



Mothers' Experiences of Severe Preeclampsia/ Eclampsia: A Narrative Literature Review

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ABSTRACT

Severe preeclampsia /eclampsia is a particularly serious issue and is highly associated with higher rates of adverse maternal and neonatal outcomes. This review aims to emphasize the importance of investigating and studying the mothers' experiences of severe preeclampsia/eclampsia. This literature review includes recent and up-to-date qualitative and quantitative studies, recruited from different databases: The Jordanian database for nursing research, Medline (Medical literature online), CINAHL (Cumulative Index to Nursing and Allied Health Literature) PubMed, Research Gates, Science Direct. Also, a Google Scholar search was used to select further studies. The reviewed literature showed these physical complications associated with psychological complications make the experiences unpleasant and complex. Healthcare providers should be aware of these adverse effects, to change the way of managing and care affected mothers. Mother experiences of severe preeclampsia/ eclampsia seem very hurtful and complex shaped by many factors, further and deeper investigation of the mother's experience for it is very important for the mother's and baby's health.

Keywords: *Experiences, Preeclampsia, Eclampsia*

INTRODUCTION

Hypertension Disorder in Pregnancy (HDP) is one of the most common serious life-threatening events during childbirth (Berhe et al., 2018; Meazaw et al., 2018). It is considered one of the leading causes of morbidity, long-term disability, and death among mothers (World Health Organization (WHO), 2018).

Severe preeclampsia is a disorder of pregnancy (after 20 weeks of pregnancy) characterized by

the onset of high blood pressure (160/110 mmgh) and often a significant amount of protein in the urine (+3 and more) (Statescu et al., 2019). If left untreated, it may result in seizures at which point it is known as eclampsia (Statescu et al., 2019). Eclampsia is defined as the occurrence of one or more generalized, tonic-clonic convulsions unrelated to other health problems in mothers with HDP (Bartal & Sibai, 2020).

Severe preeclampsia /eclampsia is a particularly serious issue, remains a major cause of death in low-resourced countries, and is highly associated with higher rates of adverse maternal and neonatal outcomes (Bridwell et al., 2019). Many contextual factors affect severe preeclampsia /eclampsia incidence (Njukang et al. 2020; Omer 2019). It has been reported that the burden of severe preeclampsia/eclampsia is more in developing countries due to unawareness, poverty, illiteracy, and lack of adequate antenatal reporting (Sageer et al., 2019; Onoh et al., 2020). In addition, demographic and biomedical (Kahsay et al., 2018; Njukang et al. 2020). However, behavioral (Weldemariam, 2018) and psychological (Rozario, 2019) appeared to an important factors. In addition, poor healthcare services and providers' attitudes affect them too (Chimatiro et al., 2018). spiritual/religious factors (Njukang et al., 2020; Omer, 2019), and cultural issues (Chimatiro et al., 2018; Sripad et al., 2019) were reported too as significant factor.

Severe preeclampsia/ eclampsia is a complex experience, it was mixed with the unpleasant and painful experience of death (Abdollahpour et al., 2020). Survived mothers noticed many emotional and psychological complications such as fear, anxiety, shock, sadness, and insecurity after knowing their babies are affected and may need extra care (Mukwenda et al., 2017).

The exploration of mothers with severe preeclampsia/ eclampsia helps healthcare providers a deeper understanding of their experiences, and the impact of these experiences on their physical, psychological, spiritual/religious, and cultural-social status, and what the maternal care need require (Kehler et al., 2016; Sandsæter et al., 2019). It is an essential requirement to identify the mother's needs, to help them to manage distressing clinical complications, and help enhance the standard of care given after severe preeclampsia/eclampsia for mothers (Mukwenda et al., 2017; Khedagi & Bello, 2021). Furthermore, despite the findings that family and husband support is important in reducing anxiety and psychological distribution owing to severe preeclampsia/eclampsia (Mukwenda et al., 2017; Kamravamanesh, et al., 2018; Rozario, 2019; Andersson et al., 2021).

As in many countries, severe preeclampsia/ eclampsia is registered as a cause of maternal morbidity and mortality rate in Jordan (Jordan's National Maternal Mortality Report (JNMMR), 2019). The purpose of this study is to review available studies on mothers who experience severe preeclampsia/ eclampsia.

Search Strategy

This literature review includes recent and up-to-date qualitative and quantitative studies, recruited from different databases: The Jordanian database for nursing research, Medline (Medical literature online), CINAHL (Cumulative Index to Nursing and Allied Health Literature) PubMed, Research Gates, Science Direct. Also, a Google Scholar search was used to select further studies. Data from World Health Organization (WHO), and Jordan's National Maternal Mortality Report (JNMMR) was obtained. The majority of articles were in full text, and the used language was English. Unpublished articles, grey literature, student dissertations, a thesis, and any article not published in the English language were excluded from the search.

The main Keywords used in the search strategies included: hypertension during pregnancy, severe preeclampsia, eclampsia, experiences, and maternal health. The total number of identified was (150) study. There were (70) articles were found to meet the inclusion criteria: (1) Prevalence of severe preeclampsia/eclampsia, (2) complications of severe preeclampsia/eclampsia (3) affecting factors in severe preeclampsia/eclampsia (4) Studies about mother experience during severe eclampsia/ eclampsia, (3) all of the studies between 2014 and 2021, published in the English language. The selected articles were (55).

Prevalence Of Hypertension Disorders During Pregnancy

Hypertensive disorders during pregnancy account for about 14% of the global burden of maternal mortality and developing countries account for the majority of these deaths (Onoh et al., 2020). The WHO that at least one woman dies every seven minutes from complications of HDP

(Gudeta & Regassa, 2019). It affects up to ten percent of all pregnancies and is the second-highest cause of maternal mortality (Ekawati et al., 2020).

Globally, the incidence of HDP increased from 16.30 million to 18.08 million, with a total increase of 10.92 % from 1990 to 2019 (Wang et al., 2021). Additional statistics showed the reported incidence of eclampsia is 1.6 to 10 per 10,000 deliveries in developed countries, whereas it is 50 to 151 per 10,000 deliveries in developing countries (Bartal & Sibai, 2020). A review covering larger data sets reported the prevalence of preeclampsia 0.2–6.7% in Asia, 0.5–2.3% in Africa, 2.8–5.2% in Europe, 2.8–9.2% in Oceania, 1.8–7.7% in South America and the Caribbean, and 2.6–4.0% in North America (Umesawa & Kobash, 2017). However, in Africa, a relatively higher prevalence of HDP is reported, as it affects 1 in 10 women (Noubiap, et al., 2019).

By countries the statistic showed, in the United States of America (USA), HDP affects as many as 81.4 per 1000 births in the United States (De Ocampo et al., 2017). In Sweden, the incidence of preeclampsia was 3.0% in 2019, and it is considered one of the leading causes of both fetal and maternal morbidity and mortality (Andersson et al., 2021).

In the Arabic context, there is a scarcity of statistics about HDP, a retrospective study was conducted in Egypt among 21690 women who gave birth in the hospital 250 patients diagnosed with eclampsia (Mahran et al., 2017). In Jordan the statistic showed among 1,451 deaths among mothers of reproductive age occurred, six cases (9.7%) died from hypertensive disorders (JNMMR, 2019). Four cases had eclampsia, one had severe pre-eclampsia, the remaining case had severe pre-eclampsia and the remaining case had HELLP syndrome (JNMMR, 2019). Out of the total 63 maternal death cases, 10 had a history of hypertension (JNMMR, 2019). Other statistics showed the overall incidence rate of preeclampsia was 1.3% (a total of 21,928 mothers participated in the study) (Khader et al., 2018).

Complications of Severe Preeclampsia /Eclampsia

Unfortunately, severe preeclampsia /eclampsia led to many complications for the mother and her baby (Tasta et al.,2021). Globally, stillbirths due to severe preeclampsia /eclampsia of the estimated 2.6 million stillbirths annually, it has been estimated that the HDPs precede 10% of early neonatal deaths (8/1000 live births) (Rozario, 2019). In addition, neonatal/fetal complications like oligo-hydramnios, non-reassuring fetal heartbeat/status, preterm birth, respiratory distress, severe asphyxia, and intrapartum death (Kongwattanakul et al., 2018; Melese et al., 2019) neonatal hypoglycemia (Akeju et al., 2016), and Intrauterine Growth Restriction (IUGR) due to placental insufficiency (Tasta et al.,2021).

Regarding mother complications, in Africa, Asia, Latin America, and the Middle East, the risk of death in mothers with eclampsia increased exponentially (42.38%) compared with the risk of death in mothers without preeclampsia (Bartal & Sibai, 2020). In addition, it is considered one of the primary causes of death in Asian and African countries (Bartal & Sibai, 2020).

While suggesting that maternal with severe preeclampsia/eclampsia may contribute to cases of hemorrhage resulting in maternal mortalities (Adam, 2020), Disseminated Intravascular Coagulation (DIC), and abruption placenta (Bartal& Sibai, 2020), both consequently lead to hemorrhage (Adam, 2020). Other physical complications, cardiovascular, cerebrovascular diseases, liver, and renal problems, and hemolysis, HELLP-syndrome (Hemolysis, Elevated Liver enzymes, and Low Platelets) in mothers lead to death in the majority of cases (Portelli & Baron, 2018; Melese et al., 2019; Rozario, 2019; Onoh, et al., 2020).

In the Arabic context, particularly in Egypt, Mahran et al. (2017) reported in their retrospective study, that the most common complication of severe preeclampsia/eclampsia was HELLP syndrome and neonatal death (11.9% of cases), due to prematurity and poor neonatal services. In Jordan, the rates of Low Birth Weight (LBW) delivery and prematurity, and the neonatal mortality rate were significantly

higher among mothers with preeclampsia (Khader et al., 2018).

Severe preeclampsia/eclampsia can be very stressful and traumatic events among affected mothers (Abdollahpour et al., 2020). So, healthcare providers especially maternal nurses and midwives should not only follow medical management but also encourage the mother about the importance of commitment and follow instructions to improve the well-being of the mother and her newborn to avoid the long-term complication of severe preeclampsia/eclampsia (Garti, 2021).

Factors Affecting Severe Preeclampsia /Eclampsia

Much evidence showed the effect of many factors in the occurrence and development of HDP in general (Rozario, 2019; Njukang et al., 2020). Demographic factors such as maternal age (over 40 years), low education, unemployment mothers; biomedical aspects such as; overweight, diabetic mothers, primigravida, history of HDP, and multiple pregnancies (Kahsay et al., 2018; Njukang et al., 2020), and anemia (Suleiman, 2014). Additionally, family history of HDP, kidney diseases, having asthma (Grum et al., 2017; Gudeta & Regassa, 2019), and chronic hypertension (Njukang et al., 2020).

Other evidence showed the effect of behavioral factors like nutritional habits and drinking alcohol during pregnancy; physical inactivity (Grum et al., 2017; Njukang et al., 2020). On another side, the literature suggests that several psychological influences appeared as strong factors as pre-pregnancy depression, Intimate Partner Violence (IPV) (Rozario, 2019); and stress (Njukang et al., 2020).

Jordan is not isolated from the world, and some same factors appeared, as obesity and high blood pressure were significantly associated with increasing preeclampsia (Suleiman, 2014; Khader et al., 2018). In addition, the risk of preeclampsia was 2.3 times higher in the first pregnancy than that in the second or more pregnancies (Khader et al., 2018), and family history of preeclampsia, diabetes, nulliparity, a

mother with previous preeclampsia history, and low education level (Suleiman, 2014).

Health Care Services Effect on Severe Preeclampsia/ Eclampsia

Maternal healthcare services have marked a negative effect on severe preeclampsia/eclampsia in most literature (Chimatiro et al., 2018; Omer et al., 2021). Three delays model (Thaddeus & Maine, 1994); delay in deciding to seek care, delay in reaching a healthcare facility and delay in receiving appropriate and correct care at the healthcare facility, were found strongly associated with severe preeclampsia/eclampsia (Sripad et al., 2018; Machano & Joho, 2020; Omer et al., 2021).

Delays to seek care include the mother's decision-making power in care-seeking and the mother's and community's awareness of maternal health and related complications (Sripad et al., 2018). Delay to reach care includes access barriers and provider knowledge of maternal complications, prevention, and management, and delays in receiving quality care include themes of care delivery, experiences of care, supply chain process and blockages, and persistent gaps in policy and programming (Kahsay et al., 2018; Sripad et al., 2018). Poor attitude of health workers also affects ANC attendants (Chimatiro et al., 2018; Omer et al., 2021), and the unsatisfying role of doctors in gynecology (Kahsay et al., 2018) makes significant psychological health issues exhibited (Kehler et al., 2016).

Health workers have been reported to be familiar with guidelines, and adherence to the guidelines is low, especially on the part of midwives (Simpson, 2018; Molenaar et al., 2018; Chikalipo et al., 2020). For example, an exploratory qualitative study was conducted (n=10) through in-depth interviews and a focus group discussion with midwives who work in one of the largest public hospitals in Malawi Africa (Chikalipo et al., 2020). The main findings were "Inadequate leading approaches on the management of clients on MgSO₄" with consistent subthemes; inadequate preparation on magnesium sulfate administration; varying plan, regimen, and guidelines/protocols on magnesium sulfate use

and lack of resources (Chikalipo et al., 2020). On another side, the evidence showed that comfort care and midwifery share empirical dimensions such as the relationship between life and death, corporeality, subject-object duality, and ethics of care (Vachon, 2020; Garti, et al. 2021).

An Arabic context study conducted in Egypt showed Magnesium sulphate therapy was given to all patients but there was a lack of parenteral anti-hypertensive therapy (Mahran et al., 2017).

In health services practically maternal, nurses and midwives are considered vital healthcare workers in Jordan (Jordanian Nursing Council (JNC), 2016). Midwifery practice provides holistic care during and after the childbirth process for mothers and neonates in maternal health services in Kingdom (JNC, 2016). In Jordan, maternal health insurance providers include the Ministry of Health (MoH), the Royal Military, the University Hospital, the United Nations Refugee Welfare Association (UNRWA), the United Nations High Commissioner for Refugees (UNHCR), non-governmental, university hospital, and private insurance (Fernandes et al., 2021). Insurance for the pregnant category is health insurance granted to Jordanian mothers during pregnancy and the postpartum period (the period of insurance is about eleven months). It includes routine pregnancy care and treatment of all pregnancy complications such as pre-eclampsia, chronic diseases, and operations (Ministry of Health, MoH, 2020). So, the care should be special and of high quality.

In Jordan, the management of severe preeclampsia/eclampsia is excluded in medical treatment as administered medication (JNMMR, 2019), it is still critical to make an early diagnosis of mild pre-eclampsia cases and refer them to the appropriate care level for comprehensive case management to decrease the probability of severity and complications (JNMMR, 2019). The majority of cases regularly received care in Antenatal care (ANC) during pregnancy; however, information regarding their blood pressure levels during the antenatal period was difficult to attain (JNMMR, 2019).

Cultural Issues

Cultural issues appeared as significant factors associated with developed and worsening severe preeclampsia /eclampsia (Chimatiro et al., 2018; Sripad et al., 2019). Such findings in a qualitative study conducted in Pakistan found cultural a significant effect in increasing maternal mortality rates including preeclampsia (Omer, 2019). Mothers' low status and male authority keep mothers less empowered (Omer, 2019). The preference for traditional birth attendants, early marriages, and lack of family planning as deeply rooted in cultural values, and traditions prohibit young girls to obtain maternal health care (Omer, 2019).

According to a study conducted in the community of Malawi, among (n=46,786 women), one of the cultural barriers many mothers wait for a marriage counselor's husband's side to guide them before starting ANC, and the hide the pregnancy in the early months to avoid being captured (Chimatiro et al., 2018). Another study was conducted in Nigeria (Akeju et al., 2016), the belief that the cause of severe preeclampsia /eclampsia was thought to be due to depressive thoughts as a result of marital conflict and financial worries, while seizures in pregnancy were perceived to result from prolonged exposure to cold (Akeju et al., 2016). However, for seizures the use of herbs, incisions, and topical application of hereditary rather than medical management (Akeju et al., 2016).

In Jordan childbirth and its consequences are considered stressful events for all families (Altarawneh et al., 2020) although the culture, plays a vital role in shaping Jordanian beliefs and practices in this event (Bawadi & Al-Hamdan, 2017), there are few studies found in Jordan about the cultural effect in severe preeclampsia and eclampsia.

Experience of Mothers with Severe Preeclampsia and Eclampsia

Mothers described the process of becoming a mother as disrupted, mixed with unpleasant and painful (Abdollahpour et al., 2020). Maternal near-miss refers to mothers who survive death after these life-threatening obstetric

complications during pregnancy, childbirth, or postpartum (Værland et al., 2016; Abdollahpour et al., 2020). Mothers surviving severe postpartum hemorrhage due to severe preeclampsia told that they feared for their lives; they felt intermediate life and death (Abdollahpour et al., 2020).

Although all pregnant mothers have concerns about the health of their fetuses and the process of childbirth, many studies showed mothers have reported many psychological and emotional complications as increased fear, despair, and anxiety in subsequent pregnancies (Mukwenda et al., 2017; Andersson et al., 2021). Mothers experiencing preterm births due to severe preeclampsia report concerns about the care and survival of their premature babies (Værland et al., 2016; Mukwenda et al., 2017). Severe maternal morbidity as well as having a premature infant can cause post-traumatic stress disorder (PTSD) (Elmir & Schmied, 2016; Fowler et al., 2019).

Kehler et al. (2016) in a qualitative study among (n=7) mothers when worked on the significance of psychological health issues exhibited in pregnant mothers: such as negative feelings and thoughts, lack of guidelines about their diagnosis, family stressors, lack of social support, not being heard, loss of normal pregnancy, physical and psychological symptoms. The mother showed the need for additional care (Kehler et al., 2016).

An interpretative phenomenological study was held with a purposive sample of (n=10) mothers recovering from eclampsia in Tanzania, aimed to explore and describe mothers' experiences of having had, and recovered (Mukwenda et al., 2017). The mothers had experienced eclamptic seizures as painful and unreal as they were unable to control their bodies or actions despite the perception of what happened (Mukwenda et al., 2017). At the hospital, they felt being cared for and recovered but were concerned because they had not been provided with enough information about the disorder (Mukwenda et al., 2017).

In addition, being separated from the baby during hospitalization was troublesome and they worried about infant feeding and health (Mukwenda et al., 2017). However, they expressed fears over the likely recurrence of eclampsia in future pregnancies and wanted

information about prevention strategies (Mukwenda et al., 2017).

Frawley et al. (2020) in their survey among (n=40) aimed to see how preeclampsia was experienced close to the time of birth, in a group of hospital patients, among mothers with preeclampsia who gave birth in Australia (Frawley et al., 2020). For 60% of mothers, their baby was born earlier than expected (Frawley et al., 2020). Although 67.5% of mothers knew little about preeclampsia, before pregnancy and diagnosis, 67.5% believed preeclampsia, was serious or life-threatening, fifty-five percent were afraid that their baby might die more information about preeclampsia, (97.5%), and 60% indicated that their preeclampsia, the experience would also delay or contribute to the decision to not undertake a future pregnancy (Frawley et al., 2020).

Two recent qualitative studies (Andersson et al., 2021; Wetherell & Swainston, 2021) explore the experiences of mothers who have received a diagnosis of pre-eclampsia/eclampsia through qualitative studies. The participants in both studies believed that the experience was stressful and worrying (Andersson et al., 2021; Wetherell & Swainston, 2021).

Mothers reported numerous effects of severe pre-eclampsia/eclampsia including memory issues about the delivery of their newborn during the affected pregnancy, life-long hypertension, neurological issues, and separation postpartum (Andersson et al., 2021). Mother's experiences were described as influencing decision-making about future pregnancies due to possible health implications (Wetherell & Swainston, 2021).

Mothers Needs

Mothers' experience significantly affects severe preeclampsia/ eclampsia management and long-term life (Mukwenda et al., 2017). Assess, addressing, and documenting mothers' need for psychological care and support (e.g., community organizations, mental health services, and cultural support), both antenatally and postpartum are very important (Mukwenda et al., 2017; 2018; Andersson et al., 2021; Wetherell & Swainston, 2021). The studies highlighted a

significant impact of severe preeclampsia/eclampsia information and care needed for mothers to have the following diagnosis (Wetherell & Swainston, 2021; Andersson et al., 2021).

The mothers address the need for greater awareness is highlighted and training for healthcare professionals particularly within primary care could enable knowledge transfer to support mothers in making decisions about their reproductive health and managing health risks through the implementation of health psychology interventions (Andersson et al., 2021; Wetherell & Swainston, 2021). An explanation of preeclampsia, signs, and symptoms should be given to all mothers at antenatal care visits to improve health outcomes (Wilkinson & Cole, 2018).

Partners are involved in ensuring a combined understanding of the need for lifestyle changes (Mukwenda et al., 2017). Instruct a woman with a history of severe preeclampsia/eclampsia information on risks linked with following pregnancies, and the opportunity to discuss family planning options (Sandsæter et al., 2019; Andersson et al., 2021; Wetherell & Swainston, 2021).

Accordingly, can have a substantial psychological effect on patients around the time of birth (Frawley et al., 2020). Maternity caregivers can direct counseling to address the specific vulnerabilities elevated and thus improve the care of mothers (Frawley et al., 2020). As not all healthcare providers are hardworking in instructing patients regarding preeclampsia, more research is needed to completely assess the knowledge of mothers and examine the practices of providers (Wilkinson & Cole, 2018).

More research is necessary regarding this specific mother-infant dyad and their families in the context of Western countries and developing countries (Værland et al., 2016). Research investigating detailed care planning and postpartum follow-up is suggested as steps to improve care for mothers with a pregnancy complicated by preeclampsia (Andersson et al., 2021).

In Jordan, although of high-quality health services, studies about preeclampsia/ eclampsia in Jordan, still mainly cover the incidence, prevalence, and risk factors. The management of severe preeclampsia/ eclampsia is still focused on medical-wise. In addition, there are no studies in Jordan in particular that explore or describe the meanings of mother's experiences with severe preeclampsia/eclampsia, which calls the urgent need for research and investigation to explore and describe these issues, bridge the gap in the existing literature, and demonstrate the need for important maternal nurse and midwives care during this experience.

DISCUSSION

In the current literature review, several studies were conducted regarding severe preeclampsia/eclampsia prevalence and complications. However, limited studies focused on a deeper understanding of mother experiences in severe preeclampsia /eclampsia. Despite that, therapeutic management for survivors' mothers after severe preeclampsia /eclampsia is important to reduce complications and save the mother and infant's life. But, they shed light on mothers feeling and their quality-of-life after-effect is poor.

Therefore, the integration of pharmacological care with conventional treatment. Healthcare providers, husbands, families, and those surrounded can contribute to a patient's care by, understanding the effect of severe preeclampsia /eclampsia on the patient and thus contribute to a better understanding of the patient's needs.

Moreover, this literature review explored the lived experiences of patients suffering from severe preeclampsia /eclampsia and the experience, barriers, and facilitators related to healthcare services provided for survivors. severe preeclampsia /eclampsia may impose long-term challenges that cause severe symptom burden and hurt both the patients and their families.

However, a lack among healthcare providers in identifying the healthcare needs of patients suffering from severe preeclampsia /eclampsia was apparent in the literature. Nonetheless,

healthcare professionals did not consider the unique needs of patients with special.

The current literature review showed that no studies explored or described the healthcare experiences of patients and the needs of mothers with severe preeclampsia /eclampsia. This justifies the urgent need for studies and investigations to explore these issues to bridge the gap in the existing literature and might highlight the need for some insights and direction to service providers and stakeholders regarding the maternal care needs of severe preeclampsia/eclampsia survivors' mothers, contributing to the creation of appropriate formal holistic care for mothers.

Implications

This study will contribute to maternal nurses, midwives, and all other healthcare providers with beneficial insight, a better understanding, and a higher awareness of the meaning of a mother's experience. Also, the use of health psychology interventions may enable information transfer to assist mothers in making reproductive health decisions and managing health risks. Furthermore, the outcomes of this study will provide a new and diverse perspective on the social and cultural environment of affected mothers, as well as reveal substantial gaps in the different healthcare demands of other types of HDP.

Furthermore, the findings will give a solid foundation for policy and stakeholder makers regarding mothers' care demands and could serve as a starting point for improving maternal care provided to survivor mothers suffering from severe preeclampsia/eclampsia. Also, it will provide some insights and direction to service providers and stakeholders regarding the maternal care needs of severe preeclampsia/eclampsia survivors' mothers, contributing to the creation of appropriate formal community care for mothers.

Finally, the findings could be incorporated into or used to modify the curriculum of trainees, especially maternal nurses, and midwives. This study will appraise and encourage further research in Jordan by focusing on maternal care

issues among mothers; especially, when there is a scarcity of studies in Arabic countries in general and in specific in Jordan, study about mothers' experiences of severe preeclampsia/eclampsia, and what the factors and need affected these experiences.

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