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**“KNOWLEDGE OF PRIMIGRAVIDA MOTHER REGARDING DANGER SIGNS DURING PREGNANCY”**

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This collection of studies examines diverse factors influencing maternal and neonatal health outcomes. Research highlights infections, including urinary tract infections and sepsis, as major contributors to complications such as preterm birth, stillbirth, and neonatal sepsis, emphasizing early detection and treatment. Nutritional deficiencies—particularly anemia and micronutrient gaps—are linked to low birth weight, maternal hemorrhage, and developmental issues, with supplementation proving effective. Hypertensive disorders, notably preeclampsia, are associated with obesity, diabetes, and advanced maternal age, with prevention strategies including lifestyle modification, calcium supplementation, and low-dose aspirin. Studies on antenatal care frequency, maternal education, and community health workers show that awareness of obstetric danger signs improves timely care-seeking. Cultural beliefs can hinder recognition of complications, requiring culturally sensitive interventions. Additional findings stress the importance of fetal movement monitoring, managing conditions like hyperemesis gravidarum, and preventing preterm labor through targeted therapies. Overall, integrating early risk screening, comprehensive nutritional support, lifestyle interventions, mental health care, and community-based education into prenatal programs is essential to reduce maternal and neonatal morbidity and mortality, particularly in low-resource settings.

**Keywords:** Factors, knowledge, danger signs, Primigravida.

Author	Objective	Methodology	Result	Conclusion
Robert L. Goldenberg	To investigate the role of maternal infections in contributing to pregnancy complications, including maternal and neonatal morbidity and mortality.	The study reviewed clinical data and literature on common maternal infections such as urinary tract infections (UTIs), chorioamnionitis, and Group B Streptococcus. It analyzed the association between these infections and adverse pregnancy outcomes, and examined symptoms, diagnostic approaches, and treatment interventions, with a focus on prenatal care practices.	Findings indicated that infections significantly increase the risk of complications such as preterm labor, stillbirth, and neonatal sepsis. Key symptoms included fever, chills, and dysuria (painful urination). The study found that early detection through routine screening and timely antibiotic treatment can reduce maternal and neonatal risks.	Maternal infections are a leading cause of pregnancy complications. Routine prenatal screening and prompt management of infections are essential to improving maternal and neonatal health outcomes.
Melissa G. Rosenstein	To investigate the causes, classification, and clinical management of vaginal bleeding during different stages of pregnancy.	The study reviewed clinical data and literature, classifying vaginal bleeding into first-trimester and second/third-trimester categories. It assessed common etiologies, symptom patterns, and	The study found that first-trimester vaginal bleeding is most commonly associated with miscarriage and ectopic pregnancy, while bleeding in the second and third trimesters is typically linked to placenta previa, placental	Vaginal bleeding during pregnancy is a potentially serious condition with varying causes depending on gestational age. Timely diagnosis and medical intervention are essential to safeguard maternal and fetal health,



			recommended medical responses, especially in emergency situations.	abruption, and preterm labour. It highlighted that heavy bleeding accompanied by severe abdominal pain and dizziness is a critical warning sign that requires immediate medical attention to prevent serious outcomes such as maternal hemorrhage and fetal loss.	especially in cases with severe symptoms.
Yarlina Balarajan	To assess the global burden of maternal anemia and its impact on pregnancy outcomes, with a focus on low-resource settings.	The study conducted a global analysis using epidemiological data and literature review to evaluate the prevalence of maternal anemia, identify associated risk factors, and examine its effects on maternal and neonatal health. It also assessed the effectiveness of iron and folic acid supplementation.	The study revealed that maternal anemia—especially iron deficiency anemia—is highly prevalent in low-income regions and is associated with adverse outcomes such as preterm birth, low birth weight, and increased risk of maternal hemorrhage. Common clinical symptoms include extreme fatigue, dizziness, and pale skin. The research showed that antenatal	Maternal anemia remains a major global health concern, particularly in low-resource areas. Routine screening and iron-folic acid supplementation during antenatal care are essential strategies to improve maternal and neonatal outcomes.	



			iron and folic acid supplementation significantly reduces these risks.	
Nancy K. Grote	To assess the impact of maternal depression on pregnancy and birth outcomes.	The study analyzed data on pregnant individuals with depression, examining links to complications and evaluating the role of prenatal mental health care.	Maternal depression was significantly associated with preterm birth, preeclampsia, and developmental delays in children. Untreated depression increased risks to both mother and baby.	Routine mental health screening and prenatal counselling are essential to reduce depression-related pregnancy complications.
Deogratius Bintabara	To examine the impact of maternal education on awareness of obstetric danger signs in low-income settings.	The study used survey data from women in low-income regions to assess the relationship between formal education and knowledge of key pregnancy-related complications.	Women with formal education demonstrated significantly better awareness of obstetric danger signs and were more likely to seek timely healthcare services.	Improving maternal education is critical to enhancing awareness of pregnancy complications and promoting early healthcare-seeking behavior.
Dagmawit Tsegaye	To assess how the frequency of antenatal care (ANC) visits influences pregnant women's knowledge of obstetric danger signs.	The study evaluated data from pregnant women in low-resource settings, comparing levels of awareness between those who attended fewer than four ANC visits and those who attended four or more. Knowledge of	The research found that women who attended four or more ANC visits had significantly higher knowledge of pregnancy-related danger signs. ANC visits provided critical opportunities for healthcare	Frequent antenatal care visits are strongly associated with improved maternal awareness of obstetric danger signs. Strengthening ANC coverage and integrating health education into each visit



		specific danger signs such as severe bleeding, convulsions, and prolonged labor was examined.	providers to educate expectant mothers about recognizing and responding to complications.	are essential to improving maternal health outcomes.
JHPIEGO (Johns Hopkins Program for International Education in Gynaecology and Obstetrics)	To explore how cultural beliefs and traditional practices affect maternal health knowledge, particularly the recognition of pregnancy danger signs.	The study conducted qualitative research in various low-resource communities, using interviews and focus group discussions to assess how cultural interpretations influence women's responses to pregnancy complications.	The findings revealed that cultural beliefs often shaped women's understanding of symptoms. For example, signs like severe headache or swelling were sometimes interpreted as spiritual or supernatural rather than medical, leading to delays in seeking appropriate care.	Cultural beliefs can significantly hinder accurate recognition of obstetric danger signs. Maternal health programs must incorporate culturally sensitive education to address misconceptions and promote timely healthcare-seeking behaviour.
Elizabeth M. McClure	To evaluate the role of antenatal risk screening in the early detection and prevention of pregnancy-related complications.	The study reviewed clinical data and antenatal care protocols focusing on early screening measures such as blood pressure monitoring, gestational diabetes testing, and ultrasound evaluations to identify high-risk pregnancies.	The findings emphasized that early risk assessments during pregnancy help detect conditions like hypertension, diabetes, and fetal growth abnormalities before they become severe. Timely identification allows for targeted interventions and improved maternal-fetal	Comprehensive antenatal risk screening is essential for preventing pregnancy complications. Integrating routine assessments into early prenatal care improves early diagnosis, risk management, and overall pregnancy outcomes.



			outcomes.	
JHPIEGO (Johns Hopkins Program for International Education in Gynecology and Obstetrics)	To systematically review the impact of community health workers (CHWs) on maternal health education and outcomes.	The study analyzed data from multiple programs and interventions across low-resource settings, focusing on CHWs' roles in educating pregnant women about obstetric danger signs and facilitating early healthcare referrals.	The review found that trained community health workers significantly improved pregnant women's awareness of danger signs, increased early referral rates, and contributed to a reduction in maternal mortality. CHWs acted as a vital link between communities and formal healthcare systems.	Community health workers play a crucial role in strengthening maternal health through education and early intervention. Investing in CHW training and integration into maternal health programs can greatly improve maternal outcomes.
Lucilla Poston	To assess effective strategies for preventing obesity-related complications during pregnancy.	The study reviewed clinical trials and public health interventions focused on structured lifestyle programs for pregnant women, including dietary guidance and physical activity plans.	Structured programs involving balanced nutrition and regular exercise were found to reduce the risk of gestational diabetes, hypertensive disorders, and excessive gestational weight gain. Early intervention was emphasized as key to success.	Lifestyle-based interventions during pregnancy are effective in preventing obesity-related complications. Integrating diet and exercise plans into routine antenatal care is recommended for at-risk women.
Swati Chandra	To review the maternal and fetal outcomes associated with	The study analyzed clinical literature and case data on	Untreated hyperemesis gravidarum was associated with	Hyperemesis gravidarum poses serious health risks if



	hyperemesis gravidarum and evaluate effective management strategies.	severe nausea and vomiting during pregnancy, focusing on complications and treatment outcomes.	maternal dehydration, electrolyte imbalances, nutritional deficiencies, and fetal growth restriction. Severe cases often required hospitalization for intravenous fluids, electrolyte correction, and nutritional support.	left unmanaged. Early diagnosis and hospital-based care in severe cases are essential to protect both maternal and fetal health.
Michael A. Brown	To analyze the global impact of preeclampsia, identify key risk factors, and recommend effective management strategies.	The study reviewed global epidemiological data and clinical guidelines to assess the prevalence, risk factors, complications, and treatment options related to preeclampsia.	The study identified obesity, diabetes, and advanced maternal age as major risk factors for preeclampsia. Delayed recognition of warning signs—such as severe headaches and blurred vision—was linked to severe complications like HELLP syndrome. Prompt administration of antihypertensive drugs and magnesium sulfate was found to be effective in preventing progression to	Preeclampsia remains a significant contributor to maternal morbidity and mortality worldwide. Early detection and timely treatment with antihypertensives and magnesium sulfate are critical to reducing severe outcomes.



Gordon C. S. Smith	To evaluate the role of fetal movement monitoring in predicting and preventing adverse pregnancy outcomes.	The study analyzed clinical data on fetal activity patterns in pregnancies beyond 28 weeks, assessing correlations between reduced movements and complications such as stillbirth, umbilical cord issues, and placental insufficiency.	eclampsia. A significant reduction in fetal movements after 28 weeks was associated with conditions like umbilical cord compression, placental insufficiency, and intrauterine growth restriction (IUGR). The study emphasized the importance of daily fetal kick counts as an early warning tool.	Monitoring fetal movements is a simple yet vital method for detecting fetal distress. Educating pregnant women to track fetal kicks and promptly report decreased activity can help prevent stillbirth and improve outcomes.
Jane Warland and Louise O'Brien	To investigate the impact of maternal awareness campaigns on fetal movement monitoring and stillbirth prevention.	The study reviewed data from public health interventions and awareness programs that educated pregnant women on the importance of monitoring fetal movements during the third trimester.	The findings showed that increased maternal awareness and education about fetal movements significantly reduced stillbirth rates. Women who received guidance were more likely to report decreased fetal activity promptly, leading to timely medical interventions.	Fetal movement awareness campaigns are effective in preventing stillbirths. The study recommends integrating fetal movement education and tracking into routine prenatal care to improve pregnancy outcomes.
Michael A. Brown	To evaluate non-pharmacological strategies for managing and	The study reviewed clinical evidence on the impact of lifestyle	Lifestyle modifications, particularly salt intake reduction, regular exercise,	Non-pharmacological approaches play a vital role in the prevention and



	preventing hypertension during pregnancy.	interventions—such as dietary changes, physical activity, and stress reduction—on blood pressure control in pregnant women.	and stress management techniques, were shown to effectively reduce the risk of developing gestational hypertension and preeclampsia.	management of hypertension during pregnancy. Incorporating these strategies into routine prenatal care can help improve maternal cardiovascular health and pregnancy outcomes.
Abdel-Aleem	To examine the risk factors, clinical presentation, and management strategies for maternal sepsis.	The study reviewed clinical data and literature on maternal infections progressing to sepsis, focusing on early detection, symptoms, and treatment protocols.	Maternal sepsis was found to be a life-threatening condition often caused by untreated infections. Key warning signs included high fever, chills, rapid breathing, and mental confusion. Delayed treatment increased the risk of organ failure and death.	Early recognition and prompt administration of antibiotics, along with intensive care support in severe cases, are critical to reducing maternal mortality from sepsis. The study emphasizes the importance of infection prevention and timely intervention during pregnancy.
Roberto Romero	To examine the underlying causes, warning signs, and prevention strategies for preterm labor.	The study reviewed epidemiological and clinical data on preterm labor, assessing risk factors, symptom patterns, and the effectiveness of therapeutic interventions.	Key risk factors identified included maternal infections, multiple gestations, and high stress levels. Warning signs such as regular uterine contractions before 37 weeks, lower	Early identification of preterm labor risk factors and symptoms is essential. Preventive measures, including progesterone treatment and stress reduction, are effective in lowering preterm



			back pain, and pelvic pressure were associated with increased risk of preterm birth. The study found that progesterone therapy and targeted lifestyle modifications significantly reduced the likelihood of early delivery.	birth rates and improving maternal-fetal outcomes.
Juan Pablo Peña-Rosas	To evaluate the impact of micronutrient supplementation on maternal and fetal health outcomes during pregnancy.	This systematic review analyzed data from multiple randomized controlled trials assessing the effects of supplementing iron, folate, vitamin D, and calcium in pregnant women.	Micronutrient deficiencies were found to be linked with significant pregnancy complications, including neural tube defects (folate), gestational hypertension (calcium), and fetal bone abnormalities (vitamin D). Iron deficiency was commonly associated with maternal anemia and related risks. Supplementation was shown to reduce these complications and improve overall pregnancy outcomes.	Comprehensive maternal nutrition programs that include key micronutrient supplementation are essential for preventing pregnancy-related complications and supporting healthy fetal development.
Laura A. Magee	To review evidence-based preventive	The study analyzed clinical trials and	Low-dose aspirin initiated in early	Preventive measures like aspirin therapy,



	strategies for reducing the risk of preeclampsia, particularly in high-risk pregnancies.	guidelines focusing on interventions such as low-dose aspirin, calcium supplementation, and early antenatal screening for hypertensive disorders.	pregnancy, calcium supplementation in populations with low dietary intake, and early blood pressure monitoring significantly reduced the incidence of preeclampsia among high-risk women.	calcium supplementation, and close monitoring of blood pressure should be integrated into antenatal care for high-risk women to reduce the burden of preeclampsia.
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**CONCLUSION:**

Improving maternal and neonatal health outcomes requires a comprehensive approach that addresses medical, nutritional, psychological, and socio-cultural factors during pregnancy. Evidence from multiple studies highlights that early detection and management of pregnancy complications—such as preeclampsia, infections, anemia, hyperemesis gravidarum, and depression—are critical in preventing severe maternal and fetal outcomes. Interventions such as routine antenatal care, micronutrient supplementation, fetal movement monitoring, and mental health screening have been shown to significantly reduce risks like stillbirth, preterm birth, and maternal mortality. Additionally, educating pregnant women through culturally sensitive health education, community health workers, and awareness campaigns enhances their ability to recognize danger signs and seek timely care. Preventive strategies, including lifestyle modifications, aspirin therapy, and antenatal risk screening, should be integrated into maternal care programs to promote safer pregnancies, particularly in low-resource settings.