

## Perinatal Depression Knowledge, Attitudes, and Beliefs Among MSW Students

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**Abstract:** *The purpose of this study was to identify the proportion of Master of Social Work (MSW) students who received perinatal depression (PD) training as part of their coursework. Additionally, we sought to identify differences in PD knowledge, attitudes, beliefs, and openness to further education between students who had received PD training compared to students without PD training. Using a cross-sectional design and convenience sampling, 177 largely female (91.0%), Hispanic (46%), and Caucasian (28.2%) MSW students from five public California universities electronically provided demographic data and completed the Depression in Women's Health Settings scale. Most MSW students reported health/mental health (38%) or children/youth/and families (47.5%) as their field of practice. Twenty-nine MSW students (16.4%) reported receiving PD training, 61% child abuse/neglect training, and 50% domestic violence training. Students with PD training were significantly more knowledgeable and reported having the skills to assess, screen, identify, and care for women with PD symptoms versus students without PD training. Given the well-documented association of PD with child abuse/neglect and domestic violence, early PD screening, identification, and referral information must be incorporated into MSW curricula and continuing education in order to promote maternal-infant well-being outcomes.*

**Keywords:** *Social work training, perinatal depression, postpartum depression, antenatal depression*

With a prevalence rate of 15 to 20%, perinatal depression (PD) is one of the most common pregnancy-related health problems and a significant public health concern (ACOG, 2015; Sit et al., 2015) that is closely associated with other public health issues including domestic violence (Kothari et al., 2016) and child abuse (Schury et al., 2017). The perinatal period encompasses pregnancy through the first 12 months after the birth of a child (American College of Obstetricians and Gynecologists [ACOG], 2015). Hormonal shifts, physical changes, and the emotional demands of the perinatal period can be a vulnerable time for women and places them at an increased risk of developing PD (Kendig et al., 2017). Perinatal depression is further defined as the onset of depressive symptoms during the pregnancy (antenatal depression) and any time up to 12 months after the birth of a new infant (postpartum depression; ACOG, 2015).

Antenatal depressive symptoms are the same as symptoms for major depressive disorder including poor sleep and appetite, anxiety, loss of interest, low mood, and feelings of guilt (American Psychiatric Association, 2013). Antenatal depression has been associated with fetal abnormalities including premature birth, low birthweight, congenital anomalies, and stillbirth (Raisanen et al., 2014). A recent meta-analysis indicated 10% of

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women will experience antenatal depressive symptoms (Falah-Hassani, Shiri, & Dennis, 2017). When left undiagnosed and untreated, antenatal depression is strongly associated with developing postpartum depression (PPD; Faisal-Cury & Menezes, 2012).

Affecting up to 20% of new mothers (Centers for Disease Control and Prevention, 2017; Gaynes et al., 2005), postpartum depression (PPD) presents with a constellation of symptoms including sadness, crying, feelings of inadequacy, guilt, loss of interest, insomnia, anxiety, and somatic symptoms (O'Hara & Wisner, 2014). Although PPD is easily treated once identified, up to 60% of women are left unidentified (Ko, Rockhill, Tong, Morrow, & Farr, 2017). Untreated PPD has been associated with poor maternal-infant bonding and low breastfeeding rates (Kingston, McDonald, Austin, & Tough, 2015; Wouk, Stuebe, & Meltzer-Brody, 2017). Additionally, PPD contributes to infant safety risks (e.g., incorrect car seat use, sleep positioning; Balbierz, Bodnar-Deren, Wang, & Howell, 2015), poor infant feeding practices (e. g. juice; Balbierz et al., 2015), and an increased risk of suicide and infanticide (Kingston et al., 2015; Sockol, Epperson, & Barber, 2013; Wouk et al., 2017). Recent research suggests long term consequences of untreated PPD are far-reaching, going beyond poor maternal-infant bonding (Netsi et al., 2018). Children of women with persistent PPD are more likely to exhibit behavioral disturbances at age 3.5, have lower high school math scores, and higher prevalence of depression at age 18 (Netsi et al., 2018).

Although PPD can affect all women, studies show that first-time mothers (Leahy-Warren, McCarthy, & Corcoran, 2012), adolescents (Torres, Goyal, Burke-Aaronson, Gay, & Lee, 2017), immigrants/refugees (Collins, Zimmerman, & Howard, 2011), and women from diverse racial or ethnic groups (Goyal, Park, & McNiesh, 2015; Goyal, Wang, Shen, Wong, & Palaniappan, 2012; Hutto, Kim-Godwin, Pollard, & Kemppainen, 2011; Ta Park, Goyal, Nguyen, Lien, & Rosidi, 2015) are at an increased risk. Given the morbidity and mortality associated with unidentified and untreated PPD, nationwide organizations have developed position statements and recommendations for screening and management including the American Medical Association (AMA, 2018), ACOG (2015), the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN; AWHONN Position Statement, 2015), and at the federal level, the U.S. Preventive Services Task Force (USPSTF; Siu et al., 2016). All of these organizations recommend that childbearing women be screened for depressive symptoms throughout the perinatal period.

In 2010, the Patient Protection and Affordable Care Act (ACA) Section 2952 included funding to support maternal mental health research and education (US Government Publishing Office, 2010). Since the enactment of the ACA, research regarding PD identification and treatment has been widely published in the medical and nursing literature. However, screening practices for PD has received little empirical attention especially in the field of social work, with no studies to date that have included Master of Social Work (MSW) students in study samples (Keefe, Brownstein-Evans, Lane, Carter, & Rouland Polmanteer, 2015). The paucity of research that has included social work is concerning as social workers, particularly clinical social workers, are known to make up the majority of mental health providers and provide mental health services in the U.S. (National Association of Social Workers [NASW], 2017). Moreover, social workers interact with childbearing women in a variety of settings including hospitals, employee

assistance programs, and community mental health programs, where they are well positioned to recognize PD symptoms (NASW, 2017).

To our knowledge, only Rouland Polmanteer, Keefe, and Brownstein-Evans (2016) have examined PD screening practices in the social work arena. Their sample of female social workers ( $n = 261$ ) completed a 32-item online survey about PPD screening practices. Over half ( $n = 149$ , 57.1%) reported not receiving any information about PPD in undergraduate or graduate coursework, 25% ( $n = 66$ ) had never used a PPD screening tool, and most reported never having read professional literature on PPD. Although well-designed, study findings had limited generalizability due to the homogeneous sample that was largely (79%) female Caucasians.

The well-documented effects of untreated PD on the infant (Smith-Nielsen, Tharner, Krogh, & Vaever, 2016) and long-term child outcomes (Netsi et al., 2018) underscore the need to train future healthcare providers, including social workers, to identify PD. Based on the limited research to date that has included social workers and none that have included MSW students in study samples, the purpose of this study was to answer the following research questions: 1) What percentage of MSW students receive PD-related training as part of their professional development?; 2) Do MSW students with PD-related training have a higher level of PD knowledge?; and 3) Do MSW students with PD training report increased PD related skills and openness to further education compared with MSW students with no PD training?

## Methods

### Study Design

A descriptive, cross-sectional design was used for this study. The convenience sample was drawn from five public universities across California. All currently enrolled full-time and part-time MSW students in face-to-face, hybrid, or online programs were invited to participate. Students were not excluded based on program focus.

### Measures

**Participant characteristics.** A short demographic questionnaire assessed participant age, gender, education level, type of current field placement/internship and/or employment (hospital, public health, other), and frequency of interacting with women of childbearing age in their place of paid employment or internship placement.

**Perinatal depression knowledge and attitudes.** The Depression in Women's Health Settings Nurses Version (Sofronas, Feeley, Zerkowitz, & Sabbagh, 2011) was used to assess PD knowledge, attitudes, and beliefs among MSW students. Originally developed to assess primary care physician knowledge (Leiferman, Dauber, Heisler, & Paulson, 2008), the 40-item questionnaire assesses a broad range of PD-related phenomenon such as healthcare provider attitudes, beliefs, current practices, management, perception of barriers to management of PD, perceptions of patient attitudes towards PD, level of mental health training, and openness to further education. For the purpose of this study, we selected 14 items that assess the level of knowledge and attitudes regarding PD. Content

validity of the questionnaire was established by women's health nurses (Sofronas et al., 2011). With author permission, questions were modified by replacing the word "nurse" with "social work students" throughout the instrument without effect on the reliability and validity of the tool. The 14 items used to assess PD knowledge and attitudes were scored on a Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Despite the small sample size and the number of questions, this 14-item subscale demonstrated fairly good internal consistency with this sample (Cronbach alpha = .74). Further, we chose three items to assess PD-related openness (Cronbach alpha = .80 in this sample) and one item to specifically measure students' perceived PD-related skills.

### **Data Collection Procedure**

After obtaining university human subjects' approval, an e-mail describing the study and a link to the questionnaire was sent to directors of social work schools at 17 public universities within the California State University system. Directors were asked to distribute the study information through student e-mail listservs to all MSW social work students. Five of 17 (30%) directors and/or chairs of social work schools agreed to distribute the study information to their students. Three of the schools were located in Northern California and two were located in Southern California.

After reading a short introduction about the study, students wishing to participate were directed to a Qualtrics® survey link that included an informed consent and the online survey. To maintain participant anonymity, no directly identifiable information was requested. To enhance participation, five \$20 Amazon gift cards were distributed through a raffle at the end of the study. Participants who wanted to take part in the raffle provided an e-mail address at the end of the survey. In order to maintain participant anonymity, email addresses were copied onto a separate document before the winners were randomly selected.

### **Data Analysis**

Demographic data and level of PD knowledge were analyzed using descriptive statistics (frequencies, means, and measures of central tendency). In response to research question one, descriptive analyses (i.e., frequencies and percentages) were conducted to identify the number of MSW students who had received PD-related training as part of their MSW education.

Based on the training categories used in research question one, students who had received any PD-related training were coded as 1 and considered "Group A: Students with PD Training," and students who reported receiving no PD training were coded as 0 and referred to as "Group B: Students without PD Training." For research question two, an independent samples t-test was conducted to examine whether there were significant differences between the two groups of MSW students with regards to their knowledge, attitudes, and beliefs regarding PD. For research question three, an independent samples t-test was conducted to investigate whether there were significant differences between the two groups of MSW students with regards to their PD-related skills and openness to further education. For both research questions two and three, a two-tailed test was used because

the current study was an exploratory analysis and did not specify whether there might be significant difference between the two groups on knowledge and attitudes towards PD (research question two), and PD-related skills and openness (research question three). All analyses were performed using IBM SPSS Statistics 24.

## Results

**Participant characteristics.** Of the 233 returned surveys, 177 (76%) were completed and thus included in the data analysis. The sample was primarily female ( $n = 161$ , 91.5%), Hispanic ( $n = 82$ , 46.3%), single ( $n = 102$ , 57.6%), ranged between 21 and 57 years of age, with a mean of 31.2 ( $SD = 7.4$ ) years. One-third ( $n = 68$ , 38%) reported that their field of practice/concentration was the health/mental health field and 48% ( $n = 84$ ) focused on children, youth, and families. See Table 1 for full participant characteristics.

Table 1. *Participant Characteristics (n=177)*

Characteristic	<i>n</i> (%)
<b>Gender</b>	
Female	161 (91.0%)
Male	15 (8.5%)
Prefer not to answer	1 (0.5%)
<b>Race-ethnicity</b>	
Hispanic	82 (46.3%)
Caucasian	50 (28.2%)
Asian/Asian American	15 (8.5%)
African American	12 (6.8%)
Biracial/Multiracial	7 (4.0%)
Other	5 (2.8%)
Native American	3 (1.7%)
Middle Eastern	3 (1.7%)
<b>Marital Status</b>	
Single	102 (57.6%)
Married	64 (36.2%)
Cohabiting/domestic partnership	6 (3.4%)
Engaged	3 (1.7%)
Prefer not to answer	1 (1.1%)
<b>Field of Practice</b>	
Children, Youth and Families	84 (47.5%)
Aging	68 (38.4%)
Health/Mental Health	15 (8.5%)
Community Development & Administration/Management	8 (4.5%)
No response	2 (1.1%)

**Type/frequency of professional development training.** As shown in Table 2, child abuse/neglect (60.5%) was the most frequently reported training. Only 16.4% of MSW students reported they had received PD-related training.

Table 2. *Percentage of Students Receiving PD-Related Training*

Type of Training Received <sup>a</sup>	n (%)
Child abuse/neglect	107 (60.5%)
General depression	91 (51.4%)
Domestic violence	88 (49.7%)
Substance abuse	85 (48.0%)
Other mental health problems	84 (47.5%)
None	52 (29.4%)
Symptoms of perinatal depression <sup>b</sup>	29 (16.4%)

Note: <sup>a</sup> Participants were asked to indicate all training they had received. The cumulative frequencies exceed the value of 100% (n = 177) because of multiple indications; <sup>b</sup> including postpartum training and depression during pregnancy.

**Association between PD related training and knowledge, attitudes and beliefs regarding PD.** Table 3 presents the mean score for the 14 items that measured PD knowledge and attitudes of participants for the whole sample. Means are also presented for participants who had received PD-related training (Group A) (n=29) and for those who had not received PD-related training (Group B) (n=148). Findings for all participants suggest that students in this study generally showed a good understanding of depression (e.g., “I am familiar with the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (*DSM-5*) criteria for depression,” [ $M = 4.47, SD = 1.45$ ], and “I feel comfortable talking about depression with patients,” [ $M = 5.13, SD = 0.94$ ]), and a good sense of their responsibilities regarding PD (e.g., “Recognizing symptoms of maternal depression (SMD) is my responsibility,” [ $M = 4.67, SD = 1.28$ ], “Intervening in SMD is my responsibility,” [ $M = 4.74, SD = 1.25$ ], and “It is my responsibility to refer depressed moms for further mental health treatment” [ $M = 5.27, SD = 0.97$ ]). Participants reported relatively less knowledge of PD itself and assessments and interventions related to SMD (e.g., “SMD are as common in the perinatal period as 2-3 years postpartum,” [ $M = 3.79, SD = 1.42$ ], “I feel confident in my ability to assess for SMD,” [ $M = 3.51, SD = 1.38$ ], and “I feel confident in my ability to intervene with SMD” [ $M = 3.91, SD = 1.46$ ]).

To address research question two, a comparison of the two groups of students indicated that participants who had received any PD-related training (Group A) showed a higher level of PD knowledge (“SMD are as common in the perinatal period as 2–3 years postpartum,”  $t(175) = -2.05, p < .05$ , a higher level of confidence in ability to assess SMD (“I feel confident in my ability to assess for PD,”  $t(175) = -3.83, p < .001$ , and a higher level of confidence in their ability to intervene for PD (“I feel confident in my ability to intervene with SMD,”  $t(175) = -3.08, p < .005$  compared to their counterparts who had not received any specialized PD training (Group B).

Table 3. *Social Work Students' Attitudes and Beliefs Regarding Perinatal Depression*

Questionnaire Item	<i>M (SD)</i>		
	All (n=177)	With PD Training (n = 29)	Without PD Training (n=148)
Depressed moms provide more inconsistent care	4.06 (1.48)	4.79 (1.37)**	3.92 (1.46)
PD often goes away without treatment	2.75 (1.39)	2.55 (1.64)	2.78 (1.34)
It is normal for pregnant women and mothers of young children to feel depressed	3.81 (1.50)	3.90 (1.48)	2.55 (1.64)
Recognizing PD is my responsibility	4.67 (1.28)	4.74 (1.58)	4.66 (1.22)
Recognizing PD is my unit's responsibility	4.67 (1.24)	4.76 (1.46)	4.66 (1.19)
Intervening in PD is my responsibility	4.74 (1.25)	4.82 (1.44)	4.72 (1.21)
It is my responsibility to refer depressed moms for further mental health treatment	5.27 (0.97)	5.14 (1.33)	5.29 (0.89)
I am familiar with the DSM-V criteria for depression	4.47 (1.45)	5.00 (0.96)*	4.36 (1.50)
PD are as common in the perinatal period as 2–3 years postpartum	3.79 (1.42)	4.28 (1.44)*	3.69 (1.40)
I feel confident in my ability to assess for PD	3.51 (1.38)	4.38 (1.08)***	3.34 (1.17)
I feel confident in my ability to intervene with PD	3.91 (1.46)	4.66 (0.97)**	3.76 (1.50)
I feel comfortable talking about depression with patients	5.13 (0.94)	5.38 (0.68)	5.08 (0.98)
I am familiar with available MHR in my institution	4.75 (1.29)	5.41 (0.73)**	4.61 (1.33)
I am familiar with available MHR in the community	4.78 (1.10)	5.28 (0.70)**	4.69 (1.13)

Note: MHR=mental health resources; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$  (2-tailed)

**Association between PD-related training and PD-related skills and openness to further education.** The independent samples *t*-test (see Table 4) indicated that no statistical difference was detected in the participants' openness to receiving further PD-related training. Specifically, Group A ( $M = 4.34$ ,  $SD = 0.86$ ) reported a higher level of perceived skills in PD screening/detection than their counterparts in Group B ( $M = 3.59$ ,  $SD = 0.71$ ),  $t(173) = -5.054$ ,  $p < .001$ . All participants showed a high level of willingness to fill out a screening tool ( $M = 5.24$ ,  $SD = 0.87$ ), to intervene based on the results of screening ( $M = 5.37$ ,  $SD = 0.80$ ), and to learn about ways to enhance communication about SMD ( $M = 5.57$ ,  $SD = 0.62$ ).

Table 4. *Social Work Students' Mental Health Training and Openness to Further Education*

Questionnaire Item	<i>M (SD)</i>		
	All (n=177)	With PD Training (n = 29)	Without PD Training (n=148)
Do you think you have the appropriate skills to assess, screen, and care for women with PD?	3.71 (0.79)	4.34 (0.86)***	3.59 (0.71)
Willing to fill out screening tool	5.24 (0.87)	5.21 (0.94)	5.25 (0.86)
Willing to intervene based on results of screening	5.37 (0.80)	5.48 (0.69)	5.34 (0.83)
Willing to learn about ways to enhance communication regarding PD	5.57 (0.62)	5.62 (0.69)	5.56 (0.64)

\*\*\*  $p < .001$  (2-tailed test)

## Discussion

To our knowledge, this is the first study to examine PD screening, knowledge, identification, beliefs, and attitudes among a diverse sample of MSW students. Sixty percent of participants reported they had received training related to child abuse/neglect and about half of participants (49.7%) reported they received training on domestic violence. However, only 16.4% reported receiving any PD training which is concerning given the well-documented association of PD with domestic violence (Kothari et al., 2016) and child abuse (Schury et al., 2017). Moreover, the majority of participants reported working with families (47.5%) or in the health/mental health field (38%), placing them in direct contact with women of childbearing age.

Findings of this study should be interpreted with caution given the relatively small convenience sample from one geographic area and the use of self-report questionnaires. Moreover, since the survey was administered via an anonymous electronic link, the exact respondent rate is unknown, further limiting our findings. Participants in this study included part-time, full-time, as well as first year students. First year MSW students without previous social work experience and without PD knowledge may have skewed results in favor of low-level exposure to PD. Additionally, a cause and effect relationship between PD-related training and PD knowledge/skills cannot be ascertained due to the cross-sectional design of this study. Further, although the sub-scales used in the data analysis demonstrated good reliability, they were modified from their standard forms. Further testing on larger samples is necessary to validate these scales. Lastly, as addressed in the results section, we created a dichotomous variable based on PD-related training; however, this variable did not take into account factors including any content-related information, frequency and length of any training received, or the helpfulness/usefulness of training. Future studies should consider these factors.

## Conclusions and Future Directions

Findings of this study reveal limited PD training in a racially and ethnically diverse sample of MSW students. Given the well-documented association of PD with child abuse/neglect and domestic violence, it is essential for PD education to be threaded throughout social work curricula. The National Association of Perinatal Social Workers (NAPSW, 2009) approved standards of care for social workers specifically working with women experiencing PD. The low proportion of MSW students knowledgeable about PD in our study is concerning. Among the nine competencies strongly suggested for social work programs by the Council on Social Work Education (CSWE, 2015), the addition of PD content directly relates to competency 4, “Engage in practice-informed research and research-informed practice” (CSWE, p. 8).

PD education training and education should be offered to all MSW students in order to build and expand the “informed” future professional workforce as social workers often come in contact with women during the perinatal period. An interdisciplinary approach to managing PD (Selix et al., 2017) should be integrated into social work curricula (Keefe et al., 2015) along with providing MSW students with tools to promote timely referral and treatment and to reduce the risk of child abuse/maltreatment. In addition to the traditional

classroom setting, technological options (e.g., smartphone applications, webinars, online short courses) should be examined as ways to provide PD education and information to MSW students and practitioners.

Field Offices of MSW programs should establish partnerships with key community perinatal care stakeholders and develop interdisciplinary training materials and consider utilizing PD experts to conduct workshops. Educating future social workers regarding PD screening, referral, treatment options, availability of services, and resources about this important public health mental health issue will promote maternal-infant, family, and community well-being.

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**Acknowledgements:** We thank the California State University chairs and directors of schools of social work for their support and the study participants for completing surveys. Funding for this study was provided by a research and scholarly activity grant from the College of Applied Sciences and Arts, San José State University, San Jose, CA.