would have had to hear from my father before. I would have to consult with the gods since she tried to kill me at the farm"* (Maternal cousin, Bonakye, 7/06/2023).

4.2 Discussion

The patient in this case presented with an Hb concentration of 2.7 g/dL at approximately 15 weeks' gestation, a level far below the WHO threshold for severe anaemia, placing her among the most extreme presentations documented in the Ghanaian maternal health literature. While an Hb concentration of this magnitude is not clinically common, the social and structural conditions that led to it are neither exceptional nor random. They follow a clear logic, where each level of disadvantage worsens the next, and where the health system's protections did not help a woman who, by clinical standards, needed urgent care.

Severe anaemia of this magnitude is typically due to underlying causes. Residence in rural Ghana may have exposed the patient to specific risk factors, including poor nutrition, malnutrition, and malaria. Agulu et al. (2025) documented a 51.4% anaemia prevalence among pregnant women in Ghana, demonstrating how endemic this condition remains. However, clinical risk factors explain the presence of anaemia but do not fully account for its severity. The haemoglobin concentration presentation suggests months without Hb monitoring, iron and folic acid supplementation, and early clinical contact, at which moderate anaemia could have been identified and corrected. This points to a failure to access antenatal care rather than a failure of antenatal care itself.

Evidence demonstrates that regular ANC attendance reduces the risk of pregnancy complications (Bahri Khomami et al., 2024; D'Alberti et al., 2026; Fenta et al., 2025). The WHO and American College of Obstetricians and Gynaecologists (ACOG) guidelines, supported by a broad evidence base, establish that early and consistent ANC is the primary mechanism through which pregnancy complications, including anaemia, hypertension, and gestational diabetes, are detected and managed before they become life-threatening (Abaane et al., 2023; Lattof et al., 2020; Tunçalp et al., 2017). The quality disparity between rural and urban ANC documented by Afulani et al. (2019) in Kenya reflects conditions directly comparable to those encountered in Bonakye, where the patient's severe anaemia was only identified at a late stage of presentation, necessitating referral over an 18.8 km distance for definitive management. This positions the patient's condition not as an isolated event but as a consequence of delayed access to care within a resource-constrained rural health system. Within Bronfenbrenner's Social Ecological Model such constraints reflect structural factors operating beyond the individual level that shape health outcomes despite the presence of clinical need.

This case goes beyond typical accounts of ANC access barriers by providing detailed insights into household-level challenges that enable or hinder access. Andersen's Behavioural Model of Health Services Utilisation argues that clinical need, even though acute, does not automatically lead to care-seeking; it must be translated into action through enabling resources. In this case, every one of those enabling resources was either absent or actively withheld. The unintended and premarital nature of the pregnancy was the proximate trigger for their withdrawal. Ameyaw et al. (2019) documented that 29.8% of pregnancies in Ghana are unintended, and the literature from Ghana and Ethiopia consistently identifies unintended pregnancy as associated with delayed ANC initiation, reduced visit frequency, and elevated psychosocial stress, mediated through the social consequences of stigma and the withdrawal of household support

(Kotoh & Boah, 2019; Tolossa et al., 2020). In this case, the stigma attached to the pregnancy appears closely tied to the family's willingness to help which in turn shaped how late she was able to access care and how severe her anaemia became before intervention.

The role of the pregnancy's biological father's disengagement deserves analytical attention. Kyei-Nimakoh et al. (2017) identified the absence of male partner support as a significant independent barrier to maternal healthcare utilisation in Ghana. The father's disengagement was not simply the loss of emotional support but represented the loss of the primary enabling agent who might otherwise have provided financial resources, transport, and the social authority to mobilise extended family assistance. His absence left the patient dependent on a household structure that was fractured by interpersonal conflict. This shifted the full weight of enablement onto her mother, who lacked the financial capacity and was physically absent.

The family dynamics documented here represent the a distinctive empirical contribution of this case. Aborigo et al. (2018) established that maternal health decision-making in rural northern Ghana frequently involves extended family members and ancestral consultations, processes that introduce delays with potentially fatal consequences. Ayanore et al. (2018) and Nyefene et al. (2018) similarly documented the ongoing influence of sociocultural factors on care-seeking behaviour in Ghana. What this case adds to that literature is first-hand testimony that traces the decision-making process in real time: the cousin invoked a personal grievance to justify withholding transport, and then deferred the medical emergency to the authority of ancestral consultation. These were not passive social norms operating in the background but active choices made by specific individuals whose authority in the household was strong enough to override both the patient's medical needs and her mother's willingness to help. Viewed through the microsystem level of the Social Ecological Model, these represents a concrete instance of how sociocultural authority within a household can directly obstruct access to urgent medica care.

Financial barriers compounded these household-level constraints through mechanisms identified in the empirical literature on Ghana's NHIS. Akweongo et al. (2021), Anarwat et al. (2021), Asem et al. (2024), and Haruna et al. (2019) each document the gap between the NHIS policy provision of free maternal care and its practical delivery in rural communities. Insurance lapses, transport costs, and residual out-of-pocket payments continue to function as effective drawbacks. Amo-Adjei et al. (2016) identified out-of-pocket expenditure as a persistent burden for rural women despite insurance coverage. In this case, the patient's mother was engaged in petty trading during the critical period of her daughter's deterioration, not to meet household expenses, but specifically to raise money for insurance renewal and transport to the referral facility. The NHIS's theoretical promise of free care proved hollow without the necessary groundwork. This finding supports the argument that financial protection policies based on formal-sector assumptions systematically fail to serve the rural poor, as the indirect costs of accessing care often surpass the direct costs these policies aim to address.

The determinants identified in this case did not function as isolated risk factors. In this case, poverty made the patient dependent on family support; the stigma attached to her pregnancy appears to explain why that support was withdrawn; and the cousin's invocation of cultural authority provided justification for withholding help. Structural limitations of the NHIS made the mother's financial efforts insufficient and gaps in the rural health infrastructure meant that even after the field team intervened, an 18.8 km referral journey was required to access the blood transfusion that saved her life. This findings locate the barriers across household, community and system levels of the Social Ecological Model and show how clinical need alone did not translate into care-seeking once the enabling resources at each level were withdrawn as stated by Andersen's model. Evidence from this case shows that interventions targeting only one level, while neglecting others, are unlikely to prevent recurrence.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The lady's tragic experience underlines the critical importance of addressing multifaceted challenges in maternal healthcare, particularly in rural settings. The lack of regular prenatal care, compounded by unintended pregnancy and familial discord, exposed the lady to severe health risks. The delay in seeking the necessary medical intervention due to complex family dynamics, financial constraints, and miscommunication among family members may have contributed to the unfortunate outcome of a miscarriage, which could also have ended the life of the young lady. To improve maternal health in rural Ghana, comprehensive healthcare approaches that integrate family support, healthcare system strengthening, and community outreach are needed. Health education programs that target both families and communities can help address cultural misconceptions and promote the importance of maternal care. Additionally, scaling up CHPS and ensuring access to essential maternal health services will be crucial in reducing adverse pregnancy outcomes in rural settings.

5.2 Recommendations

To improve maternal health outcomes, we recommend promoting family involvement by encouraging support for women during pregnancy and healthcare visits. This NHIS exemption policy for pregnant women should be more effectively implemented so that poor and vulnerable women can enrol or renew their membership. District authorities should further support poor women through targeted financial assistance, including linkage to LEAP and other barriers, even when insurance exists. Community-based family planning and antenatal outreach through CHPS compounds and community health workers should be expanded, particularly for women in remote areas. Health promotion units should also work with community leaders and families to address socio-cultural norms that delay timely care-seeking during pregnancy.

Financial barriers may be addressed by strengthening health insurance programs and social support for low-income families. Raising community awareness about the benefits of regular antenatal care (ANC) is crucial to prevent pregnancy-related complications. We further recommend that the health promotion units of health facilities collaborate with local leaders to address harmful sociocultural norms that delay access to medical care. Also, expanding community-based ANC services, such as mobile clinics or community health workers, can help reach women in remote areas. Additionally, introducing a monitoring and evaluation system will ensure regular assessment and improvement of ANC service quality.

List of Abbreviations
ANC – Antenatal Care
BP – Blood Pressure
CHPS – Community-based Health Planning and Services
DHMT – District Health Management Team
Hb – Haemoglobin
MHMT – Municipal Health Management Team
NHIS – National Health Insurance Scheme
SDHT – Sub-District Health Team
WHO – World Health Organization

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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