



Published in final edited form as:

J Psychosom Obstet Gynaecol. 2022 September ; 43(3): 368–373. doi:10.1080/0167482X.2021.1975676.

The role of clinician assistants in addressing perinatal depression

Katherine M. Cooper^a, Grace A. Masters^a, Tiffany A. Moore Simas^{a,b}, Nancy Byatt^{a,b}

^aUniversity of Massachusetts Medical School, Worcester, MA, USA

^bUMass Memorial Health, Worcester, MA, USA

Abstract

Background: Upwards of one in seven individuals experience perinatal depression and many individuals cannot access treatment. In response, perinatal depression is increasingly being managed in the obstetric setting. This study aimed to characterize the experiences of clinicians and clinician assistants to inform the extent to which clinician assistants can help address depression in obstetric settings.

Methods: This cross-sectional analysis used data from an ongoing cluster randomized control trial: The PRogram In Support of Moms (PRISM). Participants included clinicians (physicians, certified nurse midwives, nurse practitioners) and clinician assistants (medical assistants, nursing assistants). Baseline data regarding practices and attitudes of clinicians and clinician assistants toward addressing depression in the obstetric setting were described. Logistic regressions were used to examine the association of clinician time to complete work and depression management.

Results: Clinician assistants experienced significantly fewer time constraints than did clinicians. However, having adequate time to complete work was not significantly associated with increased depression management in clinicians. Clinician assistants reported feeling that addressing depression is an important part of their job, despite variation in doing so.

Conclusion: Clinician assistants are interacting with perinatal women extensively and are a vital part of obstetric care workflows. Clinician assistants report that they want to address depression and have time to do so. Thus, clinician assistants may be poised to help address the mental health needs of perinatal individuals.

Keywords

Perinatal mental health; health services research; clinician assistants; collaborative care; perinatal depression; postpartum depression

Introduction

Depression is one of the most common complications of pregnancy [1,2]. One in seven perinatal individuals experience depression during pregnancy and/or the first year

postpartum. The risk is as high as one in two for certain populations including those with lower incomes or those who identify as Black, Indigenous or person of color [3,4]. Perinatal depression is associated with negative sequelae for both birthing persons and their offspring; in severe circumstances, these may include suicide or infanticide [5]. Despite the negative consequences, approximately 50% of perinatal depression is undiagnosed and less than 30% of pregnant and postpartum individuals who screen positive receive treatment [6].

There are clear professional recommendations to screen for depression at least once in pregnancy and/or the postpartum period. Screening should be done with validated instruments such as the Edinburg Postpartum Depression Scale (EPDS) or Patient Health Questionnaire (PHQ-9) [7]. Further, screening should occur in the context of systems that are prepared to respond to positive screens. For example, systems that are prepared to respond by providing a mental health assessment, treatment initiation or referral, and follow-up [7,8]. Evidence-based treatments for perinatal depression include psychotherapy and pharmacotherapy. In many cases, the latter can be provided by an obstetric clinician [9].

Unfortunately, barriers in the mental health care pathway abound and are multifactorial. Patient-related barriers include stigma, misconceptions about pharmacotherapy, and lack of education regarding mental health assessment and treatment [10,11]. Health care barriers include lack of culturally responsive care, training, resources, referral options, and inadequate clinician time to effectively address perinatal depression [11–13]. Interventions aiming to improve participation in perinatal depression treatment increasingly focus on building the capacity of obstetric clinicians to provide mental health care in the perinatal setting [14]. Capacity-building strategies range from educational resources for clinicians (e.g. screening and treatment algorithms) to the development of Perinatal Psychiatry Access Programs such as the Massachusetts Child Psychiatry Access Program (MCPAP) for Moms [15,16].

While obstetric and other frontline clinicians are critical to screening and connecting perinatal individuals with care, clinician assistants can also play key roles in this care pathway. Clinician assistants include clinical support staff with certificate-level training, such as medical assistants, nursing assistants, and patient care assistants. These clinician assistants often administer and score validated mental health screening instruments in a variety of clinical settings, and thus they may be poised to help to address the mental health needs of perinatal individuals [17]. Currently, there is a paucity of studies evaluating the role of clinician assistants in obstetric or maternity care settings in the literature.

In this study, we aimed to evaluate how clinician assistants and licensed obstetric clinicians engage in the workflow and the management of depression in perinatal settings. We then analyzed associations between clinician and clinician assistant characteristics and depression management to inform the extent to which clinician assistants can help address depression in obstetric settings.

Methods

This cross-sectional analysis used baseline data from the PProgram In Support of Moms (PRISM) study [13,18,19]. PRISM is an ongoing cluster-randomized controlled trial (RCT) evaluating the effects of two interventions designed to address perinatal depression in 12 obstetric practices across Massachusetts. The first intervention arm includes access to the population-level MCPAP for Moms program for clinicians. This is a state-wide program that offers training and toolkits, telephonic access to perinatal psychiatrists, and face-to-face consultation, and linkages to mental health resources and referral [15]. The second intervention arm includes access to MCPAP for Moms *plus* proactive practice-level implementation support designed to help practices integrate depression management (e.g. detection, assessment, treatment, and follow-up) into their daily workflow [16]. RCT recruitment has been expanded upon elsewhere [19]. For this analysis of baseline data, licensed obstetric clinicians and clinician assistants at the participating sites were invited to participate and complete a baseline questionnaire regarding perinatal depression. The University of Massachusetts Medical School Institutional Review Board (IRB) approved the cluster RCT. All individuals gave informed consent prior to participation.

The baseline questionnaire was a 46-item questionnaire which obtained demographics as well as data on attitudes, perceived self-efficacy, and experience in managing perinatal depression. This questionnaire was adapted from validated tools used in primary care settings that examine clinician attitudes and self-efficacy to assess their readiness to implement behavioral health interventions [19,20]. Participants were grouped based on their self-reported roles. Group one was defined as licensed obstetric clinicians and included physicians, nurse practitioners, and certified nurse midwives, hereto called “clinicians.” These individuals are considered frontline, primary providers in the care of perinatal individuals. Group two was defined as clinician assistants and included medical, nursing, and patient care assistants. These individuals have numerous roles including, but not limited to, rooming patients, taking and recording vital signs, reviewing medication lists, administering and scoring health screeners, and taking brief histories preceding patient encounters with clinicians [17,21].

Clinicians were asked to respond to Likert-style questions in the following domains: (1) their confidence in screening and detecting depression, treating patients with depression, and assessing and monitoring depressive symptoms over time; (2) the rate at which they do screen, assess, treat, and follow patients with perinatal depression in practice; (3) practice-level resources and logistical-factors including their ability to refer patients with suspected depression for other services; and (4) their characterization of their workplace environment (e.g. adequate time to complete work) and satisfaction. Clinician assistants were given the same survey, however questions outside of their clinical purview were omitted. For example, clinician assistants were also asked to rate the degree to which they felt it was important to address depression in their work, but not how often they screen, treat and discuss depression since they are not currently able to provide direct treatment themselves.

Demographic and workplace variables and reported depression management practices were compared between clinicians and clinician assistants using Chi-square or t-tests.

Participant demographic information (race, ethnicity, education, years of experience) and characterization of workplace environment and efficiency were compared across groups. Specifically, we compared responses regarding the adequacy of time to complete tasks at work, assessment of practice efficiency, and descriptions of office atmosphere. Responses to Likert-style questions regarding behaviors and attitudes were collapsed for analytic simplicity: outcomes were dichotomized into agree/strongly agree and disagree/strongly disagree. In clinicians, associations between perceptions of time to complete work and reported depression management were examined using crude and adjusted logistic models. Covariates in the adjusted models included a race, ethnicity, education, and years of experience. Participants were excluded from analyses on a case-by-case basis when evaluated responses were declined or deemed not applicable by the respondent. Significance was assessed at $p = 0.05$. All analyses were done in Stata 14.

Results

Participant demographics

This study was primarily comprised of clinicians, with about one-quarter of the participants being clinician assistants (59/208, 28.4%). The majority (95%) of the clinician assistants identified as medical assistants. Of the clinicians, about one-third (46/159, 30.9%) were medical residents with an average of 2.5 years of residency completed. Clinician assistants were more racially and ethnically diverse than clinicians in this study ($p < 0.001$, Table 1).

Compared to clinicians, clinician assistants were less likely to have a college degree ($p < 0.001$) and had fewer years of experience in obstetrics overall (6.6 vs. 10.0 years, $p = 0.03$). Despite the difference in the overall level of obstetric experience, clinicians and clinician assistants in our study had similar amounts of work experience at their current practice, where about 60% of participants in both groups reported working at their practice for at least two years.

Workplace assessments

About two-thirds of both clinicians and clinician assistants characterized their workplace environment to be “busy but reasonable” (Table 2). However, 88.6% of clinician assistants reported adequate time to complete their work versus 31.3% of clinicians ($p < 0.001$). After adjusting for race, ethnicity, education, time at practice, and years of OB/GYN experience, clinician assistants were 5.6-times as likely as clinicians to report adequate time for work completion (95% Confidence Interval (CI): 1.3–24.6).

Clinician assistant attitudes toward and experiences in addressing and managing depression

The vast majority of clinician assistants (90%) agreed that addressing depression is an important part of their job. However, only 29% of clinician assistants reported that they had discussed depression in any context with their patients. Of those that reported discussing depression, 64% indicated only doing so if a patient said something concerning or a patient brought up depression themselves.

Clinician attitudes toward and experiences in addressing and managing depression

Most clinicians reported that they consistently screen for and discuss depression with their patients. Despite being less likely than clinician assistants to report having adequate time to complete their work, the perception of adequate time did not affect whether clinicians screened for, discussed, or treated depression to a significant degree. Regardless of whether they reported adequate or inadequate time to complete work, most clinicians reported that they screened for depression (91.2% vs. 85.5% respectively, OR: 1.7, 95% CI [0.45–6.72] and discussed depression with their patients (94.1% vs. 93.3%, OR: 1.1, 95% CI [0.21–6.21]) most of the time. However, far fewer clinicians reported that they consistently treated depression (45.5% in those that reported adequate time vs. 42.9% in those with inadequate time, OR: 1.1, 95% CI [0.48–2.56]). These relationships remained stable even when adjusting for potential confounders. Specifically, race, ethnicity, education, time at practice, and years of OB/GYN experience, did not alter the relationship between perception of time to complete work and clinician-reported rates of screening for, discussing, or treating depression.

Discussion

Perinatal depression is one of the most common pregnancy complications in the United States [1,2]. Given its prevalence and associated negative short- and long-term consequences, it is essential to screen for and treat depression in perinatal individuals [7,22,23]. However, integrating comprehensive mental health care into busy obstetric practice workflows can be challenging. This study quantified how clinicians and clinician assistants perceived their roles in the detection and management of perinatal depression, a topic not widely explored in the medical literature.

This analysis included perspectives from multiple practices across Massachusetts and captures a diverse clinical cohort. Eighty-nine percent of clinicians in our study reported consistently screening for depression. These screening rates are at the higher end of the estimated national average of 50 – 98% [24,25]. It is known that self-reported and actual screening rates are not always concordant, but this rate is still markedly higher than the percentage of clinicians who report treating depression regularly, illuminating the gap in care. While inadequate time with patients is often a barrier to treatment, clinician treatment rates in this study were the same regardless of the perception of adequate time in the workplace.

Clinician assistants in our study were regularly administering depression screening. Overall, clinician assistants perceived significantly fewer time constraints than clinicians. Most reported adequate time to complete their work and felt their workplace operated efficiently. Clinician assistants overwhelmingly agreed that addressing depression is an important part of their job, despite not often discussing it during patient encounters. This suggests that clinician assistants want to and have the time to facilitate not only screening for depression but also responding to positive screens. For example, clinician assistants could facilitate depression care by providing psychoeducation, resources and/or referrals. They could also be trained to provide brief interventions such as motivational interviewing, which has been shown to increase help-seeking [26]. Clinician assistants serving in these roles are supported

by literature that demonstrates clinician assistant involvement inpatient care is associated with improved workflow and better patient outcomes [21,27]. Our data suggest clinician assistants are an unleveraged resource that could help increase an obstetric practice's capacity to manage depression.

Our results also suggest high rates of job turnover amongst clinician assistants. The average years of experience in obstetrics were 6.6 years for clinician assistants in our study; however, almost half of these individuals were at their current place of employment for less than two years. This is consistent with a high degree of job turnover and may demonstrate the need to engage with and "invest in" clinician assistants. There is literature to suggest that if systems "invest in" support staff by providing professional development opportunities, there is increased job satisfaction and system-level benefit, such as lower clinician burnout [21,27]. Investing in and empowering clinician assistants in their roles may ultimately reduce job turnover and enhance practice efficiency [27]. Qualitative studies could help inform how clinician assistants would feel about opportunities to increase their involvement in the mental health care pathway.

Finally, clinician assistants in this study represented a more diverse population than clinicians. Racial and ethnic concordance between patients and their health care providers has been associated with better patient experience and health outcomes [28]. Specifically, when a physician is of the same race or ethnicity as a patient, it can increase the patient's comfort with or trust in their provider. This could be particularly important in perinatal depression, as there currently exists significant differences in screening and treatment rates by race/ethnicity. For example, Black women are screened less often and receive treatment less often after a positive screen [29]. Future studies need to explore how diversity in the racial/ethnic make-up of clinician assistants may help address depression and how it may improve patient experience and outcomes.

There were several limitations in this study. Data were collected from participants in a state that is considered to be at the forefront of care for perinatal mood and anxiety disorders [30]. Clinicians and clinician assistants in Massachusetts have access to MCPAP for Moms, which was designed to increase the capacity of clinicians to address perinatal depression [13, 19]. In view of this, providers may be more willing or likely to already engage in efforts to improve depression management. For the same reason, this may also underestimate how this affects the perception of time adequacy in the workplace and workplace environment. In addition, we were unable to comment on clinician and clinician assistant differences across age and gender.

Conclusion

Obstetric practices are increasingly changing to meet the relatively new recommendations to screen for and treat depression in obstetric settings. To date, this movement has focused largely on building the capacity of frontline clinicians, who often have high workloads and variable training in mental health. Despite major progress, barriers remain to address depression in obstetric settings. To successfully integrate depression management into obstetric care, it must become a part of the practice workflow. Clinician assistants interact

with perinatal individuals extensively and are a vital part of this workflow. Our study suggests that clinician assistants value addressing depression and have time to do so. Involving obstetric clinician assistants is a largely unleveraged opportunity that could help integrate depression care into obstetric practice. Engaging obstetric clinician assistants in depression care, could, in turn, help engage perinatal individuals in depression screening, assessment and treatment.

Funding

This work was supported by Prevention (CDC) through a Cooperative Agreement [Grant number: 1U01DP006093] awarded to the University of Massachusetts Medical School, an award from the UMass Medical School Center for Clinical and Translational Science TL1 Training Program [Grant Number: TL1TR001454], and the UMass Medical School Medical Scientist Training Program (MSTP) [Grant Number: T32GM107000].

Disclosure statement

The third and fourth authors have received salary and/or funding support from Massachusetts Department of Mental Health *via* the Massachusetts Child Psychiatry Access Program for Moms (MCPAP for Moms). The third author is the Engagement Director for MCPAP for Moms and Medical Director of Lifeline4Moms. She has served on Advisory Boards for Sage Therapeutics and is a consultant to Sage Therapeutics and Ovia Health. The fourth author is also the statewide Medical Director of MCPAP for Moms and Executive Director of Lifeline4Moms. The fourth author has served on Advisory Boards for Sage Therapeutics. She has served as a speaker for Sage Therapeutics, a consultant to Sage Therapeutics or their agents, and has served as a consultant to Ovia Health. She has also received honoraria from Miller Medical Communications and Medscape.

References

- [1]. Gavin NI, Gaynes BN, Lohr KN, et al. Perinatal depression: a systematic review of prevalence and incidence. *Obstet Gynecol.* 2005; 106(5 Pt 1):1071–1083. [PubMed: 16260528]
- [2]. Fairbrother N, Janssen P, Antony MM, et al. Perinatal anxiety disorder prevalence and incidence. *J Affect Disord.* 2016;200:148–155. [PubMed: 27131505]
- [3]. Chung EK, McCollum KF, Elo IT, et al. Maternal depressive symptoms and infant health practices among low-income women. *Pediatrics.* 2004;113(6):e523–e529. [PubMed: 15173532]
- [4]. Gress-Smith JL, Luecken LJ, Lemery-Chalfant K, et al. Postpartum depression prevalence and impact on infant health, weight, and sleep in low-income and ethnic minority women and infants. *Matern Child Health J.* 2012;16(4):887–893. [PubMed: 21559774]
- [5]. Lindahl V, Pearson JL, Colpe L. Prevalence of suicidality during pregnancy and the postpartum. *Arch Womens Ment Health.* 2005;8(2):77–87. [PubMed: 15883651]
- [6]. Bonari L, Pinto N, Ahn E, et al. Perinatal risks of untreated depression during pregnancy. *Can J Psychiatry.* 2004;49(11):726–735. [PubMed: 15633850]
- [7]. Kendig S, Keats JP, Hoffman MC, et al. Consensus bundle on maternal mental health: perinatal depression and anxiety. *Obstet Gynecol.* 2017;129(3):422–430. [PubMed: 28178041]
- [8]. Siu AL, Bibbins-Domingo K, Grossman DC, et al. Screening for depression in adults: US preventive services task force recommendation statement. *JAMA.* 2016;315(4):380–387. [PubMed: 26813211]
- [9]. The American College of Obstetricians and Gynecologists Committee opinion no. 630. Screening for perinatal depression. *Obstet Gynecol.* 2015;125(630):1268–1271. [PubMed: 25932866]
- [10]. Goodman JH. Women's attitudes, preferences, and perceived barriers to treatment for perinatal depression. *Birth.* 2009;36(1):60–69. [PubMed: 19278385]
- [11]. Byatt N, Biebel K, Lundquist RS, et al. Patient, provider, and system-level barriers and facilitators to addressing perinatal depression. *J Reprod Infant Psychol.* 2012;30(5):436–449.
- [12]. Leiferman JA, Dauber SE, Heisler K, et al. Primary care physicians' beliefs and practices toward maternal depression. *J Womens Health.* 2008;17(7):1143–1150.

- [13]. Byatt N, Moore Simas TA, Biebel K, et al. PRogram in support of moms (PRISM): a pilot group randomized controlled trial of two approaches to improving depression among perinatal women. *J Psychosom Obstet Gynaecol*. 2018;39(4):297–306. [PubMed: 28994626]
- [14]. Byatt N, Simas TAM, Lundquist RS, et al. Strategies for improving perinatal depression treatment in North American outpatient obstetric settings. *J Psychosom Obstet Gynaecol*. 2012;33(4):143–161. [PubMed: 23194018]
- [15]. Byatt N, Straus J, Stopa A, et al. Massachusetts child psychiatry access program for moms: utilization and quality assessment. *Obstet Gynecol*. 2018;132(2):345–353. [PubMed: 29995727]
- [16]. Byatt N, Xu W, Levin LL, et al. Perinatal depression care pathway for obstetric settings. *Int Rev Psychiatry*. 2019;31(3):210–228. [PubMed: 30701995]
- [17]. Skillman SM, Dahal A, Frogner BK, et al. Frontline workers' career pathways: a detailed look at Washington state's medical assistant workforce. *Med Care Res Rev*. 2020;77(3):285–293. [PubMed: 30451087]
- [18]. Byatt N, Pbert L, Hosein S, et al. PRogram in support of moms (PRISM): development and beta testing. *Psychiatr Serv*. 2016;67(8):824–826. [PubMed: 27079994]
- [19]. Moore Simas TA, Brenckle L, Sankaran P, et al. The PRogram in support of moms (PRISM): study protocol for a cluster randomized controlled trial of two active interventions addressing perinatal depression in obstetric settings. *BMC Pregnancy Childbirth*. 2019;19(1):256. [PubMed: 31331292]
- [20]. Tajima B, Guydish J, Delucchi K, et al. Staff knowledge, attitudes, and practices regarding nicotine dependence differ by setting. *J Drug Issues*. 2009;39(2):365–383. [PubMed: 20617124]
- [21]. Dill J, Morgan JC, Chuang E, et al. Redesigning the role of medical assistants in primary care: challenges and strategies during implementation. *Med Care Res Rev*. 2021;78(3):240–250. [PubMed: 31411120]
- [22]. Force UPST. Perinatal depression: preventive interventions. 2018.
- [23]. Care CoPSiW&H. Maternal mental health: perinatal depression and anxiety A.C.o.O.a. Gynecologists, editor. 2016. Available from: www.safehealthcareforeverywoman.org
- [24]. Hadley EE, Le V, Swen T, et al. Screening and treatment practices of OB/GYN providers for postpartum depression and anxiety [4L]. *Obstetr Gynec*. 2018;131(1):130S–130S.
- [25]. Byatt N, Masters GA, Bergman AL, et al. Screening for mental health and substance use disorders in obstetric settings. *Curr Psychiatry Rep*. 2020;22(11):62–13. [PubMed: 32936340]
- [26]. Holt C, Milgrom J, Gemmill AW. Improving help-seeking for postnatal depression and anxiety: a cluster randomised controlled trial of motivational interviewing. *Arch Womens Ment Health*. 2017;20(6):791–801. [PubMed: 28776105]
- [27]. Bodenheimer TS, Smith MD. Primary care: proposed solutions to the physician shortage without training more physicians. *Health Aff*. 2013;32(11):1881–1886.
- [28]. Takeshita J, Wang S, Loren AW, et al. Association of racial/ethnic and gender concordance between patients and physicians with patient experience ratings. *JAMA Netw Open*. 2020;3(11):e2024583. [PubMed: 33165609]
- [29]. Kozhimannil KB, Trinacty CM, Busch AB, et al. Racial and ethnic disparities in postpartum depression care among low-income women. *PS*. 2011;62(6):619–625.
- [30]. Rhodes AM, Segre LS. Perinatal depression: a review of US legislation and law. *Arch Womens Ment Health*. 2013;16(4):259–270. [PubMed: 23740222]

Table 1.

Demographics.

	Total (<i>n</i> = 208)	Clinicians (<i>n</i> = 149)	Clinician assistants (<i>n</i> = 59)
Race (%) ***			
Asian	8.0	9.6	3.9
Black/African American	5.4	2.2	13.7
White	76.5	81.6	62.8
Multiracial	2.7	3.7	0
Other	7.5	2.9	19.6
Hispanic ethnicity (%) ***	9.6	4.3	22.8
College degree or more (%) ***	83.0	100.0	38.6
Years at practice (%)			
<6 months	12.8	12.5	13.6
6–12 months	9.7	6.6	17.0
1–2 years	15.9	17.7	11.9
2+ years	61.5	63.2	57.6
Years of experience (mean, SE) *	9.1 (0.7)	10.0 (0.9)	6.6 (0.9)

Demographic and work experience data for clinicians and clinician assistants are reported as percentages of the number of participants in each group (reported as *n*). Total percentages may not sum to 100.0% because of rounding. Differences between groups were evaluated using Chi-squared test.

Significance is reported as * $p < 0.05$; *** $p < 0.001$.

Table 2.

Practice perceptions.

	Total	Clinicians	Clinician assistants	Chi-square	p-value
I have enough time to get everything done at work (%)				41.7	<0.001
(Strongly) Disagree	52.6	68.8	11.4		
(Strongly) Agree	47.4	31.3	88.6		
This practice operates at high efficiency (%)				23.5	<0.001
(Strongly) Disagree	22.6	33.6	0.0		
(Strongly) Agree	77.4	66.4	100.0		
Perception of office environment (%)				1.4	0.50
Calm	0.0	0.0	0.0		
Regular	22.2	24.7	15.6		
Busy but reasonable	68.4	67.1	71.9		
Hectic	9.4	8.2	12.5		

Clinicians and clinician assistants responded to Likert Style questions regarding their practice. Participants reported to what extent they (strongly) agreed or disagreed with the listed statements and selected which term best reflected their workplace environment. This was assessed for clinical significance using Chi-squared ($p = 0.05$). Total percentages may not sum to 100.0% because of rounding.