Title: Post-partum depression among Chinese American women

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Callouts and Keywords

Keywords: Chinese; postpartum depression; help-seeking; childbearing traditions

Callouts:

1) Chinese American women may first disclose depressive symptoms to their spouses and that they could rely on them for emotional and instrumental support.
2) Practicing postpartum traditions out of respect for older family members is common among Chinese American women, even if they do not necessarily believe in them.
3) For Chinese American women, barriers to help-seeking include mental health care costs, lack of services or not knowing where the services are, stigma, and language/cultural barriers.
4) Chinese American women may report sadness or PPD with clinicians, but may not meet the diagnostic criteria for PPD of standard screening tests.
5) Outreach and educational programs are necessary to increase the Chinese American community's awareness about PPD and help-seeking benefits, and reduce PPD associated stigma.

ABSTRACT

Purpose: The objective of this study was to explore the perspectives of postpartum depression and mental health help-seeking behaviors among Chinese American women. **Study Design and Methods:** Using a mixed methods design, 15 Chinese American women, who had given birth in the past year, completed depressive symptoms and mental health services questionnaires and participated in a semi-structured interview (English or Mandarin). **Results:** All participants were married, between 29-39 years of age. Content analysis revealed themes included culture-specific postpartum traditions and mental health help seeking. More than half (60%) reported sadness or postpartum depression symptoms, including 3 (20%) who scored above the cutoff of the Edinburgh Postnatal Depression Scale (EPDS score ≥9) and others who disclosed such information during the interview. Despite the experience of postpartum symptoms being prevalent, about one in four of women did not believe depression was applicable to Chinese. **Clinical Implications:** Healthcare professionals working with Chinese American women must be aware of culture-specific childbearing traditions to promote maternal-infant well-being outcomes.

Postpartum depression among Chinese American women

Defined as the onset of an affective mood disorder within the first 12 months after childbirth, postpartum depression (PPD) continues to be among the top morbidities affecting childbearing women. Postpartum depression affects one in seven women (Wisner et al., 2013) with increased rates noted in diverse racial/ethnic groups, including Asian American women (Goyal, Park, & McNiesh, 2015; Goyal, Wang, Shen, Wong, & Palaniappan, 2012; Ta Park, Goyal, Nguyen, Lien, & Rosidi, 2017). When left untreated, PPD can disrupt the maternal-infant bond which can lead to poor infant cognitive and language development (Kingston, McDonald, Austin, & Tough, 2015), behavioral difficulties in elementary school, and poor high school performance (Netsi et al., 2018). Maternal consequences of unidentified PPD include suicidal ideation, infanticide and poor maternal adjustment (Kendig et al., 2017; Sit et al., 2015).

Compared to other racial/ethnic groups, Asian Americans are less likely to report PPD symptoms, be clinically diagnosed with PPD, and utilize mental health services (Goyal et al., 2012). Hallmarks of the Asian American culture include a strong sense of familial hierarchy and honoring the family name, which may contribute to lower utilization of mental health services. Negative public perception and stigma that may accompany psychiatric treatment further contribute to the non-disclosure of depressive symptoms and lower rates of mental health help seeking behavior (Fancher, Ton, Le Meyer, Ho, & Paterniti,

59 2010). The deep-rooted cultural values also present barriers for women seeking
60 help for postpartum depressive symptoms. Asian Americans prefer to use social
61 support networks, familial ties, indigenous healers, religious and spiritual outlets
62 to ward against any psychological or somatic symptoms (Inman & Yeh, 2007),
63 rather than seek professional treatment.

64 Chinese Americans represent the largest Asian American group (United
65 States Census Bureau, 2017a). Chinese cultural traditions during the postpartum
66 period includes "Doing the Month" or "sitting-the-month," a period of confining
67 mothers to stay home for postpartum recovery and restoring balance and harmony
68 between the 'yin' and 'yang' (Liu, Petrini, & Maloni, 2014; Lee & Brann, 2015).
69 The month of maternal confinement consists of dietary and behavioral changes
70 aimed at restoring the body's equilibrium after giving birth. For example, during
71 the postpartum period, the body is thought be in a cold state, therefore the new
72 mother is encouraged to consume "hot" foods and beverages. Although
73 postpartum traditions are thought to prevent illnesses from occurring later in life
74 and promote physical and mental health well-being, findings from Liu et al. (Liu,
75 Maloni, & Petrini, 2014) challenges these assumptions suggesting doing the
76 month can decrease general health and increase in depressive symptoms.

77 Although, research findings suggest that there are adverse effects of
78 untreated PPD, Asian Americans are less likely to report PPD symptoms
79 (compared to other racial/ethnic populations). Given the growing Asian American

population (United States Census Bureau, 2017a, 2017b), healthcare providers need to have an in-depth understanding of PPD perception and mental health help-seeking behaviors in culturally diverse populations. Thus, the objective of this study was to explore the perspectives and experiences of PPD and help-seeking among Chinese American women.

Methods

This qualitative study also includes descriptive survey data, which were used to provide additional context about the mental health help seeking behaviors of the participants. Chinese American women living in Northern California who were ≥18 years old, were able to read, write, and speak English or Mandarin Chinese, and had given birth to a live infant within the past year, were eligible to participate. Convenience and snowball sampling were used to recruit participants via flyers, referrals from community partners, and word of mouth. Women meeting the inclusion criteria were interviewed in-person.

Demographic survey. Participants were asked to provide their age, number of years lived in the U.S., nativity, marital status, employment status, and highest level of education. Women also provided information about any other children at home, age and gender of the most recent infant, type of birth (vaginal or Cesarean), and history of lifetime depression.

Mental health help-seeking behaviors. Participants completed the mental health services questionnaire, which was developed and used for other

101 studies with Vietnamese Americans and Native Hawaiians (Ta Park, Goyal, et al.,
102 2017; Ta Park, Kaholokula, Chao, & Antonio, 2017). The questionnaire assesses
103 past year and lifetime use and satisfaction of mental health services. Participants
104 were asked about the type of mental health service received and indicated their
105 satisfaction with services on a 5-point scale (dissatisfied = 0 to very satisfied = 4).

106 **Depressive symptoms**. The well-validated 10-item Edinburgh Postnatal
107 Depression Scale (EPDS) (Cox, Holden, & Sagovsky, 1987) was used to assess
108 frequency of depressive symptoms over the past week. Rated on a 4-point scale
109 (0 - 3), scores range from 0 - 30. An EPDS score of ≥10 indicates a risk of PPD
110 (Wisner et al., 2001), however, this study used the suggested score of ≥9 for
111 Chinese women (Lau, Wang, Yin, Chan, & Guo, 2010). Satisfactory
112 reliability/validity among mainland Chinese, Hong Kong (Lau et al., 2010; Lee
113 et al., 1998), and Taiwanese women (Heh, 2001) have been established.

114 **Interview guide (Table 1)**. Interview questions were developed using the
115 Behavioral Model and Access to Medical Care (Aday & Andersen, 1974) which
116 explores factors that influence a person's decision to seek mental health services
117 treatment. Aday and Andersen's model has been used to examine utilization of
118 mental health services in Asian Americans (Jang, Chiriboga, & Okazaki, 2009;
119 Ta, Juon, Gielen, Steinwachs, & Duggan, 2008) and depression as a predictor of
120 health care utilization (Hamilton et al., 2016). Participants were asked to describe
121 how PPD is viewed in the Chinese culture, postpartum traditions, mental health

122 help-seeking attitudes and behaviors. Examples: “What would you do if you felt
123 sad/depressed? Would you seek help?”

124 The research team included three trained female interviewers, the primary
125 investigator, and two nursing students including a Chinese bilingual/bicultural
126 person. Participants completed demographic information, the health services
127 questionnaire, and the EPDS. Audio-recorded interviews were conducted in
128 participants’ homes (73%) or in quiet areas of coffee shops based on the
129 participant’s place of choosing. One interview was conducted in Mandarin and the
130 remaining in English. All participants received a $25 gift card for their time and a
131 list of local mental health resources.

132 **Data Analysis**

133 Participant characteristics and questionnaire data were analyzed using
134 descriptive statistics including frequencies, means, and other measures of central
135 tendency. Interview data were transcribed verbatim into a word document and
136 analyzed using content analysis. The principal investigator created a coding
137 dictionary based on the questions a priori. Then, two raters independently utilized
138 the coding dictionary as a guide to analyze the qualitative data. Discrepancies in
139 coding were reviewed and resolved by group consensus and the research team
140 discussed and derived emergent themes and subthemes from coded data. During
141 data analysis, checks for trustworthiness included transferability and
142 dependability. Transferability demonstrates the research findings are applicable to

143 other contexts including similar populations (Shenton, 2004). The researchers
144 have replicated this study with Asian Indian and Vietnamese women (Goyal,
145 Park, & McNiesh, 2015; Ta Park, Goyal, Nguyen, Lien, & Rosidi, 2017). To
146 ensure dependability, this paper includes an interview guide (Table 1) and the
147 research steps in the methods (e.g. recruitment; data analysis), to increase the
148 likelihood that other researchers may replicate this study.

149 **Results**

150 **Participant characteristics (Table 2).** Fifteen married Chinese women
151 aged 33.2 (*SD*=3.1) years participated in this study. All had lived in the U.S. for
152 2-35 years with most being foreign-born. About half (46.7%) were stay-at-home
153 mothers and educated at the graduate level (53.3%). The majority (80%) had a
154 vaginal birth, gave birth to female infants (60%), were exclusively breastfeeding
155 (60%), and were 8.5 (*SD*=4.5) months postpartum at the time of the study.

156 **Lifetime mental health use.** Half (53.3%) reported ever receiving any
157 mental health help, and among these, 21.4% used an in-person self-help group,
158 and 13.3% had received at least one psychological counseling session that lasted
159 ≥30 minutes. Two women had been prescribed antidepressants. Most were
160 “satisfied” with their experience across various types of professionals.

161 **Depressive symptoms.** Total EPDS scores ranged from 0 - 11 with two
162 women reporting a previous history of depression. Three (20%) of the participants
163 scored ≥9 on the EPDS, indicating risk for developing PPD.

164 **Qualitative Findings.** There were two main themes: 1) Culture-specific
165 postpartum traditions; and, 2) Help-seeking for mental health issues.
166 **Cultural specific postpartum traditions**. Subthemes included: 1)
167 Chinese cultural identity; 2) practice of postpartum traditions; 3) significance of
168 infant gender; and 4) perceptions of sadness or depression after giving birth.
169 *Chinese cultural identity*. The majority of women reported a strong
170 Chinese identity and/or they practice Chinese customs. One-fifth reported that
171 Chinese traditions and way of thinking have been instilled in them from their
172 parents, and a third said they practice Chinese customs. Many said they cook and
173 eat Chinese foods (60%) and teach their children to speak Chinese (53.3%). Some
174 said they read Chinese books and keep up with Chinese current events (13.3%).
175 Some (40%) reported that they identify as both Chinese and American.
176 *Significance of infant gender.* Forty percent reported the Chinese culture
177 places a higher value in having a son versus a daughter, and some (13.3%)
178 acknowledging that sons were treated differently and received preferential
179 treatment than the daughters. Conversely, a few women (20%) stated the
180 preference for boys was an "old time" versus "modern time" way of thinking.
181 *Practice of postpartum traditions.* The majority of women (66.7%) stated
182 they practiced the 30 day period, "Doing the month," and not bathing or washing
183 their hair. New mothers are encouraged to stay indoors, rest, and not do any
184 household chores and the maternal grandmother moves into the home and assists

185 with household chores and caring for the infant so the new mother can rest and
186 recuperate. New mothers are encouraged to eat food and drink fluids (e.g.
187 chicken, pig's feet, soups, dates, ginseng, and herbal tea) that aid in healing and
188 restoring the body's balance. Pigs feet are thought to stimulate breast milk
189 production and red blood cell production (Lynch, 2017). Herbal tea helps to
190 cleanse the body after the birth (Lynch, 2017). One participant said,

191 "You have to stay at home for a month… she (mom) didn't want me open
192 the window because the wind would blow in. Going to have a headache
193 and trouble with the abdominal area exposed. You can't expose yourself to
194 any open area -- to anything. You can't have anything cold… need
195 something to help your body to restore the energy and to recover. A lot of
196 traditional food or like herbs stuff that you use."

197 Although some stated a strong personal belief in the practice of Chinese
198 postpartum traditions, they found it difficult for example, to not bathe for a month
199 after the birth. Some women who were not fully wedded to the traditions, still
200 practiced traditions out of respect for their elders because there was no perceived
201 harm in doing so. Some women felt that complying with the traditions helped
202 them recover and heal, where others stated it was no longer necessary to practice
203 Chinese postpartum traditions in these modern times. One participant said,

204 "I think that's 30 or 40 years ago in China and people are very poor and do
205 not have the air condition, do not have the heater. So they say it is very

206 easy to get sick or get a cold if you go to take shower or cause the one
207 thing is true is that after you give birth to baby, you feel very weak."
208 *Perceptions of sadness/depression after giving birth.* Women stated
209 several reasons that related to the development of depression. Half thought
210 depression was caused by having your "life change" when you become a new
211 parent, lack of social support, and hormonal changes. One thought depression was
212 due to the inability to breastfeed. Some said that depression is a sign of weakness,
213 caused by another illness, and is all in the "head" or self-inflicted.
214 A few women believed depression did not exist in the Chinese culture, as
215 another participant states, "No, I don't think there's such thing as postpartum
216 depression in Chinese culture, as far as I know. People definitely don't talk about
217 it because I don't hear about it. So, if Chinese women do get postpartum
218 depression, I don't feel like there's a lot of resources for them, or a lot of help."
219 Although mental illness, including depression, is stigmatized in Asian
220 cultures such as the Chinese culture (Augsberger, Yeung, Dougher, & Hahm,
221 2015; Chen et al., 2016; Wang & Liu, 2016), some women thought their mothers
222 would listen to them if they expressed sadness/depression and be supportive if
223 they wanted to seek mental health treatment.
224 **Help-seeking for mental health issues.** This theme included two sub-
225 themes: 1) Help-seeking behaviors; and 2); Barriers to mental health help seeking.

Help-seeking behaviors. Many (80%) said they would first disclose any depressive symptoms to their spouses and could rely on them for support. Some women were willing to seek professional help (60%) or help from other family and friends (60%), if needed. A few women stated if they were feeling sad or depressed, they would sit and cry (6.7%) or preoccupy themselves with activities such as going to the library to read or exercising (13.3%).

Barriers to mental health help-seeking. Half of the women perceived depression as a private matter due to cultural reasons, as one participant stated, "They don't really want to tell other people, "I have a mental issue." This is a culture thing." Other barriers included costs, lack/awareness of services, stigma, and language/culture barriers (i.e. Western doctors do not understand Chinese culture) (20%). Another participant said, "They did tell me a little more later (about PPD), but it was like I had to kind of ask and poke around." Some suggested that PPD education be provided early on during prenatal care as many had limited understanding of PPD.

Clinical Nursing Implications

This study describes the perceptions and experiences of PPD and help-seeking of Chinese American women. Based on EPDS scores, 20% of women were experiencing elevated depressive symptoms, which is similar to the finding of Cheng, Walker, and Chu (2013) where 24.5% scored in the high depressive symptom range. Almost all were foreign-born, reported having a strong identity to

247 the Chinese culture, and observed Chinese postpartum traditions. Also, 60%
248 reported sadness or PPD symptoms, either by scoring above the cutoff of the
249 EDPS or disclosing such information during the interview. Despite PPD being
250 prevalent, about one in four of women did not believe depression was applicable
251 to Chinese, and many have not heard about PPD. Importantly, a sizable
252 proportion (40%) indicated that even if they had experienced depression or its
253 symptoms, they would deny they had depression and/or view that having
254 depression was a sign of weakness.

255 Most etiology and triggers for depression symptoms perceived by Chinese
256 American women in the sample were consistent with that shared by women of the
257 general population (e.g. stress related to becoming a new parent, lack of social
258 support, hormonal changes, breastfeeding difficulties, and other life
259 events/illnesses) (Ngai & Chan, 2012; Xie et al., 2010). While there was not a
260 direct association, as perceived by participants, between PPD symptoms
261 experienced and specific Chinese cultural values and/or specific Chinese
262 postpartum traditions, the findings offer some insights into understanding risk
263 factors that may underlie the high prevalence of PPD observed or increase the
264 vulnerability of postpartum Chinese American women to PPD. First, all
265 participants were aware of some Chinese postpartum traditions, and while some
266 indicated seeing no harm of observing them, many indicated partaking the
267 practices out of respect of the elder family members. Particularly among women

268 who might not have the sufficient resources and support to partake and fulfill
269 some of those traditions, it is worth exploring whether or not the failure of
270 partaking any of the traditions might have negatively impacted family harmony or
271 perceived self-worth, and whether or not these might exacerbate some of the
272 reported PPD triggers as lacking social support and self-inflictions. Second,
273 participants discussed the close involvement of their family who provided
274 practical support of child caring or cooking. It is unclear whether such increased
275 practical support (and change in roles and expectations) from their family during
276 the postpartum period would increase the frequency of family conflicts or
277 disharmony and/or perceived stress that could trigger PPD symptoms.
278 In conclusion, healthcare professionals working with diverse populations
279 must be aware of culture-specific childbearing traditions in order to provide
280 culturally competent care and promote optimal maternal-infant well-being
281 outcomes. Findings from this study may be used to provide vital information to
282 those working with Chinese American families and develop culturally appropriate
283 outreach programs to increase utilization of mental health services for Chinese
284 American women, particularly at risk for developing PPD.

285 **REFERENCES**

286 Aday, L. A., & Andersen, R. (1974). A framework for the study of access to
287 medical care. *Health Serv Res, 9*(3), 208-220.
288 Andersen, R., Harada, N., Chiu, V., & Makinodan, T. (1995). Application of the
289 Behavioral Model to Health Studies of Asian and Pacific Islander
290 Americans. *Asian Am Pac Isl J Health, 3*(2), 128-141.
291 Augsberger, A., Yeung, A., Dougher, M., & Hahm, H. C. (2015). Factors
292 influencing the underutilization of mental health services among AA
293 women with a history of depression and suicide. *BMC Health Serv Res,*
294 *15*, 542. doi:10.1186/s12913-015-1191-7
295 Chen, J. A., Shapero, B. G., Trinh, N. T., Chang, T. E., Parkin, S., Alpert, J. E., . .
296 . Yeung, A. S. (2016). Association Between Stigma and Depression
297 Outcomes Among Chinese Immigrants in a Primary Care Setting. *J Clin*
298 *Psychiatry, 77*(10), e1287-e1292. doi:10.4088/JCP.15m10225
299 Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal
300 depression. Development of the 10-item Edinburgh Postnatal Depression
301 Scale. *Br J Psychiatry, 150*, 782-786.
302 Fancher, T. L., Ton, H., Le Meyer, O., Ho, T., & Paterniti, D. A. (2010).
303 Discussing Depression with Vietnamese American Patients. *Journal of*
304 *Immigrant and Minority Health, 12*(2), 263-266. doi:10.1007/s10903-009-
305 9234-y

306 Goyal, D., Park, V. T., & McNiesh, S. (2015). Postpartum Depression Among
307 Asian Indian Mothers. *MCN Am J Matern Child Nurs, 40*(4), 256-261.
308 doi:10.1097/nmc.0000000000000146
309 Goyal, D., Wang, E. J., Shen, J., Wong, E. C., & Palaniappan, L. P. (2012).
310 Clinically identified postpartum depression in AA mothers. *J Obstet*
311 *Gynecol Neonatal Nurs, 41*(3), 408-416. doi:10.1111/j.1552-
312 6909.2012.01352.x
313 Hamilton, J. E., Desai, P. V., Hoot, N. R., Gearing, R. E., Jeong, S., Meyer, T. D.,
314 . . . Begley, C. E. (2016). Factors Associated With the Likelihood of
315 Hospitalization Following Emergency Department Visits for Behavioral
316 Health Conditions. *Acad Emerg Med, 23*(11), 1257-1266.
317 doi:10.1111/acem.13044
318 Heh, S. S. (2001). Validation of the Chinese version of the Edinburgh Postnatal
319 Depression Scale: detecting postnatal depression in Taiwanese women. *Hu*
320 *Li Yan Jiu, 9*(2), 105-113.
321 Inman, A. G., & Yeh, C. J. (2007). AA stress and coping. In A. Ebreo, L. Yang,
322 L. Kinoshita, & M. Fu (Eds.), *Handbook of AA psychology* (2nd ed., pp.
323 323-339). Thousand Oaks, CA: Sage Publications.
324 Jang, Y., Chiriboga, D. A., & Okazaki, S. (2009). Attitudes toward mental health
325 services: age-group differences in Korean American adults. *Aging Ment*
326 *Health, 13*(1), 127-134. doi:10.1080/13607860802591070

327 Kendig, S., Keats, J. P., Hoffman, M. C., Kay, L. B., Miller, E. S., Simas, T. A.
328 M., . . . Lemieux, L. A. (2017). Consensus Bundle on Maternal Mental
329 Health: Perinatal Depression and Anxiety. *J Midwifery Womens Health,*
330 *62*(2), 232-239. doi:10.1111/jmwh.12603
331 Kingston, D., McDonald, S., Austin, M.-P., & Tough, S. (2015). Association
332 between Prenatal and Postnatal Psychological Distress and Toddler
333 Cognitive Development: A Systematic Review. *PLoS One, 10*(5),
334 e0126929. doi:10.1371/journal.pone.0126929
335 Lau, Y., Wang, Y., Yin, L., Chan, K. S., & Guo, X. (2010). Validation of the
336 Mainland Chinese version of the Edinburgh Postnatal Depression Scale in
337 Chengdu mothers. *Int J Nurs Stud, 47*(9), 1139-1151.
338 doi:10.1016/j.ijnurstu.2010.02.005
339 Lee, A., & Brann, L. (2015). Influence of Cultural Beliefs on Infant Feeding,
340 Postpartum and Childcare Practices among Chinese-American Mothers in
341 New York City. *Journal of Community Health,* 40(3), 476-483. doi:
342 10.1007/s10900-014-9959-y
343 Liu, Y. Q., Maloni, J. A., & Petrini, M. A. (2014). Effect of postpartum practices
344 of doing the month on Chinese women's physical and psychological
345 health. *Biol Res Nurs, 16*(1), 55-63. doi:10.1177/1099800412465107
346 Liu, Y. Q., Petrini, M., & Maloni, J. A. (2014). "Doing the month": Postpartum
347 practices in Chinese women. *Nurs Health Sci*. doi:10.1111/nhs.12146

348 Lynch, G. H. (2017). For centuries, these Asian recipes have helped new moms
349 recover from childbirth. Retrieved from
350 https://www.npr.org/sections/thesalt/2017/04/02/520535846/for-centuries-
351 these-asian-recipes-have-helped-new-moms-recover-from-childbirth
352 Netsi, E., Pearson, R. M., Murray, L., Cooper, P., Craske, M. G., & Stein, A.
353 (2018). Association of persistent and severe postnatal depression with
354 child outcomes. *JAMA Psychiatry*. doi:10.1001/jamapsychiatry.2017.4363
355 Ngai, F. W., & Chan, S. W. (2012). Stress, maternal role competence, and
356 satisfaction among Chinese women in the perinatal period. *Res Nurs*
357 *Health, 35*(1), 30-39. doi:10.1002/nur.20464
358 Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative
359 research projects. *Education for Information, 22*(2), 63-75.
360 doi:10.3233/EFI-2004-22201
361 Sit, D., Luther, J., Buysse, D., Dills, J. L., Eng, H., Okun, M., . . . Wisner, K. L.
362 (2015). Suicidal ideation in depressed postpartum women: Associations
363 with childhood trauma, sleep disturbance and anxiety. *J Psychiatr Res, 66-*
364 *67*, 95-104. doi:10.1016/j.jpsychires.2015.04.021
365 Ta Park, V. M., Goyal, D., Nguyen, T., Lien, H., & Rosidi, D. (2017). Postpartum
366 Traditions, Mental Health, and Help-Seeking Considerations Among
367 Vietnamese American Women: a Mixed-Methods Pilot Study. *Journal of*

368 *Behavioral Health Services Research, 44*(3), 428-441.
369 doi:10.1007/s11414-015-9476-5
370 Ta Park, V. M., Kaholokula, J. K., Chao, P. J., & Antonio, M. (2017). Depression
371 and Help-Seeking Among Native Hawaiian Women. *J Behav Health Serv*
372 *Res*. doi:10.1007/s11414-017-9584-5
373 Ta, V. M., Juon, H. S., Gielen, A. C., Steinwachs, D., & Duggan, A. (2008).
374 Disparities in use of mental health and substance abuse services by Asian
375 and Native Hawaiian/other Pacific Islander women. *J Behav Health Serv*
376 *Res, 35*(1), 20-36. doi:10.1007/s11414-007-9078-y
377 United States Census Bureau. (2017a). Facts for features: Asian-American and
378 Pacific Islander heritage month. Retrieved from
379 https://www.census.gov/newsroom/facts-for-features/2017/cb17-ff07.html
380 United States Census Bureau. (2017b). *Quck facts: United States*. Retrieved from
381 https://www.census.gov/quickfacts/fact/table/US/HCN010212.
382 Wang, W., & Liu, Y. (2016). Discussing mental illness in Chinese social media:
383 the impact of influential sources on stigmatization and support among
384 their followers. *Health Commun, 31*(3), 355-363.
385 doi:10.1080/10410236.2014.957376
386 Wisner, K. L., Sit, D. K., McShea, M. C., Rizzo, D. M., Zoretich, R. A., Hughes,
387 C. L., . . . Hanusa, B. H. (2013). Onset timing, thoughts of self-harm, and

388 diagnoses in postpartum women with screen-positive depression findings.
389 *JAMA Psychiatry, 70*(5), 490-498. doi:10.1001/jamapsychiatry.2013.87
390 Xie, R. H., Yang, J., Liao, S., Xie, H., Walker, M., & Wen, S. W. (2010). Prenatal
391 family support, postnatal family support and postpartum depression. *Aust
392 N Z J Obstet Gynaecol, 50*(4), 340-345. doi:10.1111/j.1479-
393 828X.2010.01185.x

394

395 **Table 1**

396 **Semi-Structured Interview Guide**

Interview Questions	**Follow-up Questions, as relevant**
1. Describe your cultural background in your own words. To what degree do you identify with your culture(s)?	
2. I understand that you recently had a baby. How did your family react?	
3. In your culture, are there specific traditions or things that usually happen after a woman gives birth?	*If the participant answers yes, then ask:* - Can you describe these traditions or things? - Have you experienced these traditions or things that you have just described? *If the participant answers NO, then ask:* How important is it for you to have these traditions or things? ➔ *If the participant answers YES, then ask:* How important is it for you to have experienced these traditions or things to you?
4. Now, I am going to ask some questions about sadness and depression. What do you think causes people to feel sad or depressed? What do you think your family or friends think about sadness or depression?	
5. I want to ask you questions about how you are feeling. Have you felt	*If participant answers yes, then skip to question 5.*

sad or depressed lately? What would you like to do about it?	
6. What would you do if you felt sad or depressed? Would you go get some help for it? Would you tell your doctor or nurse about your symptoms?	
7. What does treatment mean to you? What do your family or friends think about getting treatment? What kind of treatment do you think works best when people feel sad or depressed?	
8. What would influence you to seek treatment?	
9. Who are the best people to help treat sadness or depression? If you were feeling depressed or anxious, where would you go to get help?	
10. What types of treatments do you think are available to you?	
11. There are many women who feel sad or depressed and don't seek out treatment, why do you think this is so?	
12. What can mental health clinics or professionals do to make it easier for women who feel sad or depressed to seek out their services?	
13. What role does your health care insurance play in your decision to seek treatment?	*Refer to the woman's responses to the Health Services Questionnaire to probe for more information.*

14. Have you ever received professional (e.g. psychologist; therapist) help when you felt sad or depressed in the past? If so, how did you find out about it? Was it helpful? Would you go again?	
15. Other comments?	

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398 **Table 2: Sample Characteristics (N=15)**
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Characteristics	***N (%)***
Age (in years)	
Mean (SD)	33.2 (3.1)
Range	29-39
Number of years lived in U.S.	
Mean (SD)	15.1 (12.2)
Range	1.5-37
Nativity	
Born in Mainland China	8 (53.3%)
Born in Taiwan	5 (33.3%)
Born in Hong Kong	1 (6.7%)
Born in United States	1 (6.7%)
Marital Status	
Married	15 (100.0%)
Employment status	
Employed full-time	3 (20.0%)
Employed part-time	2 (13.3%)
Maternity leave	3 (20.0%)
Unemployed	7 (46.7%)
Education level	
College	7 (46.7%)
Graduate School	8 (53.3%)
Postpartum (in months)	
Mean (SD)	8.5 (4.5)
Range	2.4-15.5
Type of Delivery	
Vaginal	12 (80.0%)
C -Section	3 (20.0%)
Number of children of each participant	
2 children	5 (33.3%)
1 child	10 (66.7%)
Sex of recent infant	
Female	9 (60.0%)
Male	5 (33.3%)

Female & Male (twins)	1 (6.7%)
Method of Feeding	
Breastfeeding only	9 (60.0%)
Bottle only	2 (13.3%)
Breastfeeding and Bottle	4 (26.7%)
Self-reported experience with lifetime depression	
Yes	2 (13.3%)
No	13 (86.7%)
EPDS score	
Mean (SD)	5.6 (3.2)
Range	0-11
Possible depression (≥10)	3 (20.0%)

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402 **Table 3. Suggested Clinical Nursing Implications**

Suggested Clinical Nursing Implications
Chinese American women may not believe that depression applies to them, may not have heard about PPD or think that it exists, and may view depression as a sign of weakness.
Chinese American women may prefer to seek help through their families and social networks versus professional help.
Awareness of Chinese American childbearing traditions may aid in the delivery of culturally competent care and promote optimal maternal-infant well-being outcomes.
Nurses caring for Chinese American women may identify PPD risk both by asking if they have experiences with sadness or depression as well as through conventional PPD screening methods (e.g. EPDS).
Culturally appropriate outreach and education programs may be developed to increase the knowledge and understanding about PPD and awareness about available mental health care for Chinese American women particularly at risk for developing PPD.

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