

istian
347
is for
.gov/
ance.

ental
sing,
2
port.
and
189–

con-
/doi.

yer,
ited
nen.

rod-

ashi
pp.
t.9
am-
144,

ren
x9–

xi-
1-19
6/j.

ors
ind
eri-
72
K.
ces
nd
6/j.

int
io-
oi.

m,
D-
ar-
tal

n:
ri-
o.

C.,
id
17-
ii.

rs
v.
r-
t-

J-
e
//

va
f.
i.

3
f
/



Shutterstock/Thannaree Deepul

PERINATAL EXPERIENCES OF ASIAN AMERICAN WOMEN DURING COVID-19

Deepika Goyal, PhD, RN, FNP-C, Meekyung Han, PhD, MSW, Talia Feldman-Schwartz, and Huynh-Nhu Le, PhD

Abstract

Purpose: To explore the wellbeing, pregnancy, childbirth, and postpartum experiences of Asian American women who gave birth during the COVID-19 pandemic.

Study Design: Qualitative exploratory design.

Methods: Using convenience and snowball sampling, we recruited Asian American women who gave birth during the COVID-19 pandemic via social media. Participants completed sociodemographic and depressive symptom questionnaires and took part in a virtual semistructured interview where they were asked to describe their pregnancy, birth, and postpartum experiences in the midst of the COVID-19 pandemic. Qualitative content analysis methods were used to identify themes from participant narratives.

Results: Thirty-eight Asian American women representing several racial ethnic subgroups (Asian Indian, Chinese, Filipino, Hmong, Laotian, Vietnamese) participated in our study. Participants were on average 34 ($SD = 3.5$) years of age; the majority were married and

lived in California. At the time of data collection, participants were 3.7 ($SD = 2.07$) months postpartum and 5.3 to 10.5 months into the COVID-19 pandemic. Qualitative content analysis revealed two main themes: 1) unexpected perinatal journey, and 2) the emotional and psychological consequences of COVID-19.

Clinical Implications: Our findings are not unique to Asian American women, but they offer insight for nurses taking care of all childbearing women. Nurses can provide individually tailored anticipatory guidance to help women navigate perinatal changes and manage expectations during future public health crises. Nurses can also encourage and help perinatal women identify ways to increase their own social support networks during the pregnancy and postpartum period.

Key words: Asian Americans; COVID-19; Perinatal care; Postpartum period; Pregnancy.

The COVID-19 pandemic disrupted health care delivery and contributed to an increased risk of perinatal morbidity and mortality in the United States and around the world (Karimi et al., 2021).

In response to nationwide social distancing and sheltering in place mandates, the American College of Obstetricians and Gynecologists (ACOG) recommended a shift to telehealth and limited presence of partners at obstetric visits, the birth, and postpartum period (ACOG, 2020a, 2020b). Social distancing led to reduced social support and isolation from family and friends, which dramatically changed the perinatal experience for women, their partners, and their families (Burgess et al., 2021).

Research in the United States examining the wellbeing of perinatal women during COVID-19 is growing. However, Asian American women are largely underrepresented in study samples (1% to 5.2%) (Farewell et al., 2020; Liu et al., 2021; McFarland et al., 2021; Mollard & Wittmaack, 2021).

Asian Americans

Asian Americans comprise 5.9% (20 million) of the U.S. population. With an 81% population growth between 2000 and 2019, they are the fastest growing racial-ethnic group in the United States and expected to quadruple by 2060 (Pew Research Center, 2021). Birth data indicate 6% of U.S. births in 2019 were to Asian American women (Martin et al., 2021). When examining a widespread public health crisis such as COVID-19, it is crucial to understand the scope of the problem for all women. This importance is underscored given growing racism directed at Asian Americans solely based on COVID-19 originating in China (Centers for Disease Control and Prevention [CDC], 2020; Wayne et al., 2021; Woo & Jun, 2021). One third of Asian Americans have been recipients of racial slurs and jokes since the beginning of the pandemic compared with Black (21%), Hispanic (15%), and White adults (80%; Pew Research Center, 2020).

The growing Asian American population highlights necessity of targeted research to direct culturally responsive care in the treatment of perinatal women. The underrepresentation of perinatal Asian American women in COVID-19-related research led us to explore the perinatal experiences and wellbeing of Asian American women who gave birth during the COVID-19 pandemic.

According to Transition Theory (Schumacher & Meleis, 1994), transition is any life event that results in change. The process and consequences of the transition, rather than the transition itself, are what matter. Although giving birth to a child is often an anticipated transition, the unanticipated COVID-19 pandemic has the potential to contribute to unexpected and perhaps, long-lasting consequences. Knowledge about transitions and experiences during the COVID-19 pandemic are vital to further our understanding.

Methods

We used a qualitative explorative design, convenience, and snowball sampling to recruit English-speaking adult Asian

American women, living in the United States who had given birth to a live infant March 2020 or later. This date was chosen based on the World Health Organization (2020) declaring COVID-19 a pandemic on March 11, 2020. Institutional human subjects committee approval was obtained prior to data collection.

Measures

Participants provided sociodemographic information (age, ethnicity, marital status, employment status, highest level of education). We also collected infant age, infant gender, type of birth, and number of any children at home. We asked participants to report if they had ever been diagnosed with or if they were currently being treated for a mental health disorder.

Wellbeing. Participants completed the 2-item Patient Health Questionnaire (PHQ-2; Kroenke et al., 2003) to assess degree of depressive symptoms over the past 2 weeks. The two items are scored on a Likert scale from 0 “not at all” to 3 “nearly every day.” Scores can range from 0 to 6 with scores of ≥ 3 indicating depression risk and further follow-up. Reliability and validity of the PHQ-2 has been established in other samples of postpartum women (Chae et al., 2012; Gjerdingen et al., 2009).

Perinatal experiences. Semistructured interview questions were developed using concepts from Transition Theory (Schumacher & Meleis, 1994) to examine the transition from the nonmaternal to the maternal role in light of the COVID-19 pandemic. The questions and prompts aimed to obtain a holistic understanding of participant’s perinatal experiences during the COVID-19 pandemic (Table 1).

Data Collection Procedure

We searched Facebook® for new mothers’ and new parents’ groups and sent requests to group administrators to post our study flyers. Members of groups also sent our study flyer to other women meeting study criteria. The study was open from August 12, 2020 through January 31, 2021. Interested participants emailed the first author

TABLE 1. QUALITATIVE INTERVIEW QUESTIONS

Please describe your most recent pregnancy experience during the COVID-19 pandemic.

Please describe your most recent birth experience during the COVID-19 pandemic.

Please describe your experiences in the first few weeks at home with your infant(s) during the COVID-19 pandemic.

If you have sought emotional or mental health professional help since COVID-19 pandemic, please describe your experiences.

Please tell us about any other concerns you have about COVID-19 and the next few months.

Please tell us anything else you would like to share about your pregnancy, birth, labor, and first few months after your baby was born.

TABLE 2. PARTICIPANT CHARACTERISTICS (N = 38)

Characteristics	N (%)
Ethnicity	
Chinese	13 (34.2%)
Southeast Asian ¹	10 (26.3%)
Asian Indian	5 (13.2%)
Filipino	5 (13.2%)
Other ²	5 (13.2%)
Education Level	
College Degree	16 (42.1%)
Graduate Degree	22 (57.9%)
Employment Status	
Full-time	16 (42.1%)
Maternity Leave	16 (42.1%)
Other ³	6 (15.8%)
Income	
100K or more	29 (76.3%)
75–99K	5 (13.2%)
50–75K	1 (2.6%)
Declined to Answer	3 (7.9%)
Previous Mental Health Diagnosis	
Yes	7 (18.4%)
Current Mental Health Treatment	
Yes	6 (15.8%)
Birth Type	
Cesarean	10 (26.3%)
Vaginal	28 (73.7%)
Feeding Method	
Breastmilk only	31 (81.6%)
Formula only	1 (2.6%)
Breastmilk and formula	6 (15.8%)

¹Southeast Asian = Hmong, Indian, Laotian, Vietnamese, and Thai

²Other = Japanese, Korean, and self-identified other

³Other = one part-time and five stay-at-home-moms

Unexpected Perinatal Journey

Due to the pandemic, participants reported that their experiences of pregnancy and the postpartum period were unanticipated. Responses reflected two subthemes: 1) restructured medical visits, and 2) silver linings.

Restructured medical visits. Women described how social distancing restructured their medical appointments. First-time mothers focused on the decreased number of in-person office visits, likely a change from what they were expecting. For example, *they (the clinic) skipped some of the less critical appointments, I think, I may have skipped maybe three appointments. They did not substitute for virtual or telehealth.* First-time mothers seemed amenable to having fewer prenatal appointments hoping that they were still receiving the care that they needed. As

given to schedule a virtual interview appointment. An electronic copy of the informed consent statement was sent to participants to review with a virtual interview link. Questions about the study and informed consent were answered via email before the interview and at the start of the interview as needed. We asked participants to provide verbal consent to audio record the interview. All participants received a list of mental health resources including Postpartum Support International and 2020Mom and a \$25 store gift card to compensate their time. We conducted interviews until our sample included participants from each of the six main Asian American subgroups (Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese; Pew Research Center, 2021).

Data Analysis

We used descriptive statistics to analyze participant sociodemographic characteristics and wellbeing data. The first (DG) and third (TF) authors reviewed the auto-generated interview transcripts for accuracy and analyzed data using content analysis (Krippendorff, 2019). To maintain trustworthiness, the first and third authors adopted a holistic approach to ensure strong credibility of the data and kept their own biases, privilege, and positionality at the forefront during analysis (Smith & Firth, 2011). To reduce unintentional bias, the first and third authors independently read the interview transcripts, identified themes and subthemes, and compared and contrasted notes to better form an understanding of the perinatal experiences of Asian American women during COVID-19.

Results

Participant characteristics. Thirty-eight Asian American women participated in this study. All participants were married or partnered. The majority were from California ($n = 29$, 76.3%). Other states represented were Colorado, Nevada, New Hampshire, New York, North Carolina, Pennsylvania, Texas, and Washington. Participants were 3.7 ($SD = 2.07$) months postpartum and 208.2 ($SD = 43.5$, range 160–314) days into the COVID-19 pandemic at the time of data collection. Just over half of our participants had given birth for the first time ($n = 20$, 53%), seven (18.4%) reported a history of mental illness, and six (15.8%) were receiving mental health care treatment at the time of interview (Table 2).

Wellbeing. Mean PHQ-2 score was 6.4 ($SD = 4.0$), ranging between 0 and 6. Three (7.9%) participants scored ≥ 3 indicating a high risk for developing depression and were advised to follow-up with their health care providers. The Spearman-Brown coefficient for two-item scales (Eisinga et al., 2013) indicated good reliability for our sample (.86).

Qualitative Findings

Virtual interviews lasted from 30 to 60 minutes. Content analysis revealed two main themes: 1) unexpected perinatal journey and 2) emotional and psychological consequences of COVID-19. The following sections describe the overall themes and associated subthemes.

this participant surmised the decreased in-person prenatal care was likely due to her having a low-risk pregnancy, *they greatly decreased the number of visits especially because I was not a high-risk pregnancy. I believe that my visits were cut down to half, so I didn't go to the hospital very often. . . there was even a time where I just did like a phone chat with my doctor, I didn't even go into the office.*

Participants described changes to medical appointment due to COVID-19, *it was actually really stressful because they changed their policy to only one person. Just yourself (no partners).* Participants also described not being allowed to bring their partners to appointments, so, *he [my husband] was no longer allowed to go to my visits so he didn't get to see the ultrasounds, or anything after that. Another thing was we hoped we would get to go to the birthing classes, especially being a first-time parent for both of us, unfortunately, that didn't happen....*

Women who had previous pregnancy and birth experiences in nonpandemic times described disappointment in not being able to have their partner join them for medical appointments, *it just kind of sucks that my husband can't go to this (ultrasound) appointment, but thankfully it's our second one (baby) so he'd already got that experience with the first one.* Women voiced a general disappointment of going through the pregnancy alone, not what they had expected based on their previous experiences, *so that [not being able to have my husband come to prenatal appointments with me] was a real bummer because we've done that with others [pregnancies]. So, things were definitely different and he couldn't go to any of my appointments, I had to drive myself, I had to do all of this alone.*

Silver lining. Women described the positive side of sheltering in place due to the pandemic. One participant who had given birth to her first child stated, *It was kind of nice because my husband was able to work from home, so we were both working from home at the very end of my pregnancy. It was nice because I figured, when I go into labor, he'll be there.* Another participant described the silver lining of the pandemic. COVID-19 provided an excuse to avoid family visits and exposure to COVID-19. *Coming from my background, I don't feel comfortable saying no, or being assertive [saying no to family visiting us]. All of my older aunts and uncles use their whole face when they kiss [the baby]. And it's like they're sucking the smell out of you.*

Consequences of COVID-19

This theme encompassed two subthemes, 1) fear of COVID-19 and 2) feeling sad and disappointed.

Fear of COVID-19. As expected, participants expressed fear related to COVID-19 exposure and the unknown effects on their unborn child. For example, one participant who was also a health care worker shared, *I was very scared, especially because it [COVID] was so new that they didn't understand anything about, you know, maternal fetal effects from COVID and my line of work with asymptomatic patients.* Another participant described her growing anxiety about being at home with

her new baby and managing visitors, *I have anxiety about our newborn, like having anyone hold her, touch her, visit her. So that is a little concerning.*

Feeling sad and disappointed. Participants described sadness and disappointment of missing out perinatal experiences (baby showers, family visits). Women with first pregnancies had different reasons for negative emotional reaction than women with other children at home. For example, one participant was upset about missing her first baby shower and the enduring consequences of that experience, *the fun stuff went away; my baby shower was cancelled. I still can't look at other people's Facebook posts about baby showers because I'm still quite upset at what happened. It felt very isolating.* Another participant decided to cancel her first baby shower. *Yeah, so I was you know selfishly kind of stressed out because we didn't get to have a baby shower. . . I have a pretty big family, it would have been a 150-person event. We just decided because of the risks (of COVID) and a lot of elderly people in our family, just to not to put anyone through that. So, we had to cancel that.*

Women described international travel restrictions stopping family from visiting. One first-time mother described not being able to have her mother with her in the early postpartum period. *She (my mother) would have been such help, the allowed time is three months to be here from Japan, so she could help with chores, or you know, raising kids too. We just FaceTime, and I know it's not the same for her, not being able to hold him and so I feel like there's kind of a loss of bonding for also for my son. And for me I as well to just kind of see, how maybe how she took care of me and how I can take care of my son.*

Participants who had other children at home also described sadness and disappointment. One participant stated, *I feel a lot of concern for my 16-month-old, not being able to play with other children his age.* This view was shared by another participant who stated, *he wears a mask at daycare... it's a little bit sad because, you know, they send us videos of their circle time and everybody's sitting on opposite ends of long tables ... it is sad and You know she (is 3 years old) needs to be able to socialize with other kids [but cannot due to COVID]. We've taken 100% attention from her and divided to her sisters.*

Participants with other children at home described feeling overwhelmed. For example, one participant stated, *my older daughter was supposed to go back to daycare [but could not due to COVID-19]. That way, it could just be me and the baby and that was more manageable. But then it ended up being every like both of the kids. And so that was a lot more difficult than anticipated.*

Discussion

We describe the perinatal wellbeing and experiences of Asian American women during the COVID-19 pandemic. There is scant published information on this topic. Three of our participants (7.9%) scored ≥ 3 on the PHQ-2, indicating depression risk, which is lower to depression rates (12%–34.5%) in other studies conducted during the pandemic in the United States (Farewell et al., 2020; Liu et al.,

CLINICAL IMPLICATIONS

- Nurses can provide resources regarding the benefits of COVID-19 vaccination during pregnancy and breastfeeding.
- Nurses should consider the possibility of enduring effects of perinatal experiences during COVID-19 on maternal-child outcomes.
- Nurses can direct patients to validated resources to help manage fear of COVID, for example, Centers for Disease Control and Prevention.
- Nurses must work toward creating a safe, inclusive, and respectful environment, free from any indication of racism during this time of heightened vulnerability.
- Nurses can help women identify ways to increase their own social support networks during perinatal period.

2021; McFarland et al., 2021; Mollard & Wittmaack, 2021). The lower depression risk in our sample may be attributed to participants' higher socioeconomic status, timeframe of the study (5–10 months into the pandemic), or sensitivity and specificity of the depression screening questionnaire used. Our qualitative findings are consistent with other studies of women living in the United States, including inadequate social support, and managing work obligations along with other childcare needs (Farewell et al.; Mollard & Wittmaack).

Although previous studies during non-COVID times that included Asian American women highlighted importance of cultural perinatal practices such as mandated postpartum rest and customary help from family (Cheng & Pickler, 2009; Goyal, 2016; Han et al., 2020; Jaramillo et al., 2019; Ta Park et al., 2019), participants in this study did not report taking part in traditional perinatal practices. There were similarities and differences in how the experiences of Asian American perinatal women were experienced by parity. First-time mothers reported missing out on the medical visits and ultrasounds and rituals such as baby showers more so than mothers with other children. Conversely, mothers with other children reported having more stress associated with having children at home while also taking care of a newborn. Given the small sample, additional research is warranted.

The COVID-19 pandemic was the overall shared event for our participants. Besides the common challenges and distresses related to the outbreak, Asian Americans experienced increased racism due to the Chinese origin of COVID-19 (CDC, 2020), thus perinatal Asian American women may face additional and compounded stressors of either overt or covert discrimination (Woo & Jun, 2021). Unfortunately, this xenophobia is on the rise and becoming more prevalent and apparent, despite efforts to fight it (Wayne et al., 2021). New SARS-CoV-2 variants, such as the Delta (CDC, 2021a), are a national concern and the future of the pandemic is unclear. Continued research to identify

perinatal mental health trajectories of Asian American women is critical to understand the consequences of racism amid the COVID-19 pandemic.

Limitations

Inclusion of an underrepresented group in perinatal research is a major strength of our study. However, our results are limited by several factors including our well-educated participants with 76% reporting an annual income >\$100,000. Recruitment for our study began in Northern California, which resulted in a larger proportion of participants from California and fewer participants from other parts of the United States. The large proportion of participants from California is not surprising given the high percentage of Asian Americans (30%) in Northern California, compared with 6% of the general U.S. population (Pew Research Center, 2021).

An important limitation is that we did not ask participants about any racist comments or slurs directed toward them during their perinatal care. Given the increase in racial slurs, attacks, and jokes directed toward Asian Americans since the start of the pandemic, future research should include questions regarding racism and discrimination. Future research efforts must focus on recruiting a diverse range of Asian American women living nationwide, including non-English speaking immigrants, in order to capture a holistic understanding of Asian American women's perinatal experiences during a public health crisis.

Clinical Implications

Our study provides a unique opportunity for nurses to learn about the perinatal experiences of Asian American women who gave birth during the COVID-19 pandemic. Several implications for nursing practice were identified that focused on helping manage COVID-19-related expectations for perinatal women. Participants discussed concerns with the overall fewer prenatal care visits from the currently recommended 12 to 14 visits (American Academy of Pediatrics & American College of Obstetricians and Gynecologists, 2017). Nurses can reassure women that fewer in-person medical visits reduce the risk of COVID-19 infection that places pregnant and postpartum women at an increased risk of severe illness (CDC, 2021b). Nurses can educate pregnant and postpartum women about the benefits of getting the COVID-19 vaccine, especially the passive immunity for infants who are breastfed (Spatz, 2021).

Several participants discussed the disappointment of not being allowed to have their partner or spouse accompany them to milestone ultrasound appointments. Nurses can work with women on creative ways to include their partners using video calls or ensuring the ultrasound is recorded for later viewing by the couple. Although few of our participants were at risk for depression, nurses should be aware that social isolation and loneliness can increase the risk for depression and assess for depressive symptoms throughout the perinatal period based on screening guidelines (ACOG, 2018).

Finally, it is important to acknowledge the recent racism and discrimination directed at Asian Americans (CDC, 2020; Wayne et al., 2021; Woo & Jun, 2021). Nurses must work toward creating a safe, inclusive, and respectful environment, free from any indication of racism during this time of heightened vulnerability. ❖

Acknowledgment

The authors would like to acknowledge ongoing research, scholarly, and creative activity (RSCA) support from San José State University.

Dr. Deepika Goyal is a Professor, San José State University, The Valley Foundation School of Nursing, One Washington Square, San Jose, CA. Dr. Goyal can be reached via email at deepika.goyal@sjsu.edu

Dr. Meekyung Han is a Professor, San José State University, School of Social Work, One Washington Square, San Jose, CA.

Talia Feldman-Schwartz is an Undergraduate Student and Research Assistant, George Washington University, Department of Psychological and Brain Sciences, Washington, DC.

Dr. Huynh-Nhu Le is a Professor, George Washington University, Department of Psychological and Brain Sciences, Washington, DC.

The authors declare no conflicts of interest.

Copyright © 2022 Wolters Kluwer Health, Inc. All rights reserved.

DOI:10.1097/NMC.0000000000000796

References

- American Academy of Pediatrics & American College of Obstetricians and Gynecologists. (2017). *Guidelines for perinatal care* (8th ed.). American Academy of Pediatrics.
- American College of Obstetricians and Gynecologists. (2018). Screening for perinatal depression (Committee Opinion No. 757). *Obstetrics and Gynecology*, 132(5), 1314–1316. <https://doi.org/10.1097/AOG.00000000000002928>
- American College of Obstetricians and Gynecologists. (2020a). *General information regarding pregnant individuals and COVID-19*. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/03/novel-coronavirus-2019>
- American College of Obstetricians and Gynecologists. (2020b). Implementing telehealth in practice: (Committee Opinion No. 798). *Obstetrics and Gynecology*, 135(2), 493–494. <https://doi.org/10.1097/AOG.00000000000003672>
- Burgess, A., Breman, R. B., Bradley, D., Dada, S., & Burcher, P. (2021). Pregnant women's reports of the impact of COVID-19 on pregnancy, prenatal care, and infant feeding plans. *MCN. The American Journal of Maternal Child Nursing*, 46(1), 21–29. <https://doi.org/10.1097/NMC.0000000000000673>
- Centers for Disease Control and Prevention. (2020). *Identifying the source of the outbreak*. <https://www.cdc.gov/coronavirus/2019-ncov/science/about-epidemiology/identifying-source-outbreak.html>
- Centers for Disease Control and Prevention. (2021a). *Variants of the virus*. <https://www.cdc.gov/coronavirus/2019-ncov/variants/variants.html>
- Centers for Disease Control and Prevention. (2021b). *Investigating the impact of COVID-19 during pregnancy*. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/special-populations/pregnancy-data-on-covid-19/what-cdc-is-doing.html>
- Chae, S. Y., Chae, M. H., Tyndall, A., Ramirez, M. R., & Winter, R. O. (2012). Can we effectively use the two-item PHQ-2 to screen for postpartum depression? *Family Medicine*, 44(10), 698–703.
- Cheng, C. Y., & Pickler, R. H. (2009). Effects of stress and social support on postpartum health of Chinese mothers in the United States. *Research in Nursing and Health*, 32(6), 582–591. <https://doi.org/10.1002/nur.20356>
- Eisinga, R., Grotenhuis, M. T., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health*, 58(4), 637–642. <https://doi.org/10.1007/s00038-012-0416-3>
- Farewell, C. V., Jewell, J., Walls, J., & Leiferman, J. A. (2020). A mixed-methods pilot study of perinatal risk and resilience during COVID-19. *Journal of Primary Care and Community Health*, 11, 2150132720944074. <https://doi.org/10.1177/2150132720944074>
- Gjerdingen, D., Crow, S., McGovern, P., Miner, M., & Center, B. (2009). Postpartum depression screening at well-child visits: Validity of a 2-question screen and the PHQ-9. *Annals of Family Medicine*, 7(1), 63–70. <https://doi.org/10.1370/afm.933>
- Goyal, D. (2016). Perinatal practices & traditions among Asian Indian women. *MCN. The American Journal of Maternal Child Nursing*, 41(2), 90–97. <https://doi.org/10.1097/nmc.0000000000000222>
- Han, M., Goyal, D., Lee, J., Cho, H., & Kim, A. (2020). Korean immigrant women's postpartum experiences in the United States. *MCN. The American Journal of Maternal Child Nursing*, 45(1), 42–48. <https://doi.org/10.1097/NMC.0000000000000585>
- Jaramillo, J., Goyal, D., & Lung, C. (2019). Birth tourism among Chinese women. *MCN. The American Journal of Maternal Child Nursing*, 44(2), 94–99. <https://doi.org/10.1097/nmc.0000000000000500>
- Karimi, L., Makvandi, S., Vahedian-Azimi, A., Sathyapalan, T., & Sahebkar, A. (2021). Effect of COVID-19 on mortality of pregnant and postpartum women: A systematic review and meta-analysis. *Journal of Pregnancy*, 2021, 8870129–8870129. <https://doi.org/10.1155/2021/8870129>
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology* (4th ed.). Sage.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2003). The patient health questionnaire-2: Validity of a two-item depression screener. *Medical Care*, 41(11), 1284–1292.
- Liu, C. H., Erdei, C., & Mittal, L. (2021). Risk factors for depression, anxiety, and PTSD symptoms in perinatal women during the COVID-19 Pandemic. *Psychiatry Research*, 295, 113552. <https://doi.org/10.1016/j.psychres.2020.113552>
- Martin, J. A., Hamilton, B. E., Osterman, M. J. K., & Driscoll, A. K. (2021). Births: Final data for 2019. *National Vital Statistics Reports*, 70(2), 1–51. Hyattsville, MD: National Center for Health Statistics. <https://doi.org/10.15620/cdc:100472>. <https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf>
- McFarland, M. J., McFarland, C. A. S., Hill, T. D., & D'Oria, R. (2021). Postpartum depressive symptoms during the beginning of the COVID-19 pandemic: An examination of population birth data from central New Jersey. *Maternal and Child Health Journal*, 25(3), 353–359. <https://doi.org/10.1007/s10995-020-03116-w>
- Mollard, E., & Wittmaack, A. (2021). Experiences of women who gave birth in US hospitals during the COVID-19 Pandemic. *Journal of Patient Experience*, 8, 2374373520981492. <https://doi.org/10.1177/2374373520981492>
- Pew Research Center. (2020). *Many Black and Asian Americans say they have experienced discrimination amid the COVID-19 outbreak*. <https://www.pewresearch.org/social-trends/2020/07/01/many-black-and-asian-americans-say-they-have-experienced-discrimination-amid-the-covid-19-outbreak/>
- Pew Research Center. (2021). *Key facts about Asian origin groups in the U.S.* <https://www.pewresearch.org/fact-tank/2021/04/29/key-facts-about-asian-origin-groups-in-the-u-s/>
- Schumacher, K. L., & Meleis, A. I. (1994). Transitions: A central concept in nursing. *Image: The Journal of Nursing Scholarship*, 26(2), 119–127.
- Smith, J., & Firth, J. (2011). Qualitative data analysis: The framework approach. *Nurse Researcher*, 18(2), 52–62. <https://doi.org/10.7748/nr2011.01.18.2.52.c8284>
- Spatz, D. L. (2021). Advocate for the COVID-19 vaccine for pregnant and breastfeeding women. *MCN. The American Journal of Maternal Child Nursing*, 46(3), 178–178. <https://doi.org/10.1097/NMC.0000000000000719>
- Ta Park, V. M., Goyal, D., Suen, J., Win, N., & Tsoh, J. Y. (2019). Chinese American women's experiences with postpartum depressive symptoms and mental health help-seeking behaviors. *MCN. The American Journal of Maternal Child Nursing*, 44(3), 144–149. <https://doi.org/10.1097/NMC.0000000000000518>
- Wayne, K., Lee, A., Kyaw, M., & Moore, G. (2021). COVID-19 update: Navigating biases against Asian Americans during Covid-19. *Women's Healthcare: A Clinical Journal for Nurse Practitioners*, 9(3), 15–17. <https://www.npwomenshealthcare.com/covid-19-update-navigating-biases-against-asian-americans-during-covid-19/>
- Woo, B., & Jun, J. (2021). COVID-19 racial discrimination and depressive symptoms among Asian Americans: Does communication about the incident matter? *Journal of Immigrant and Minority Health*, 1–8. <https://doi.org/10.1007/s10903-021-01167-x>
- World Health Organization. (2020). *Coronavirus disease (COVID-19) advice for the public*. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>