"Nobody gave me information": Hospital experiences of Ghanaian families after maternal mortalities

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BACKGROUND: Rates of maternal mortality are highest in low-resource settings. Family members are often involved in the critical periods surrounding a maternal death, including transportation to health centers and financial and emotional support during hospital admissions. Maternal death has devastating impacts on surviving family members, which are often overlooked and understudied.

OBJECTIVE: Our study aimed to explore the hospital experiences of family members surrounding a maternal death, and to define their access to and need for institutional and psychosocial support.

STUDY DESIGN: This mixed methods cross-sectional study was conducted at an urban tertiary hospital in Ghana. Maternal mortalities from June 2019 to December 2020 were identified using death certificates. Participants, defined as husbands or other heads of households in families affected by maternal mortality, were purposively recruited. An interview guide was developed using grounded theory. In-person semi–structured interviews were conducted in English or Twi to explore impacts of maternal mortality on family members, with a focus on hospital experiences. Surveys were administered on types of and needs for institutional support. Interviews were audio recorded, translated, transcribed, coded with an iteratively-developed codebook, and thematically analyzed. Survey data was descriptively analyzed.

RESULTS: Fifty-one participants included 26 husbands of the deceased woman, 5 parents, 12 siblings, and 8 second-degree relatives. Interviews revealed an overall negative hospital experience for surviving family members, who expressed substantial dissatisfaction and distress. Four themes regarding the hospital experience emerged from the interviews: 1) poor communication from healthcare workers and hospital personnel, which contributed to 2) limited understanding of the patient's clinical status, hospital course, and cause of death; 3) maternal death perceived as avoidable; and 4) maternal death perceived as unexpected and shocking. Survey data revealed that only 10% of participants were provided psychosocial support following the maternal death event, yet 93.3% of those who did not receive support desired this resource.

CONCLUSION: The hospital experience was overall negative for family members and a lack of effective communication emerged as the root cause of this negative perception. Strategies to improve communication between healthcare providers and families are essential. In addition, there is an unmet need for formal mental health resources for families who experience a maternal death.

Key words: family member, global maternal health, healthcare communication, hospital experience, maternal death, maternal mortality, mental health, sub-Saharan Africa

Introduction

Decreasing maternal mortality has been a targeted Sustainable Development Goal for the past decade. Despite global reductions in maternal mortality, rates remain the highest in low-resource settings,[1] with almost 95% occurring in low- and middle-income countries (LMICs) and 70% occurring in Sub-Saharan Africa.[1] In Ghana, the maternal mortality ratio is estimated at 310 per 100,000 live births, which remains among the highest globally.[2]

Unexpected maternal mortality can be devastating for family members. A sudden death can be highly stressful and result in feelings of unpreparedness, poor coping, and a more complex bereavement period for families.[4] Additionally, maternal mortality may have

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Why was this study conducted?

- The experience of maternal mortality can have lasting psychosocial effects on family members; however, this population is understudied
- This study explored the hospital experiences of family members surrounding maternal mortalities at a tertiary hospital in Ghana

Key findings

- A lack of effective communication from healthcare providers emerged as the predominant underlying cause of poor hospital experiences
- Only 10% of participants were offered psychosocial support following the maternal death, suggesting the need to improve formal mental health resources for families

What does this add to what is known?

- Our study is one of very few to explore hospital experiences surrounding a maternal death and report an overall negative perception
- A lack of effective communication as the underlying factor suggests the need for improved communication between hospital personnel and families
- Implementing formal mental health resources for families is critical

intergenerational and multisectorial disruptions that can result in long-term economic, social, and health consequences.[5]

Despite the known emotional, psychological, and often physical consequences of maternal death on family members, little research has been done on families' hospital experiences and the impact of this critical time. Therefore, we aimed to explore the surviving family members' perceptions about their hospital experiences surrounding a maternal death and to assess the level of institutional support received following the death.

Materials and Methods

This mixed methods study, which focuses on the hospital experience, is part of an overarching study assessing the impact of maternal mortality on family members.[5] The study setting was the Komfo Anokye Teaching Hospital (KATH), a large tertiary care hospital in the urban center of Kumasi, Ghana. KATH manages patients who received their antenatal care at KATH, as well as those referred to the center after developing complications during pregnancy, delivery, or postpartum. KATH's maternal mortality ratio was 847 per 100,000 live births in 2020.[3]

Participants were husbands or other heads of households in families affected by maternal mortality. Inclusion criteria were age ≥18 years, fluency in English or Twi, and a family member of maternal mortality managed at KATH between June 1, 2019, and December 1, 2020. Death certificates at KATH were reviewed to identify maternal mortalities[1] and gather family members' contact information. Written informed consent was obtained from all participants. Ethical approval was granted by the Institutional Review Boards at KATH (KATH-IRB/AP/003/20) and the University of Michigan (HUM00175461).

A semi-structured interview guide, consisting of open-ended questions and more specific follow-up prompts, was developed using grounded theory. Question development was guided by the expertise and experiences of the research team, which included Ghanaian OBGYNs at the study site. Questions focused on the hospital experience of family members surrounding maternal mortality, including interactions with healthcare providers, challenges encountered, emotional and financial impacts, and overall perspectives. Additional survey questions focused on support provided in the hospital. A trained research assistant conducted in-person interviews at the participants' location of choice, in either English or Twi. Interviews lasted approximately 30 minutes. Cellphone credit (22 Ghanaian cedis=$2 USD) was provided as an incentive.

Demographic and survey data was descriptively summarized. Age and cause of death were extracted from death certificates and described. Interviews were audio-recorded; Twi interviews were translated into English and transcribed. Multiple researchers used an interactive process to review the interview transcripts, identify and discuss keyword phrases, and develop a final codebook. Once the codebook stabilized, all transcripts were manually coded. Finally, codes were thematically analyzed per the Attride-Stirling framework of basic, organizing, and global themes.[6]

Results

From 101 death certificates documenting a maternal death, 67 families were contacted (34 did not respond or had nonworking numbers) and 51 agreed to participate: 26 participants were the husband of the woman who died, 5 were her father or mother, 12 were her sister or brother, and 8 were a second-degree relative (Table). Most maternal mortalities were due to a hypertensive disorder of pregnancy (27.4%) or obstetric hemorrhage (21.6%).

Survey questions on hospital support revealed that 10% of participants received psychosocial support, from a social worker, religious leader, or others. Of those who did not receive psychosocial support (n=45), 93.3% wished they had been provided with it (Figure 1). Conversely, 65.6% of family members whose infants survived (n=32) received support regarding caring for and feeding the newborn (Figure 2).

Interviews revealed an overall negative hospital experience for surviving family members who experienced maternal mortality, with the majority expressing dissatisfaction and distress. Four themes regarding the hospital experience emerged from the interviews: 1) poor communication from healthcare providers and hospital

TABLE
Demographics of Maternal Death and Interviewed Participant

Characteristic	n (%) or Median (Range)
Demographics of maternal death	
Maternal age at death (years)	32 (17-44)
Maternal cause of death	
Hypertensive disorder of pregnancy[a]	14 (27.4)
Obstetric hemorrhage, anemia	11 (21.6)
Respiratory failure	7 (13.7)
Sepsis	5 (9.8)
Kidney failure, acute kidney injury	4 (7.8)
Cardiac failure[c]	3 (5.9)
Stroke	2 (3.9)
Other[d]	5 (9.8)
Demographics of interviewed participant	
Age (years)	42 (26-76)
Highest completed education	
None	7 (13.7)
Primary	12 (23.5)
Secondary	18 (35.3)
Tertiary	14 (27.5)
Occupation	
Farmer	8 (15.7)
Trader	7 (13.7)
Professional work	13 (25.5)
Other work	22 (43.1)
No work outside the home	1 (2.0)
Relationship to the woman who died	
Husband	26 (51.0)
Father	3 (5.9)
Mother	2 (3.9)
Sister	4 (7.8)
Brother	8 (15.7)
Second-degree relative[e]	8 (15.7)

bARDS, acute chest syndrome.

[a] Preeclampsia, eclampsia, HELLP syndrome- hemolysis, elevated liver enzymes, low platelets.; [c] Atrial fibrillation, cardiac tamponade.; [d] Cousin, aunt/uncle, grandparent.; [e] n=1 each for pulmonary embolism, diabetic ketoacidosis, choriocarcinoma, acute fulminant hepatitis, unspecified complications of sickle cell disease.

personnel, which contributed to; 2) limited understanding of the patient's clinical status, hospital course, and cause of death; 3) maternal death perceived as avoidable; and 4) maternal death perceived as unexpected and shocking (Figure 3).

Poor communication between healthcare workers and hospital personnel

There was an overwhelming sentiment from surviving family members on the limited communication about the patient's clinical status, hospital course, and cause of death. This included delays in communicating information until long after important events had occurred, lack of updates on changes in a patient's status as they got sicker or complications developed, and limited explanations when communication did occur.

> *"We didn't hear anything up until I went back inside and asked what had happened and they said that she had passed away over an hour ago... we have been there all day... so if I had not walked in and asked anyone, you wouldn't have known that she had passed away." (Participant 28)*

Few respondents said their physicians or nurses prioritized calling and providing updates about the patient. While some said they received periodic updates, the majority felt they were given no updates at all until the patient's passing or when the physicians needed family members to buy medication or pay for tests. Several participants reported feeling shunned or ignored by medical professionals when they requested updates.

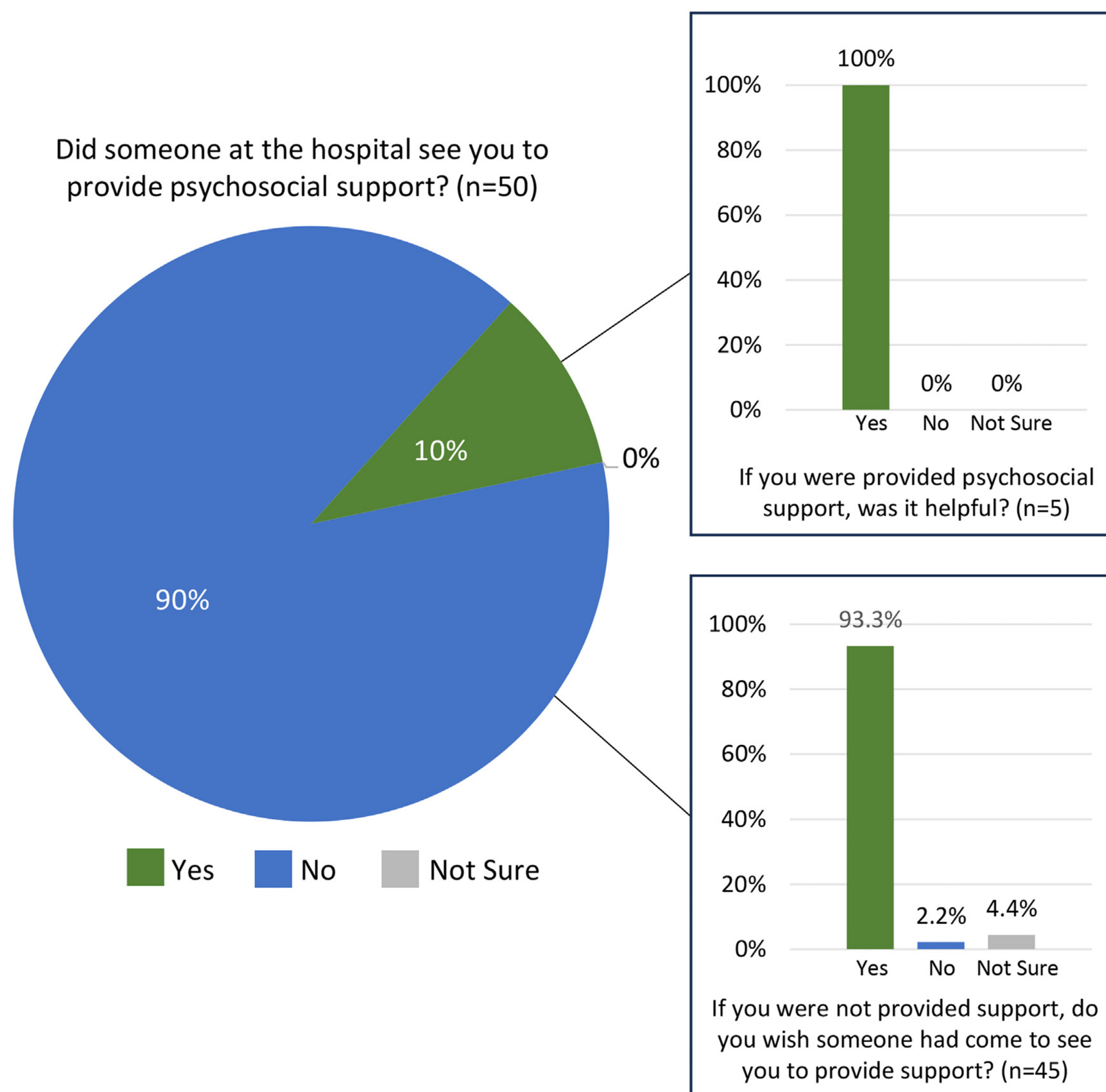
> *"At ICU, nobody gave me any information. I was told nothing about the condition. You ask a question, they say wait for the doctor... And when doctors come, you are asked to leave." (Participant 30)*

Participants wished medical professionals would be more mindful of how they interact with patients and family members, actively listen to family members' concerns, and respect patients' and families' wishes.

> *"I think that if the patient is admitted and their situation is critical, their family should be informed. I should be given information. At least, if the doctors do their rounds and then they see that things are not moving the way they expect, they can [tell me]." (Participant 30)*

While some received detailed information about the events leading up to the death, most were told that the medical providers tried their best but couldn't save the patient, and the cause of death was not revealed.

FIGURE 1
Psychosocial support offered to family members.



> *"All that I want is that the hospital should let us know what caused her death, because they did not tell us." (Participant 7)*

Frustration with poor communication also applied to the complex processes of retrieving the deceased patient from the morgue, addressing unpaid hospital bills, finding and obtaining the signature of the physician who pronounced the patient dead, or arranging transport of the deceased patient back to their hometown. Families who experienced these difficulties expressed shame, guilt, and frustration with an inability to follow appropriate burial traditions.

> *"It has brought a disgrace to the family because they told me I can [only] take the body after I have paid my debt, and I have already call[ed] for ambulance to come and take the body to the north." (Participant 12)*

Limited understanding of the patient's clinical status, hospital course, and cause of death

Participants had difficulty understanding the hospital course of events. This extended beyond the patient's clinical status to include the reasoning behind family members' blood donations when the blood sometimes went unused, and the necessity of and risks involved in life-saving interventions. Family members are often responsible for purchasing medications or paying for lab tests, as well as physically transporting medications and lab samples on behalf of the patient. Thus, deciphering which medications or lab tests to purchase was a repeated concern.

> *"When the [pregnant woman] got to the hospital, they said her pressure has gone high. Immediately, [she*

FIGURE 2
Newborn care support offered to family members.

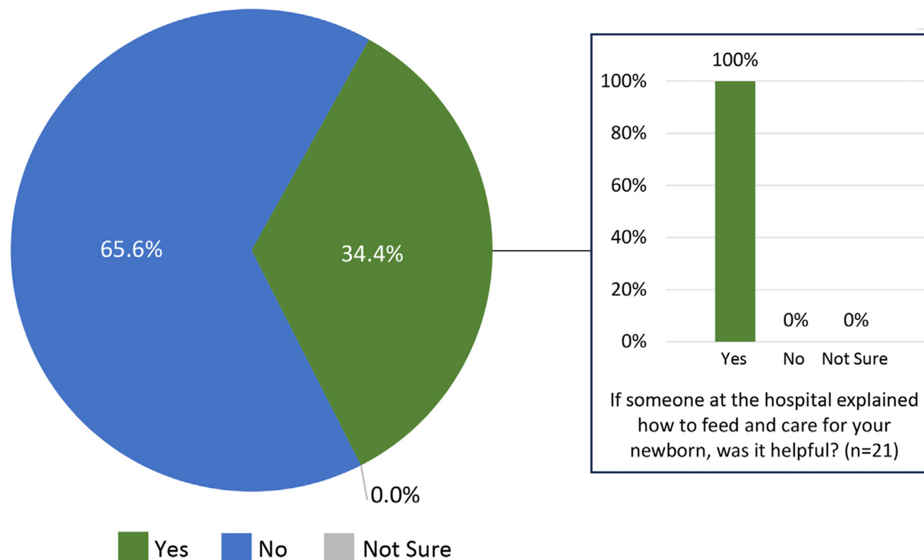
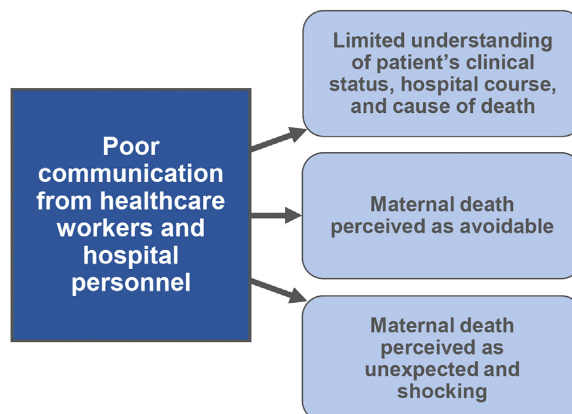


FIGURE 3
Thematic framework of the family's hospital experience following a maternal mortality.



called me to tell me. I rushed to the hospital on a motorcycle. When I got there, they told me to rush and go get some medicine for her but I did not get some at the pharmacy they recommended. So I went to a different pharmacy and still did not get some. When I finally got some of the medicine and came back to the hospital she had passed." (Participant 15)

Despite most participants describing a lack of understanding resulting from insufficient provider explanation, some did report positive experiences—particularly with providers delivering accurate information to family members in preparation of the patient's death.

"The doctor told me the truth about my wife's state. And if they can say that to all people, it will be good." (Participant 13)

Maternal death is perceived as avoidable

Many participants expressed anguish with suspected delays in care and believed that maternal death was likely preventable if hospital staff had acted quickly and early. They specifically cited perceived delays in ordering medications, performing cesarean sections, transferring to higher-level hospitals, and admitting the patient to the ICU. They felt that if a patient's condition is worsening or a symptom is even slightly abnormal, providers should react quickly and not wait for further deterioration. Similarly, if the physicians know they are unable to properly care for a patient, they should refer them immediately instead of wasting time.

"I feel that if the doctors had attended to her earlier and had not delayed she could have been saved. They had a chance to save her but they did not react quickly because they thought it wasn't that serious. By the time they

realized it was serious it was too late. So if they hadn't delayed I am sure she would have been saved." (Participant 9)

Specifically, high patient-to-nurse and -doctor ratios and perceived delays in intervention due to high patient volumes were commonly expressed.

"Our hospitals, they demand on the doctors more than the doctor patient ratio. We know, it's not the best." (Participant 29)

Many participants felt that healthcare workers worked with low energy and were inattentive to the patients; this was thought by family members to have resulted in a delay in life-saving interventions and subsequently led to the maternal death.

"I am suggesting that next time when someone comes there in such condition, they should pay much attention to the patient to my opinion. If they had paid much attention to her such thing would not have happened." (Participant 14)

Conversely, several family members were satisfied with the hospital experience due to physician attentiveness and quick intervention. These participants accepted the death as unavoidable.

"Oh, when they admitted her there the doctors were very attentive to her. She had a doctor around her almost all the time and they made us go buy whatever medication they think will help her recover. They really tried to save her, they did their best but unfortunately she couldn't make it." (Participant 20)

One even reported that the physician taking care of his wife cried when she died. Those who had a positive interaction wished that every physician would treat every patient and family as kindly as theirs had.

"That doctor was really good to me, she really cared for my wife well. Every time I get to the hospital, I see her by her bed fussing over her. When my wife died, she even cried. I saw her cry before my eyes." (Participant 19)

Maternal death perceived as unexpected and shocking

Most participants expressed that the maternal death was unexpected and that they felt unprepared for the experience. The sudden occurrence of maternal death, particularly for patients who were previously healthy, was shocking for family members and contributed to an overall negative experience in the hospital. Many had prior experience with other friends and family members doing well in childbirth, even when cesarean section or other interventions were needed, and had thus held the same positive expectations for their situation.

"It was normal to everybody, it happens. She wasn't the first person to be operated upon like this. So, there wasn't any fear of that sort. But it's when it was unsuccessful, then... we felt the pain." (Participant 32)

The news of the maternal death was very hard to process for many family members, with some needing to see the body before they believed it.

"I did not believe [the doctor] when she told me. So I told her I want to see [the demised family member] for myself. Even when I saw her, I was still doubting." (Participant 5)

Many thought this sense of shock could be mitigated if families were informed early in the hospital course on the possibility of death.

"I haven't experienced [anything] like [this] before, so when it happened, it came to me the shock." (Participant 1)

Overall impact

For many participants, the maternal mortality event was a life-altering experience that left them with many new perceptions about pregnancy and childbirth. Some expressed the importance of quality hospital care for other pregnant patients, with others imploring hospital staff to be considerate of family members who have experienced a loss. Family members coped and assigned blame in a range of ways. Some felt the death was the fault of the hospital, some chose to avoid blaming hospital staff for their pain, and others decided to move on and accept that there was nothing else they could do. Many relied on religion to explain the event, seeking solace in the belief that it was God's plan while focusing on praying for the health of other pregnant women in their community.

"I've come to realize that we need to pay good attention to [pregnant women] and pray for them, because if anything come happen to them, when they are waiting for surgery or during the time of labor. So, that is what has changed my mind, to be very concerned about pregnant women." (Participant 32)

Discussion

Principal findings

Our study revealed a central theme of poor communication between healthcare workers and hospital personnel, which led to family members having a limited understanding of the patient's clinical status, hospital course, and cause of death and feeling that the maternal death was avoidable, unexpected, and shocking. Overall, the hospital experience was negative for surviving family members, with the majority expressing dissatisfaction and distress. An overwhelming lack of psychosocial support for family members and a desire for additional support was reported.

Result

To date, research on the hospital experience of family members surviving a maternal death is limited. Several studies have revealed negative experiences for family members surviving any sudden death or stillbirth related to the cold reception of hospital staff, delays in verbal communication of the death, and poor and inconsistent messages

from providers.[7] Miscommunication between providers and parents have been shown to result in perceived medical errors and a suboptimal hospital experience.[8] Additionally, our findings on the dearth of psychosocial support for surviving family members are especially important since prior studies have shown increased mild depressive symptoms, complicated grief resulting in impairment of daily functioning, post-traumatic stress disorder, overall poorer mental health quality of life, and worse nutritional status for husbands and heads of households following a maternal death.[5,9]

Clinical Implications

Our central theme of poor communication from providers highlights the need for improved communication between hospital personnel and patients and their families, particularly during critical emergencies where the clinical status is tenuous and immediately following a death. The hospital experience is a vital period for families and a poor experience can negatively impact their future health-seeking behavior, especially as it pertains to the surviving child. Prior studies have shown that perceived inadequate care and costs incurred at the hospital surrounding a maternal death may result in hesitancy in seeking care for a neonate.[10] Children of a maternal death have 15 times increased odds of dying in childhood and an increased likelihood of malnutrition and abandonment.[9,11] Further, we demonstrate a critical gap in support for family members, indicating the need for formal mental health resources to be integrated into hospital systems, which may involve utilizing nonmedical hospital staff such as social workers and religious personnel.

Research Implications

Additional studies are needed to better understand how hospital experiences impact longer-term psychosocial coping, perceptions of the healthcare system, and care-seeking behaviors among family members. Further, studies are needed to explore the provider-focused challenges in counseling and communicating with family members of critically ill patients, particularly in settings with high patient-to-provider ratios and low health literacy of family members.

Strengths and limitations

To our knowledge, this study is the first in Sub-Saharan Africa to explore family perspectives and provide a comprehensive understanding of how family members experience maternal death. The study setting was well-suited to represent diverse views, as KATH is a large referral center serving central Ghana. Limitations include the retrospective approach to data collection, which may introduce recall bias, especially for families whose experiences were impacted by grief. Further, low health literacy and not understanding hospital infrastructure may have contributed to family members' having poorer perceptions of the hospital experience. Finally, our findings may not be representative of families experiencing maternal deaths at nontertiary medical centers and in rural settings.

Conclusions

Our study sheds light on the distressing experiences faced by family members surrounding a maternal death and the lack of support provided following these traumatic events. These findings stress the urgent need to prioritize effective communication and comprehensive support mechanisms in hospitals in Ghana and other LMICs. By addressing these issues, hospitals can foster a more respectful and informed environment, better supporting families during the critical period surrounding maternal death. ■

CRediT authorship contribution statement

LeAnn A. Louis: Formal analysis, Writing – original draft, Writing – review & editing. **Adu Appiah-Kubi:** Conceptualization, Methodology, Writing – review & editing. **Ruth Owusu-Antwi:** Methodology, Writing – review & editing. **Thomas O. Konney:** Conceptualization, Methodology, Writing – review & editing. **Cheryl A. Moyer:** Conceptualization, Formal analysis, Methodology, Writing – original draft, Writing – review & editing. **Emma R. Lawrence:** Conceptualization, Formal analysis, Methodology, Writing – original draft, Writing – review & editing.

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