

Introduction

- Perinatal depression affects ~20% of this group (Fedock & Alvarez, 2018)
- CDC Pregnancy Risk Assessment Monitoring System (PRAMS): Prenatal depression → 12% US prevalence & ~10% in NY [study location] (CDC, 2017)
- Prenatal depression negatively impacts mother/fetal outcomes (Fedock & Alvarez, 2018)

Background & Significance

Guidelines & Recommendations to Screen:

- The United States Preventive Services Task Force (**USPSTF**) (Siu et al., 2016)
- The American College of Obstetricians and Gynecologists (**ACOG**) (ACOG, 2018)
- ~1/3 of cases may be identified and treated, & obstetricians report screening ~80% of postpartum (PP) versus ~50% of prenatal patients (Fedock & Alvarez, 2018)
- Only 66% of obstetricians use a valid tool (Taouk et al., 2018)
- Provider antidepressant use, prenatal VS PP (28% vs 54%) (Venkatesh et al., 2016)
- Depression screening & management in the prenatal population may therefore be neglected to a degree

Methodology

- Provider-focused quality improvement (QI) project, with quasi-experimental design
- A Pre/Post-intervention chart review conducted to compare pre/post-intervention prenatal depression screening, & follow-up care rates
- Provider staff education with pre/post-tests

Interventions

- **Staff/provider education with pre/post-tests**
- **Administer the Edinburgh Postnatal Depression Scale (EPDS) to prenatal women**

AIMS & Objectives

AIM: to increase the rate of formal prenatal depression screenings, & Follow-up in a private OBGYN office

Objectives:

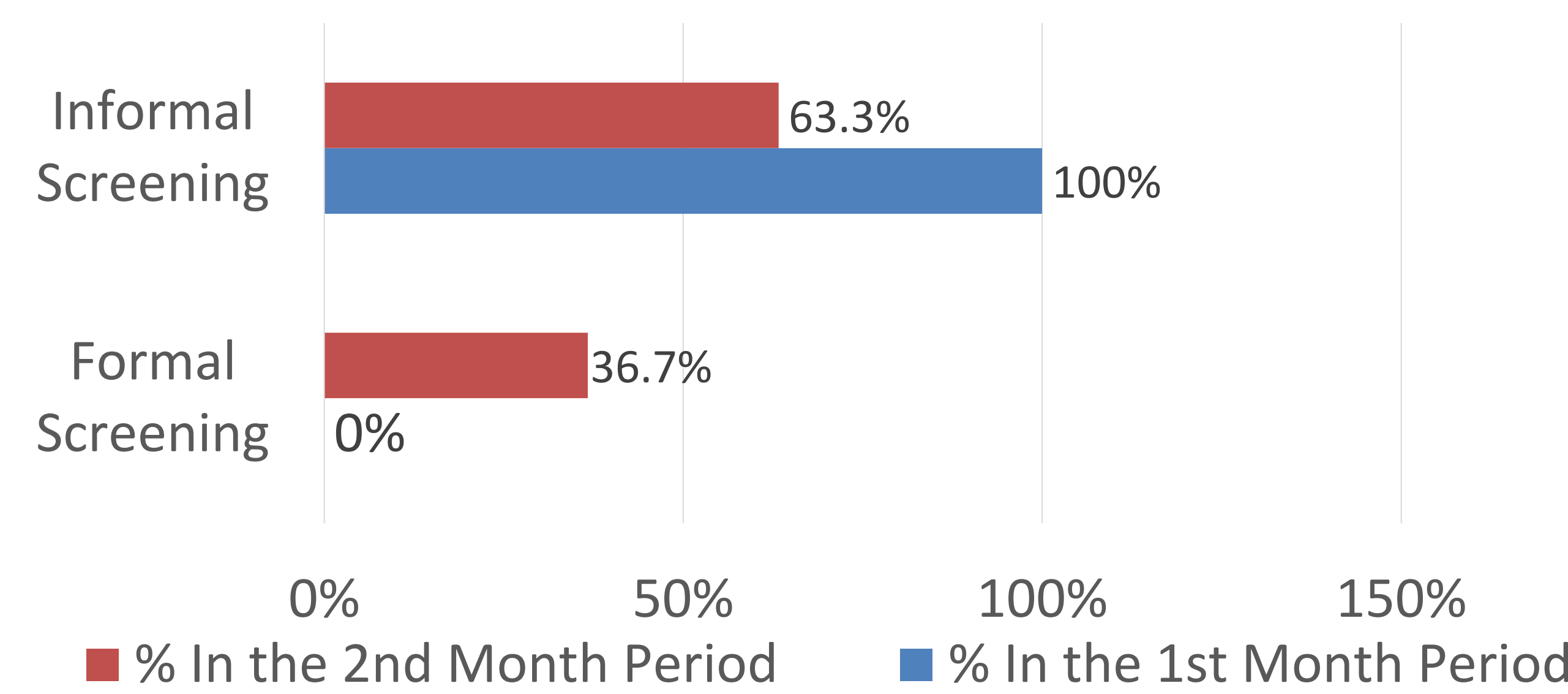
- Conduct an **educational session** to providers/staff (n=5), with pre/post-test regarding the importance of screening with a valid tool (EPDS)
 - Administer pre/post-tests before and after the educational intervention to determine if education was successful by examining degree of familiarity, comfort with administration, and comfort with explanation of the EPDS to patients, & frequency of administration
- **Administer the EPDS** to clients as they waited in the waiting area
 - Assess the efficacy of interventions through a pre/post-intervention chart review of 30 randomly selected charts from 2, 1-month periods (2nd review after > 1 month of EPDS rollout)

Results

General Findings: Formal and Informal Screenings and Identified +Depression Screens

	# In the 1 st Month Period	% In the 1 st Month Period	# In the 2 nd Month Period	% In the 2 nd Month Period
Formal Screening	0	0%	11	36.7%
Informal Screening	30	100%	19	63.3%
Identified Cases of Depression	2	6.7%	3	10%

Formal and Informal Screenings



***A statistically significant increase in formal screening (0% vs 36.7%) (Wilcoxon Z= -3.317, p < .001)**
Lack of more formal screenings due to refusals

Follow-up Care

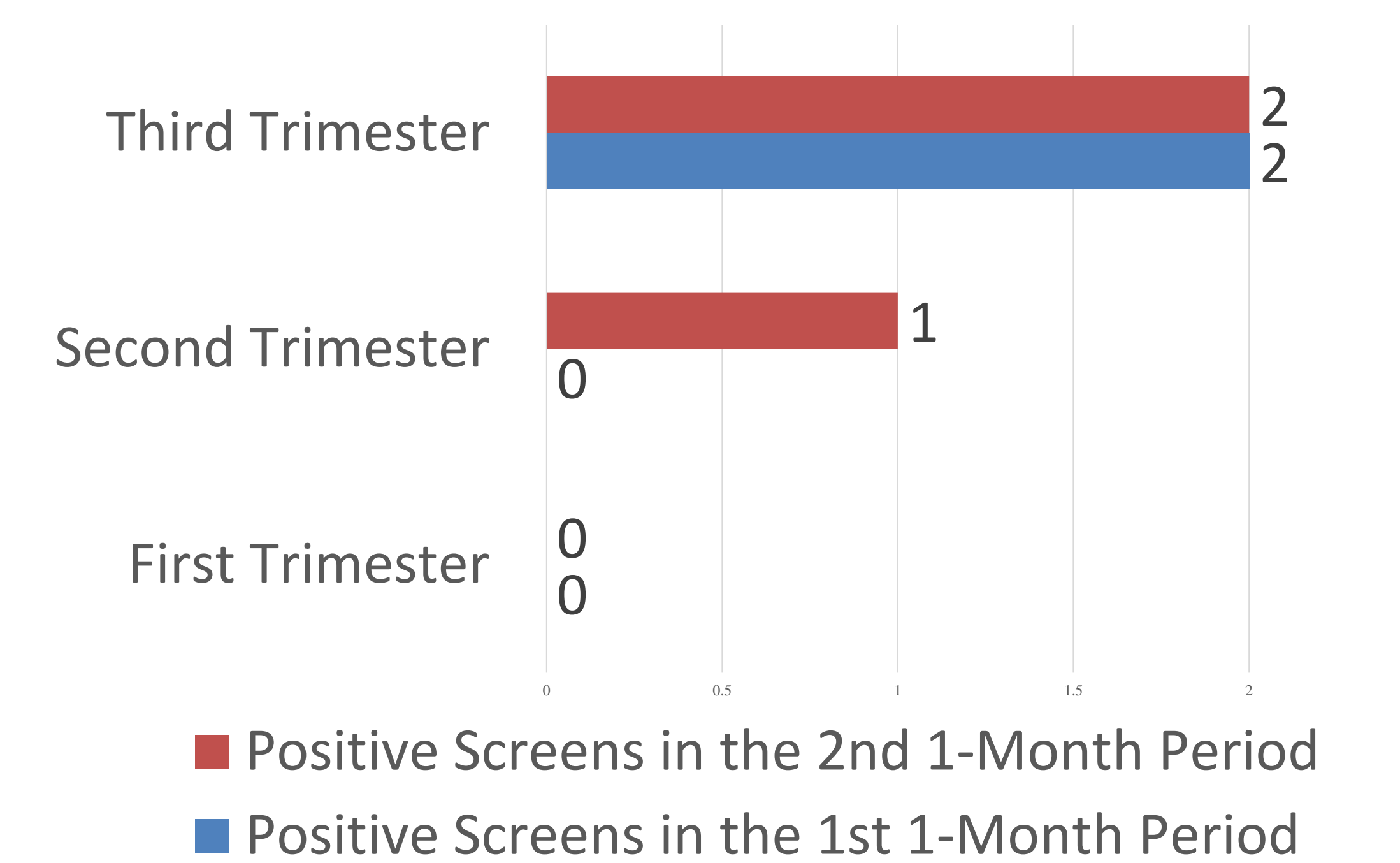
	# In the 1 st Month Period	% In the 1 st Month Period	# In the 2 nd Month Period	% In the 2 nd Month Period
Therapy Referral	2	6.7%	1	3.3%
Antidepressant Initiation	0	0%	0	0%
Psychiatric Care Referral	0	0%	0	0%
Monitoring & Supportive Bedside Counseling	0	0%	3	10%

4 vs 2 patients received f/u care post-intervention
***Although f/u care doubled (13.3% vs 6.7%), this was not statistically significant (Wilcoxon Z= -1.0, p .317)**

Results continued

- When only 11 women were screened with the EPDS, 3 screened positive for depression (27.3%), and 4 total were referred for follow-up care (3 bedside counseling & further monitoring, 1 for psychotherapy)
 - Overall, 49 patients screened informally, and 11 with the EPDS, 2 screened positive informally VS 3 positive with the EPDS (4.1% vs 27.3%)
 - The EPDS may have greater sensitivity to detect +screens, but this conclusion would require a head-to-head comparison
- **Pre/Post-test Results:** Staff/provider knowledge & comfort level with EPDS administration, use, and frequency of use increased after education, but none were statistically significant EXCEPT reported frequency of EPDS use (Wilcoxon Z= -2.236, p= .025)

Trimester and Positive Screens



***Statistical analysis shows an association between later trimesters & positive screens (Mann-Whitney U = 62.500, p = .042)**

Discussion

- As in the literature, a depression screening initiative resulted in a statistically significant increase in formal screenings & increased rate of follow-up care (Avalos et al., 2016; Miller et al., 2019; Holmquist et al., 2021; Reilly et al., 2020). The EPDS is superior over informal screening. However, increase in follow-up care was not statistically significant, likely because few were experiencing depressive symptoms
- As in the literature, staff education statistically increased frequency of EPDS use (Pearson et al., 2019), but increase in confidence & knowledge of EPDS use was not statistically significant, likely due to low amount of subjects (n= 5)
- The EPDS may be more sensitive to detect milder cases of depression, & can therefore be used for preventative measures, over informal screening, as a patient who did not screen positive was given follow-up care due to EPDS score of 9 (almost positive)
- As in the literature, providers reported lack of previous EPDS use (Taouk et al., 2018) & antidepressants were not prescribed (Venkatesh et al., 2016)
- This study may also, highlight the perceived mental illness-related stigma in the Arab/Muslim population, as 63.3% refused to complete the EPDS. Incorporating patient spirituality in addressing mental health in this population may alleviate the issue (Merhej, 2019)
- Psychotherapy may have been reserved for those with overt symptoms (patient with EPDS= 17). Perhaps the 2 patients given therapy in the 1st month were severely depressed, and would not have been identified through informal screening, had they experienced only mild symptoms
- Perhaps more frequent screenings should take place as pregnancies progress, as later trimesters were correlated with positive screens

Implications

- If the EPDS is applied to clinical practice, more cases would be identified or at risk of +depression screen, therefore, more would be treated, & preventative care can begin
 - Informal screening may be inadequate to detect mild cases & cannot be used for preventative services
 - Informal screening should therefore be discouraged & formal screening implemented, & enforced through staff education & public healthcare policy
 - EPDS use can lead to early detection of depression during pregnancy, resulting in better quality & safety of care, & healthcare cost reduction
- Healthcare providers should be educated regarding EPDS use during their training
- The EPDS can be used to assess treatment efficacy, & even justify antidepressant use

Conclusion

Depression in the prenatal period affects a significant number of women, yet many do not screen their prenatal patients (Fedock & Alvarez, 2018), nor do they screen with a valid tool (Taouk et al., 2018). The findings of this study suggest that staff education regarding the use of a valid screening tool, and administration of the screening tool, will result in more screening with the formal tool, identified cases, and even at-risk cases, thereby facilitating prompt interventions for the management of depressive symptoms

References



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