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## BRIEF COMMUNICATION

### **Exploring self-blame and the perceived causes of preeclampsia in urban Ghana**

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#### **KEYWORDS**

Maternal health; Preeclampsia; Pregnancy; Self-blame; Sub-Saharan Africa

#### **SYNOPSIS**

Many women blame themselves for the development of preeclampsia, and patients may benefit from an explicit discussion about the causes of preeclampsia with their healthcare provider.

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Preeclampsia/eclampsia is a major complication of pregnancy in developing countries. [1, 2] Whilst the existing literature focuses on the epidemiological and clinical aspects, the present study explores patient experience with preeclampsia/eclampsia among women in Ghana.

Participants were adult postpartum women diagnosed with preeclampsia with severe features or eclampsia, admitted to Korle Bu Teaching Hospital (KBTH), Accra, Ghana. Ethical approval for this study was granted by KBTH (KBTH-IRB/00096/2018) and the University of Michigan (HUM00139104). Participants were identified using maternity ward admission logs and provided written consent for inclusion in this study. The participants completed a postpartum survey, administered by a research team member, including questions about self-blame and perceived provider counseling. Participant understanding was assessed using a fact-based knowledge assessment. Multiple logistic regression analysis was used to evaluate predictors of self-blame.

From November 2019 to March 2020, 150 participants were recruited, 133 (88.7%) with preeclampsia and 17 (11.3%) with eclampsia. Participants had a mean age of 31.4 years, 54 (36%) were primiparous, and 71 (47%) had only undergone primary education.

Regarding perceptions of self-blame, 10 (6.8%) participants were told that development of preeclampsia/eclampsia was their fault, 26 (17.5%) believed it was their fault, and 58 (38.7%) believed they could have done something differently to prevent it. Of these women, the most common response regarding prevention was decreasing emotional stress during pregnancy, and 32 (55%) prevention responses were based on misperceptions (Table 1).

In an adjusted logistic regression analysis, predictors of self-blame (believing it was their fault) included a woman being told preeclampsia was her fault (OR 7.6, 95% CI 1.3–45.5,  $P<0.05$ ), and a woman believing there was something she could have done to prevent preeclampsia (OR 10.0, 95% CI 2.6–38.9,  $P<0.05$ ). Self-blame was independent of diagnosis (preeclampsia versus eclampsia), delivery outcome (live birth versus stillbirth), and education level. Self-blame was also independent of perceived provider counseling and the participant's score on the knowledge assessment.

Future reproductive plans were affected, with 16 (10.7%) women not planning on future pregnancies due to their experience with preeclampsia/eclampsia. Eighty-four (56.4%) participants experienced emotional distress and 99 (66.9%) reported experiencing a financial burden.

Regardless of perceived quality of intrapartum care, self-blame may be an important aspect of the patient experience of preeclampsia/eclampsia and is dependent on whether a patient is told that development of the condition is her fault. This suggests that women may benefit from an explicit statement that development of preeclampsia/eclampsia is not their fault. Understanding the patient experience can help develop counseling tools and policies that support women affected by preeclampsia/eclampsia.

#### **AUTHOR CONTRIBUTIONS**

TB , SAO, CAM and EL contributed to conception/design of the study. AJ and AO contributed to the acquisition of data. AJ, CAM, and EL contributed to analysis of the data. All authors contributed to drafting and/or revising the work, and final approval of the final version of the manuscript.

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#### **CONFLICTS OF INTEREST**

The authors have no conflicts of interest.

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**TABLE 1** Participant responses on perceived self-blame and prevention of preeclampsia

<b>Survey question</b>	<b>All participants (n=150)</b>
<b>Did your condition cause you emotional distress?<sup>a</sup></b>	
Yes	84 (56.4%)
No	54 (36.2%)
I don't know	11 (7.4%)
<b>Did your condition cause you financial burden?<sup>a</sup></b>	
Yes	99 (66.9%)
No	35 (23.6%)
I don't know	14 (9.5%)
<b>Do you plan to get pregnant again?<sup>a</sup></b>	
Yes	52 (34.7%)
No, because of my experience with preeclampsia	16 (10.7%)
No, for other reasons	44 (29.3%)
I don't know	28 (25.3%)
<b>Were you told by anyone that development of this condition during pregnancy was your fault?<sup>a</sup></b>	
Yes	10 (6.8%)
No	134 (90.5%)
I don't know	4 (2.7%)

<sup>a</sup> Total number of responses <150 due to missing data

<b>Do you believe that development of this condition during your pregnancy was your fault?<sup>a</sup></b>	
Yes	26 (17.5%)
No	94 (63.1%)
I don't know	29 (19.5%)
<b>Do you believe there is something you could have done to prevent the development of this condition during your pregnancy?</b>	
Yes	58 (38.7%)
No	64 (42.7%)
I don't know	28 (18.7%)
<b>If you believe you could have done something differently, what could you have done to prevent preeclampsia?</b>	<b>Participants who believe they could have prevented preeclampsia (n=58)<sup>b</sup></b>
Decreasing emotional stress ("Thinking too much", "Shouting", Feeling depressed")	16 (27.5%)
Decreasing physical stress/working less ("Working too much", "Should have relaxed more")	8 (13.7%)
Medication compliance	8 (13.7%)
Changing diet/weight	7 (12.1%)

<sup>b</sup> Total number of responses >58 due to participants reporting multiple prevention responses.

Earlier ANC/medical care	7 (12.1%)
"If I had known earlier"	6 (10.3%)
"If I had received more information"	5 (8.6%)
"I should not have gotten pregnant"	1 (1.7%)
"I should not have been afraid to come to the hospital"	1 (1.7%)

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