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Association of Psychosocial Nurse Assessments and Referrals to Birth Outcomes

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Purpose: The study purpose is to describe prevalence and association between intimate partner violence and mental health disorders during pregnancy with preterm birth and low birth weight along with frequency of nurse assessments and referrals.

Pregnancy is an interplay of biopsychosocial and emotional processes that may lead to preterm birth (PTB) and low birth weight (LBW) via hormonal, biological, stress and emotional pathways. When intimate partner violence (IPV) is experienced in pregnancy, a multitude of biological and psychosocial health problems increase for the mother, fetus, and newborn. Psychosocial and social risk factors associated with Mental Health Disorders ([MHD]; stress, anxiety, depression, and IPV) are multi-dimensional factors associated with PTB and LBW. PTB and LBW are associated with increase in neonatal morbidity and mortality, which is particularly concerning since many causes are modifiable. The American College of Obstetrics and Gynecology and Association of Women's Health, Obstetric, and Neonatal Nurses advocates psychosocial, social, and domestic violence screening of women throughout prenatal care regardless of social status, educational level, race or ethnicity.

Methods: This study was a descriptive correlational secondary data analysis of 2,637 women who delivered at a metropolitan hospital in the United States over one year. The Abuse Assessment Screen and an investigator-developed record review form from the original study identified IPV, MHDs, referrals, and birth outcomes.

A literature search from 1998 -2017 was conducted using MEDLINE, PubMed, CINAHL, Cochrane Library, and Google Scholar, merging the terms "pregnancy", "nurse assessment", "psychosocial risks (MHD, PTSD, PTL, and LBW)", "mental health disorders", and "intimate partner violence". The study question was "What is the association between psychosocial risk factors (MHDs and IPV) during pregnancy and nurse assessments and referrals with birth outcomes (PTB, LBW)?" with the objective of identifying nurse assessment and referral practices for patients with MHDs and IPV to improve birth outcomes.

Results: Twenty-one peer-reviewed publications that met the criteria were identified and reviewed. Several themes were identified that influence pregnancy outcomes: 1) psychosocial risk factors; 2) nurse screening practices; and, 3) referral to social services.

Over one-third of patients did not have a documented Abuse Assessment Screen on admission. Four percent ($n = 107$) reported IPV and/or MHDs during pregnancy. MHDs were significantly associated with lack of referral, PTB in gestational age in weeks, birth weight less than 2500 grams, and birth prior to 37 completed weeks. There was a statistically significant difference in mean gestational age for women with MHD compared to women without MHD. No statistically significant association or difference in birth outcomes (PTB, LBW) was found for IPV status. Women with IPV and/or MHDs had great than 30% missed opportunities by nurses for assessment and referral to social services.

Conclusion: The study found that women with documented MHDs are at a greater risk of PTB and LBW infants, but not women who experience IPV. This study identified MHD as a significant risk factor in preterm deliveries. It was found IPV was not statistically significant in the birth outcomes (LBW and PTB). There is no consensus in the literature currently as to how often the woman should be assessed for MHD, only that there should be assessment prenatally, and especially postpartum.

Mental health disorders are associated with PTB and LBW. Nurses identifying IPV and MHDs during perinatal risk assessments were inconsistent in initiating referrals to social services. MHDs should be included when assessing pregnant patients who may be at risk for PTB and LBW at each visit. The findings of our study strengthen the importance of emphasizing a more comprehensive approach to risk assessment and service presentation in high risk perinatal women with MHDs. When assessment indicates, the healthcare provider should refer the patient for further evaluation or intervention. Additional research is warranted to explore patient follow-up with referrals and effectiveness of maternal and neonatal intervention outcomes.

Title:

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Keywords:

birth outcomes, nurse referrals and psychosocial risk assessment

References:

Association of Women's Health, Obstetric, and Neonatal Nurses. (2015). AWHONN Position Statement. Intimate partner violence. *Journal of obstetric, gynecologic, and neonatal nursing*, 44(3):405-408. DOI: <http://dx.doi.org/10.1111/1552-6909.12567>.

Cardwell, M. (2013). Stress: pregnancy considerations. *Obstetrica & Gynecological Survey*, 68(2), 119-29. <http://doi:10.1097/OGX.0b013e31827f2481>.

Center for Disease Control and Prevention (CDC). (2016). Mental Health. Accessed November 10, 2017 from <http://www.cdc.gov/mentalhealth/basics/mental-illness.htm>.

Center for Disease Control and Prevention (CDC). (2017). Intimate Partner Violence: Consequences. CDC, National Center for Injury Prevention and Control: Division of Violence Prevention; Accessed November 23, 2017 from <http://www.cdc.gov/ViolencePrevention/intimatepartnerviolence/consequences.html>.

Hamilton, B., Martin, J., Osterman, M., & et al. (2017). Births: Preliminary Data for 2016, National vital statistics rapid release. Available from <https://www.cdc.gov/nchs/data/vsrr/report002.pdf>.

Roy, C. (1980). The Roy adaptation model. In J. P. Riehl & C. Roy (Eds.), *Conceptual models for nursing practice* (2nd ed.) (pp. 179-1823), Norwalk, CT: Appleton-Century-Crofts.

Wilkes, J. (2015). ACOG Releases Recommendations on Screening for Perinatal Depression. *American Family Physician*, 92(7), 648.

Abstract Summary:

Psychosocial/social risk factors are associated with preterm birth and low birth weight, increasing neonatal morbidity and mortality. Many causes are modifiable. Health organizations advocate psychosocial, social, mental health, and domestic violence screening of women throughout prenatal care regardless of social status, educational level, race or ethnicity.

Content Outline:

Purpose: To describe prevalence and association between intimate partner violence and mental health disorders during pregnancy with preterm birth and low birth weight along with frequency of nurse assessments and referrals.

1. Psychosocial and social risk factors associated with mental health disorders and intimate partner violence
 1. Multi-dimensional
 2. Associated with Preterm birth (PTB) and low birth weight (LBW).
2. PTB and LBW associated with increase of neonatal morbidity and mortality
 1. Many causes modifiable
3. The American College of Obstetrics and Gynecology and Association of Women's Health, Obstetric, and Neonatal Nurses advocates:
 1. Psychosocial, social, and domestic violence screening of women
 2. Throughout prenatal care
 3. Regardless of social status, educational level, race or ethnicity

Methods: A literature search from 1998 -2017 was conducted using MEDLINE, PubMed, CINAHL, Cochrane Library, and Google Scholar, merging the terms “pregnancy”, “nurse assessment”, “psychosocial risks (MHD, IPV, PTL, and LBW)”, “mental health disorders”, and “intimate partner violence”.

1. Descriptive correlational secondary data analysis was conducted of 2,637 women who delivered at a metropolitan hospital in the United States over one year.
2. What is the association between psychosocial risk factors (MHDs and IPV) during pregnancy and nurse assessments and referrals with birth outcomes?
3. Utilized Abuse Assessment Screen and an investigator-developed record review form from the original study.
4. Nurse assessment and referral practices for patients with MHDs and IPV linked to birth outcomes.

Results: Twenty-one peer-reviewed publications were retrieved matching the criteria search.

1. The synthesis yielded common themes identified as influencing pregnancy outcomes: 1) psychosocial risk factors; 2) screening practices; and, 3) referral to social services.
2. Four percent (n = 107) reported IPV and/or MHDs during pregnancy
 1. MHDs significantly associated with lack of referral, PTB in gestational age in weeks, birth weight less than 2500 grams, and birth prior to 37 completed weeks
3. No statistically significant association or difference in birth outcomes (PTB, LBW) found for IPV status
4. Over one-third of patients did not have documented Abuse Assessment Screen on admission
 1. Missed opportunities by nurses for assessment and referral to social services

Conclusion: Women with documented MHDs at greater risk of PTB and LBW infants, but not women who experience IPV.

1. No consensus in literature currently for how often pregnant women should be assessed for MHD, only there should be prenatal and postpartum assessments.
 1. Nurses identifying IPV and MHDs during perinatal risk assessments inconsistent in initiating referrals to social services
2. Include MHDs when assessing pregnant patients at risk for PTB and LBW at each visit.
 1. Emphasize more comprehensive approach to risk assessment and service in high risk perinatal women.
 2. Refer high risk patients (MHD, IPV) for further evaluation or intervention.
3. Further research warranted:
 1. Explore patient follow-up with referrals
 2. Effectiveness of maternal and neonatal intervention outcomes

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Author Summary: Nancy Goldstein, a member of STTI, Nu Beta Chapter, has been a practicing nurse and nurse practitioner combined for over 37 years in the Johns Hopkins Medical Institutions and University. Her main areas of focus in practice, research, and nursing education have been women's and adult health and substance use disorders. In addition, over the past several years, Dr. Goldstein has coordinated the pre-licensure nursing student practicum placements for their program.