Prevalence Of Perinatal Depression In Us Residents: Analysis Based On Nhanes 2017-2020 Pre-Pandemic

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Prevalence of Perinatal Depression in US Residents: analysis based on NHANES 2017-2020 pre-pandemic

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Abstract

Objective
Perinatal depression, affecting over 10% of pregnant and postpartum women globally, is a significant but often underrecognized mental health issue. Untreated symptoms can persist for years, highlighting the need for early intervention. This study, using the most recent National Health and Nutrition Examination Survey (NHANES) data available, aims to assess trends in perinatal depression prevalence and mental health care utilization in US.

Methods
NHANES data from 2017 to March 2020 were analyzed, focusing on pregnant and postpartum women who had given birth within the last 24 months as the target population. The Patient Health Questionnaire (PHQ-9) was used to assess depressive symptoms, and demographic characteristics along with access to mental health care were evaluated. T-tests and chi-square tests (p < 0.05) were used for data analysis, with weights applied to provide nationally representative results.

Results
The surveyed sample contains 295 pregnant and postpartum women, and 27 (9.2%, 95%CI: 5.9%, 12.4%) were identified as depressed (PHQ-9 score ≥10). When survey weights were applied, the estimated national depression prevalence was 8.2% (95%CI: 8.2%, 8.3%). Depressed perinatal women showed higher rates of mental health care seeking (50.1% vs. 6.4% for non-depressed).

Conclusions
Awareness of mental healthcare utilization had increased but half of the depressed women were still not receiving any kind of treatment. Further research on perinatal depression and efforts to enhance screening and treatment are needed to better to support affected individuals and families.
# Table of Contents

**ABSTRACT** .................................................................................................................. 2

**INTRODUCTION:** ........................................................................................................... 4

**METHODS:** ..................................................................................................................... 5

**STUDY DESIGN AND PARTICIPANTS** ........................................................................ 5  
**VARIABLES AND MEASUREMENTS** ............................................................................. 6  
**DATA ANALYSIS** .......................................................................................................... 8

**RESULTS:** ........................................................................................................................ 9

**DISCUSSION:** .................................................................................................................. 9

**APPENDIX:** ................................................................................................................... 16

**REFERENCE:** .................................................................................................................. 19
**Introduction:**

Depressive disorder, or depression, is a common mental disorder that affects an estimated population of 5% of adults (World Health Organization, 2023). It was found to occur 50% more commonly in women than in men, and worldwide, over 10% of pregnant women and women who have just given birth were reported to experience depression (Institute of Health Metrics and Evaluation, n.d.; Woody et al., 2017). Unlike the commonly experienced “baby blues” experienced by up to 70% of new mothers that resolve within two weeks, postpartum depression may last a long time, sometimes for years (Marcus & Heringhausen, 2009). Roughly 5% of women experienced high-level postpartum depression symptoms for three years following childbirth (NIH Research Matters, 2020). Women with postpartum depression typically will not feel better without receiving treatment, while life stress, hormonal changes and the high demand for caring for the new baby all contribute to an increased risk of perinatal depression (National Institutes of Mental Health, 2023).

People’s awareness of mental health has been on the rise but perinatal depression remains under-recognized and undertreated despite being prevalent (Stuart-Parrigon & Stuart, 2014). In 2013, the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) changed the diagnostic criteria for perinatal depression in comparison to the DSM-4, substituting "perinatal" for "postpartum." DSM-5 now defines perinatal depression as the occurrence of a major depressive episode with peripartum onset (onset during pregnancy [antenatal depression] or within 4 weeks after delivery [postpartum depression]) (American Psychological Association, 2013). Based on a national review conducted in 2005 on 30 studies, the point
prevalence of major and minor depression in the United States was estimated to be between 8.5% and 11% during pregnancy and between 6.5% and 12.9% during the first year postpartum (Gaynes et al., 2005). Some research suggested there were racial/ethnic and income variations in postnatal depression prevalence rates in the United States, but none of the present studies was considered conclusive because they vary in methodologies, assessment tools, and environment settings (Dagher et al., 2021). Based on the data from the National Health and Nutrition Examination Survey (NHANES) 2005–2012, 8.2% of pregnant women were found to be depressed while only 12% of them reported utilizing mental health care services in the previous year (Byatt et al., 2016). This study aims to provide updated estimates of perinatal depression in the US, using most recent NHANES data, and check mental health care utilization in depressed group.

**Methods:**

*Study Design and Participants*

The data analyzed were retrieved from the NHANES program for the year 2017 to March 2020. Due to the program suspension in March 2020 because of the coronavirus disease 2019 pandemic, the data collected for the NHANES 2019-2020 cycle were combined with the previous cycle (2017-2018) to generate nationally representative data files covering the period from 2017 to March 2020 pre-pandemic (Center for Disease Control and Prevention, 2021). A total of 15,560 people completed the interview (National Center for Health Statistics, 2023). Thorough evaluations confirmed that the final dataset yielded reliable national estimates. All participants signed the informed consent and all procedures were approved by the National Center for Health Statistics Ethics Review Board (National Center for Health Statistics, 2022).
NHANES conducted interviews with individuals in their homes and performed medical examinations at a mobile examination center (MEC) (National Center for Health Statistics, 2023). All data used in this study were publicly available and deidentified. Additional information about NHANES can be found at www.cdc.gov/nhanes.

Variables and Measurements
Subjects were included in the analysis if they were at the perinatal stage (either currently pregnant or postpartum) and with accessible depressive symptoms data. Pregnancy related variables were only available to the public for female participants aged 20-44 years old. Women who answered yes to “Are you pregnant now?” and answered a value under 24 for the question “How many months ago have baby?” were considered perinatal women. Women also reported the number of pregnancies they had, their gravidity, and the number of live births. Women who were pregnant with or have just had their first offspring were categorized as “primipara” while those who have had more than one live birth were categorized as “multipara”.

Depressive symptoms were assessed using the Patient Health Questionnaire (PHQ-9), a nine-item depression screening questionnaire. The questions were administered at the MEC by trained interviewers as part of the MEC interview process. Each symptom question was assigned points ranging from 0 to 3, corresponding to response categories of “not at all”, “several days”, “more than half the days”, and “nearly every day”. Individuals with complete responses to these questions will have a total score ranging from 0 to 27, and the pre-defined cut-point was used to assess major depression and the severity of depression. PHQ-9 scores of 5, 10, 15, and 20 respectively indicate mild, moderate, moderately severe, and severe depression (Kroenke et al.,
A PHQ-9 score of 10 was used as the cut-point for dichotomizing the participants into “depressed (score ≥ 10)” and “not depressed (score of < 10)” groups in this study. Women were asked about their access to care, specifically have they “seen or talked to a mental health professional such as a psychologist, psychiatrist, psychiatric nurse or clinical social worker” for the past year. Respondents who answered "yes" to this question were grouped as “Seen mental health professional/past yr”, while those who answered "no" were grouped as “Did not see mental health professional/past yr”.

Several demographic characteristics were included in the study as potential confounders, including age, race/ethnicity, education, marital status and income. Demographics questionnaires were administered by trained interviewers using Computer-Assisted Personal Interview (CAPI) system and checked by NHANES officers for accuracy and completeness. Race and Ethnicity data were categorized into four groups: “Non-Hispanic White”, “Non-Hispanic Black”, “Mexican American/other Hispanic”, and “Other Race - Including Multi-Racial”. Education was categorized into three groups: “Less than high school”, “High school graduate”, and “At least some college”. Marital status was categorized into three groups: “Married/Living with Partner”, “Widowed/Divorced/Separated”, and “Never married”. Income was categorized into three groups: “Monthly poverty level index <=1.30”, “1.30 < Monthly poverty level index = 1.85”, and “Monthly poverty level index >1.85”. The family monthly poverty level index (INDFMMPI) was calculated according to the Department of Health and Human Services’ (HHS) poverty guidelines, based on reported monthly income relative to poverty level. It was calculated based on family size, year, and state-specific data. The categorization into three groups corresponds to...
commonly used percentages of the poverty guidelines employed by federal programs to assess eligibility.

Data Analysis
NHANES assigns weights to account for its complex survey design, including oversampling, non-response, and post-stratification adjustments (National Center for Health Statistics, n.d.). After applying the weights, surveyed sample is representative of the entire U.S. civilian noninstitutionalized resident population. Each person in the sample was assigned a weight, which reflects the number of people in the population that the sample person represents. According to official analytic guidelines, the MEC exam weights (given as variable WTMECPRP) should be used for data analysis when data from MEC interview is involved. In this study, data for the “depression screen” and pregnancy-related data from “reproductive health” were collected during the MEC interview. Analysis was conducted on both the original interviewed sample and on the weighted population that it represents. The characteristics of the depressed and non-depressed women were compared using t-test for analysis of continuous variable. Continuous variables were presented as the weighted mean ± standard error (SE). Fisher’s exact test was used for the categorical variable while analyzing the interviewed sample due to its relatively small sample size. The chi-square test was used to analyze the categorical variable using the weighted population. P values were calculated and a two-sided p < 0.05 was considered statistically significant. All statistical analyses were performed using R software (R version 4.3.3 (2024-02-29)).
**Results:**

Of the 5314 women participants, 67 reported being currently pregnant, and 237 reported giving birth to a baby within the last 24 months. Nine women reported being pregnant and at the same time had given birth within 24 months. Thus, a total of 295 participants were classified as perinatal women and included in this analysis. All 295 participants have completed response to the depression screener thus none were excluded (Figure 1).

Of these 295 participants, 27 had a PHQ-9 score $\geq 10$ and the rest 268 had PHQ-9 score less than 10. About 9.2% (95%CI: 5.9%, 12.4%) perinatal women was depressed. There was no statistically significant difference between the two groups in terms of age, race/ethnicity, education level, income level, gravidity, or parity (Table 1). The marital status between the two groups were significantly different ($P=0.001$). Women who were widowed, divorced, or separated had much higher rates of depression, compared to women who were married or living with their partner or women who have never married.

After applying survey weights to the interviewed sample, the sample represents a population of 8,276,425 perinatal women, with 8.2% (95%CI: 8.2%, 8.3%) of them in the depressed group. There was no statistically significant difference between the two groups in terms of age, race/ethnicity, education level, income level, gravidity, or parity (Table 2). The average age was 29.5 for the depressed group and 29.6 for the non-depressed group. The depression rate among White women was 9.7%, among Black individuals it was 7.0%, and among Hispanics it was 7.8%. Women with less than a high school education have a depression rate of 12.4% and women
with at least some college degrees have a depression rate of 7.5%. Women from families with a monthly poverty level index <1.30 have a depression rate of 11.2%, compared to 8.8% for those from families with an index of 1.30 to 1.85, and 6.6% for those from families with an index >1.85. On average, the depressed group has had 3.9 babies, while the non-depressed group has had 3.2 babies. Women giving birth for the first time have a depression rate of 9.2%, compared to 7.8% for those who have previously given birth. The marital status between the two groups were significantly different (P=0.005). The depression rate for women who were either widowed, divorced, or separated was as high as 36.5%, compared to 5.6% for women who were married or living with their partner, and 13.2% for women who have never married. Depressed perinatal women showed higher rates of mental health care seeking behavior at 50.1% compared to 6.4% for non-depressed population.

Discussion:
In this study, we examined perinatal women who were either currently pregnant or had given birth within the last 24 months, comprising a total of 295 participants from NHANES data collected between 2017 to March 2020. Our findings revealed that the estimated rate of depression in the U.S. among pregnant and postpartum women was 8.2%. The prevalence rate appears unchanged over the past few years. Based on NHANES data from 2005-2012, Byatt et al. reported that 8.2% of pregnant women were depressed, using PHQ-9 score of 10 as the cutoff point (Byatt et al., 2016). As reported by Byatt et al., the proportion of depressed pregnant women seeking mental health care in the past year was only 12% during the period from 2005 to 2012. The percentage of depressed perinatal women seeking mental health care
increased to 50.1% during the period from 2017 to 2020. A higher percentage of non-depressed peers were also seeking mental health care (6.4% compared to 4.1%).

Despite the improvements in mental health care utilization observed in both the general population and among those with depression, the disease burden remains high. The cost burden associated with perinatal mood and anxiety disorders for the 2017 birth cohort could reach as high as $14 billion, extending over a period of 5 years postpartum (Luca et al., 2020). These costs resulted from affected population’s reduced economic productivity, increased spending on maternal health services and higher rates of preterm births (Luca et al., 2020; Yedid Sion et al., 2016). More effort and programs are needed in all aspects, including encouraging screening, treatment, and prevention. They were deemed as widely recommended but inconsistently applied, with support from policies and funding unevenly targeted (Griffen et al., 2021). Women were often advised to discontinue all psychotropic medications during pregnancy or breastfeeding (Van Niel & Payne, 2020). However, emerging research emphasizes the need for a personalized approach. Many medications can be taken safely and pose minimal risks, and in certain cases, the advantages of medication use outweigh the potential risks (Payne, 2019). Apart from medications, various types of psychosocial interventions have been found to be effective, including interpersonal psychotherapy, supportive psychotherapy, massage, yoga and acupuncture (Stuart-Parrigon & Stuart, 2014). Interpersonal therapy and cognitive behavioral therapy were also found effective in preventing perinatal depression in women with elevated risk (US Preventive Services Task Force et al., 2019).
Research results on perinatal depression were challenging to conclude due to the lack of consensus on the definitions of various factors in the study, including the extent of depression and perinatal period. Depression rate could vary greatly depending on the cutoffs used. A cutoff score of 10 was chosen because at this score, the test had a sensitivity of 88% and a specificity of 88% for major depression, as validated against a mental health professional interview in a sample of 580 patients (Kroenke et al., 2001). While using a lower cutoff score of 5 on the 2005-2012 sample, Vu and Shaya found that the prevalence of perinatal/postpartum depression was as high as 43.90% (Vu & Shaya, 2017). A review that summarized depression prevalence in the United States identified 18 different ways of describing "depression" across a sample of 49 papers (Ettman et al., 2023).

Discrepancies also stem from the unclear definition of the perinatal period. National Institute of Mental Health suggest typical episodes of postpartum depression begin within 4–8 weeks after childbirth (National Institutes of Mental Health, 2023). However, other studies suggest that the onset could occur much later. In a 2016 review of longitudinal studies, depression assessed during pregnancy and up to one year after childbirth was evaluated, revealing an average prevalence of antenatal depression at 17% and postnatal depression at 13% (Underwood et al., 2016). The cumulative incidence of depression more than doubled, rising from 8.5% at 8 weeks to 18.1% at one year postpartum (Tebeka et al., 2021). Based solely on the NHANES data, this study could not determine the onset point of the depressive episode, but rather analyzed the prevalence of depression within the perinatal population. Given studies suggesting that depression symptoms could persist for up to three years postpartum, this study aimed to
include a broader range of women in the postpartum population to be studied (National Institute of Child Health and Human Development (NICHD), 2020). During the MEC interview, participants were asked "How many months ago did you have a baby?" They could respond with an exact number of months less than 24 or indicate "more than 24" months. Therefore, postpartum women in this study were defined as those who had given birth within the past 24 months, as precise data beyond this timeframe were not available. But the composition of the sample should be considered when comparing the results with other studies. All these discrepancies in terminology and sampling criteria highlight the importance of standardizing criteria to accurately assess the prevalence of perinatal depression.

Although none of the demographics including age, race/ethnicity, education level, income level, gravidity, or parity were found to be related to differences in perinatal depression in this study, there were some other researches suggests otherwise. Some research and review suggest higher rates of depression among African American, Hispanic women and other minority groups compared to white women (Bauman et al., 2020; Mukherjee et al., 2016). However, these non-white minority groups were also found to be less likely to be screened for depression, further masking the underlying issue (Sidebottom et al., 2021). Poor socioeconomic status was also a risk factor for perinatal depression (Nisar et al., 2020). However, as mentioned above, these studies differ in survey measurements tools and definitions. The results remain controversy and require more review.
The data collection process for the data used in this analysis was interrupted by the pandemic. It is also important to investigate how the COVID-19 pandemic has impacted pregnant and postpartum women regarding the risk for perinatal depression. Studies in China have shown increased risk of depression for pregnant and postpartum women (Sun et al., 2020; Wu et al., 2020). It was evident that the pandemic has worsened mental health across the entire general population of U.S. adults (Ettman et al., 2023). Comparing pre-pandemic and post-pandemic data could provide valuable insights into identifying potential ways to support women at risk during these challenging times. Future research on the US population could analyze and compare with this pre-pandemic analysis once the NHANES data for 2021-2023 becomes available.

Due to limitations in the available data, this study was unable to assess other potentially important factors, such as past psychiatric history, medication records and responses from women under the age of 20. The relatively small sample size of pregnant and postpartum women may also affect the generalizability of our findings to the broader population.

**Conclusion:**
This study analyzed a total of 295 women, who were either currently pregnant or had given birth within the last 24 months, using data from NHANES collected between 2017 and March 2020. The prevalence of depression among these women was 9.2% within the sample, estimating an 8.2% prevalence in the US population. The utilization of mental health care significantly increased, with over half (50.1%) of pregnant and postpartum women seeking care.
in the past year during 2017-2020. Despite improvements achieved, cost burden remains high and require continuous effort from all aspects.
Appendix:
Figure 1. Flowchart of participant selection from NHANES database

Participants of NHANES 2017 - March 2020
N=15560

Female (age 20-44) &
- Currently Pregnant
  N=67
- Gave birth within 24mo
  N= 237

9 qualified for both (duplicated)

Women in perinatal period
N=295

Participants with PHQ-9 data
N=295

Final Analysis
N=295
### Table 1: Sample characteristics of pregnant women in relation to depressive symptoms: NHANES 2017–2020 pre-pandemic

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Depressed</th>
<th>Not depressed</th>
<th>p' (DF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample N</td>
<td>27</td>
<td>268</td>
<td></td>
</tr>
<tr>
<td>Age (years), mean ± SD</td>
<td>29.5 ± 5.7</td>
<td>29.6 ± 6.0</td>
<td>P=0.9464 (DF=32.053)</td>
</tr>
<tr>
<td>Race/ethnicity, n (%)</td>
<td></td>
<td></td>
<td>P=0.3112 (DF=3)</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>10(37.0)</td>
<td>77(28.7)</td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>10(37.0)</td>
<td>77(28.7)</td>
<td></td>
</tr>
<tr>
<td>Mexican American/ other Hispanic</td>
<td>6(22.2)</td>
<td>75(28.0)</td>
<td></td>
</tr>
<tr>
<td>Other Race - Including Multi-Racial</td>
<td>1(3.7)</td>
<td>39(14.6)</td>
<td></td>
</tr>
<tr>
<td>Education, n (%)</td>
<td></td>
<td></td>
<td>P=0.4674 (DF=2)</td>
</tr>
<tr>
<td>Less than high school</td>
<td>6(22.2)</td>
<td>39(14.6)</td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>5(18.5)</td>
<td>69(25.7)</td>
<td></td>
</tr>
<tr>
<td>At least some college</td>
<td>16(59.3)</td>
<td>160(59.7)</td>
<td></td>
</tr>
<tr>
<td>Marital Status, n (%)</td>
<td></td>
<td></td>
<td>P=0.001 (DF=2)</td>
</tr>
<tr>
<td>Married/Living with Partner</td>
<td>15(55.6)</td>
<td>197(73.5)</td>
<td></td>
</tr>
<tr>
<td>Widowed/Divorced/Separated</td>
<td>6(22.2)</td>
<td>8(3.0)</td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>6(22.2)</td>
<td>63(23.5)</td>
<td></td>
</tr>
<tr>
<td>Income, n (%)</td>
<td></td>
<td></td>
<td>P=0.6558 (DF=2)</td>
</tr>
<tr>
<td>Monthly poverty level index &lt;=1.30</td>
<td>15(60.0)</td>
<td>117(48.8)</td>
<td></td>
</tr>
<tr>
<td>1.30 &lt; Monthly poverty level index = 1.85</td>
<td>3(12.0)</td>
<td>39(16.3)</td>
<td></td>
</tr>
<tr>
<td>Monthly poverty level index &gt;1.85</td>
<td>7(28.0)</td>
<td>84(35.0)</td>
<td></td>
</tr>
<tr>
<td>Gravidity, mean ± SD</td>
<td>3.9±2.8</td>
<td>3.2±1.8</td>
<td>P=0.1949</td>
</tr>
<tr>
<td>Parity, n (%)</td>
<td></td>
<td></td>
<td>P=1 (DF=1)</td>
</tr>
<tr>
<td>Primipara</td>
<td>8(29.6)</td>
<td>86(32.2)</td>
<td></td>
</tr>
<tr>
<td>Multipara</td>
<td>19(70.4)</td>
<td>181(67.8)</td>
<td></td>
</tr>
<tr>
<td>Mental Health Care Use, n (%)</td>
<td></td>
<td></td>
<td>P&lt;0.001 (DF=1)</td>
</tr>
<tr>
<td>Seen mental health professional/past yr</td>
<td>11(40.7)</td>
<td>18(6.7)</td>
<td></td>
</tr>
<tr>
<td>Did not see mental health professional/past yr</td>
<td>16(59.3)</td>
<td>250(93.3)</td>
<td></td>
</tr>
</tbody>
</table>

* Numbers may not sum to totals due to missing data, and column percentages may not sum to 100% due to rounding.
* P-value for t-test (continuous variable) or fisher test (categorical variable).
### Table 2: Weighted characteristics of pregnant women in relation to depressive symptoms: NHANES 2017–2020 pre-pandemic

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Depressed</th>
<th>Not depressed</th>
<th>p† (DF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample N</strong></td>
<td>27</td>
<td>268</td>
<td></td>
</tr>
<tr>
<td><strong>Weighted N</strong></td>
<td>679,781.83</td>
<td>7,596,643.71</td>
<td></td>
</tr>
<tr>
<td><strong>Age (years), mean ± SD</strong></td>
<td>29.5 ± 5.6</td>
<td>29.6 ± 6.0</td>
<td>P=0.9464</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(DF=32.053)</td>
</tr>
<tr>
<td><strong>Race/ethnicity, n (%)</strong></td>
<td></td>
<td></td>
<td>P=0.5311</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>424,112.91(62.4)</td>
<td>3,967,268.73(52.2)</td>
<td>(DF=2.43)</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>86,430.22(12.7)</td>
<td>1,151,384.06(15.2)</td>
<td></td>
</tr>
<tr>
<td>Mexican American/ other Hispanic</td>
<td>154,287.51(22.7)</td>
<td>1,814,318.61(23.9)</td>
<td></td>
</tr>
<tr>
<td>Other Race - Including Multi-Racial</td>
<td>14,951.19(2.2)</td>
<td>663,672.31(8.7)</td>
<td></td>
</tr>
<tr>
<td><strong>Education, n (%)</strong></td>
<td></td>
<td></td>
<td>P=0.7219</td>
</tr>
<tr>
<td>Less than high school</td>
<td>118,046.6(17.4)</td>
<td>831,865.3(11.0)</td>
<td>(DF=1.92)</td>
</tr>
<tr>
<td>High school graduate</td>
<td>178,984.3(26.3)</td>
<td>2,055,966.8(27.1)</td>
<td></td>
</tr>
<tr>
<td>At least some college</td>
<td>382,751(56.3)</td>
<td>4,708,811.6(62.0)</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status, n (%)</strong></td>
<td></td>
<td></td>
<td>P=0.005</td>
</tr>
<tr>
<td>Married/Living with Partner</td>
<td>361,124.4(53.1)</td>
<td>6,054,888.7(79.7)</td>
<td>(DF=1.84)</td>
</tr>
<tr>
<td>Widowed/Divorced/Separated</td>
<td>114,197.3(16.8)</td>
<td>198,531.6(2.6)</td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>204,460.1(30.1)</td>
<td>1,343,223.5(17.7)</td>
<td></td>
</tr>
<tr>
<td><strong>Income, n (%)</strong></td>
<td></td>
<td></td>
<td>P=0.6266</td>
</tr>
<tr>
<td>Monthly poverty level index &lt;=1.30</td>
<td>323,718.6(49.2)</td>
<td>2,579,749.4(37.4)</td>
<td>(DF=2)</td>
</tr>
<tr>
<td>1.30 &lt; Monthly poverty level index = 1.85</td>
<td>107,207.6(16.3)</td>
<td>1,114,961.3(16.2)</td>
<td></td>
</tr>
<tr>
<td>Monthly poverty level index &gt;1.85</td>
<td>226,876.8(34.5)</td>
<td>3,194,715.6(46.4)</td>
<td></td>
</tr>
<tr>
<td><strong>Gravidity, mean ± SD</strong></td>
<td>3.9±2.9</td>
<td>3.2±1.7</td>
<td>P=0.1949</td>
</tr>
<tr>
<td><strong>Parity, n (%)</strong></td>
<td></td>
<td></td>
<td>P=0.7385</td>
</tr>
<tr>
<td>Primipara</td>
<td>248,768.1(36.6)</td>
<td>2,458,672.8(32.5)</td>
<td>(DF=1)</td>
</tr>
<tr>
<td>Multipara</td>
<td>431,013.8(63.4)</td>
<td>5,113,814.3(67.5)</td>
<td></td>
</tr>
<tr>
<td><strong>Mental Health Care Use, n (%)</strong></td>
<td></td>
<td></td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Seen mental health professional/past yr</td>
<td>340,875.8(50.1)</td>
<td>488,902.2(6.4)</td>
<td>(DF=1)</td>
</tr>
<tr>
<td>Did not see mental health professional/past yr</td>
<td>338,906(49.9)</td>
<td>7,107,741.5(93.6)</td>
<td></td>
</tr>
</tbody>
</table>

* Numbers may not sum to totals due to missing data, and column percentages may not sum to 100% due to rounding.
† P-value for t-test (continuous variable) or χ² test (categorical variable).
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