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## Devoloping a Primary Care Screening Protocol for Post-Miscarriage Depression

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# Developing a Primary Care Screening Protocol for Post Miscarriage Depression

Mountain Health Center, Bristol VT

Sean Muniz

May-June 2021

Mentors: Jennifer Wisdom-Behounek M.D., Brian Bates M.D.,  
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# The Prevalence of Post Miscarriage Depression

- Spontaneous abortions (miscarriages) are extremely common, occurring in 20-33% of all pregnancies
- Numerous studies have shown that 10-30% of women who have had a spontaneous abortion experience depression afterwards
  - These symptoms often persist for 1-3 years
- Post partum depression is most often screened by the child's pediatrician or family doctor at the first few well child checks
  - Who is screening women post miscarriage if there is no child to bring to the doctor's office?

# Public Health Cost of Depression

The economic burden of depression was estimated at \$210 billion in 2010 for the U.S.

Depressed patients have a decreased likelihood to complete higher education

Depression is associated with unemployment

Depression decreases relationship stability

In 2016 there were 19.7 suicide deaths for every 100,000 Vermonters

# Clinic/Community Perspective

According to Dr. Wisdom-Behounek, a clinician at Mountain Health Center in Bristol, VT, over the last 4 years only 8 new diagnoses of spontaneous abortion have been entered into their electronic health record

- Given the prevalence of spontaneous abortions, this means that a large amount of these occurrences are happening without the PCP being aware
- She also notes that a post miscarriage screening call would be an ideal time to offer the patient a PCP visit for family planning

Wendy Giard, the nursing case manager at Mountain Health Center and a former OB nurse, states that the clinic is currently not screening any women for post spontaneous abortion depression

- From her previous OB experience, she recalls that any follow up after a miscarriage by the OB office typically occurs within the first week
  - This is before it is possible to determine if the patient has been having persistent depressive symptoms

# How to Best Screen for Post Miscarriage Depression

- A 2015 study recommends that PCPs use a phone PHQ-2 screening at 2 weeks post miscarriage to initially evaluate for depression
  - A 1992 study showed a decrease in depressive symptoms just from this screening phone call
- The 2015 study further recommends that this should be followed up with an in-office visit at 6 weeks to fully screen for depression and offer counseling, support, and treatment
- The PHQ-2 has been shown to have a sensitivity of 100% for depression, making it an ideal screening test

# The Screening Protocol

## **Post Spontaneous Abortion Depression Screening Protocol.**

ED Visit/Hospitalization for spontaneous abortion:

- Nursing case management (Wendy) receives a daily list of ED visits/hospitalizations.
- Wendy identifies patients with the diagnosis of spontaneous abortion/miscarriage.
- Wendy contacts these patients at/within two weeks and conducts a phone PHQ-2 questionnaire.
- If the patient scores  $>3$  on the PHQ-2, schedule an in person follow up ASAP, potentially using post-hospitalization follow up appointment.
- If the patient scores  $\leq 3$  on the PHQ2, schedule a repeat phone call follow up at 6 weeks.
- If the patient scores  $>3$  at the 6-week phone call, schedule an in person follow up ASAP.
- If the patient scores  $\leq 3$  at the 6-week phone call, offer a family planning visit.
- No further follow up is needed.

The patient has a spontaneous abortion at home and calls:

- Triage receives a phone call from a patient having a miscarriage.
- Triage notifies Wendy about this patient.
- Wendy contacts these patients at/within two weeks and conducts a phone PHQ-2 questionnaire.
- If the patient scores  $>3$  on the PHQ-2, schedule an in person follow up ASAP.
- If the patient scores  $\leq 3$  on the PHQ2, schedule a repeat phone call follow up at 6 weeks.
- If the patient scores  $>3$  at the 6-week phone call, schedule an in person follow up ASAP.
- If the patient scores  $\leq 3$  at the 6-week phone call, offer a family planning visit.
- No further follow up is needed.

# Results

- The protocol was well received by the clinicians and nursing staff at Mountain Health Center.
  - Several edits were suggested which were incorporated into the final protocol
- All clinicians recognized that the clinic has been missing a potentially significant amount of untreated depression in this population
- The protocol is in the process of being approved by a protocol committee
  - We anticipate it becoming active in the next month



# Effectiveness and Limitations

- Given that the clinic has not been screening any patient for depression post miscarriage, this protocol will help identify certain individuals in need of treatment
- Limitations include:
  - Being unable to screen women who have a miscarriage at home and are not evaluated by the medical system
  - Limited communication between a patient's OB provider and their PCP
    - Especially if the miscarriage is managed by the OB
  - Uncertainty regarding how these patient's obstetricians are screening for post miscarriage depression

# Future Avenues

- In the immediate future I plan on contacting Porter Women's Health Group in Middlebury and Middlebury Planned Parenthood
  - Most Mountain Health Center patients receive their obstetrical care from these two clinics
  - How are they screening for post miscarriage depression?
  - What mechanisms can be put in place to improve communication with Mountain Health Center regarding their patients having miscarriages?
- I intend to evaluate how many patients this protocol has screened and positively identified one year after its implementation
  - If this protocol proves successful, I would love to publish the data and offer it to other clinics to implement for their populations
  - This has the potential to be an excellent project for my 4<sup>th</sup> year of medical school

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