

COMMENTARY

Social Distancing in the Era of COVID-19: A Call for Maintaining Social Support for the Maternal Population

Alaa Alhomaizi,^a Dalal Alhomaizi,^a Sandra Willis,^a Helen Verdell^a

Key Messages

- Pregnant, laboring, and postpartum women are navigating the challenges inherent to the perinatal period against the backdrop of a global pandemic but without a key protective factor—social support.
- Formal and informal social support systems for mothers need to be prioritized, even during pandemics, and failure to do so will greatly affect mothers, their infants, and their whole households.
- When determining policies to mitigate the spread of coronavirus disease (COVID-19), policy makers should take a harm reduction approach that incorporates feasible and innovative strategies to ensure the continuation of maternal social support.
- Policy makers need to engage and empower mothers as well as the associated professional communities to voice their needs and to inform and participate in the policy formulation process to ensure the creation of policies that are better suited to maternal social support needs during the pandemic.

INTRODUCTION

Over the past year, the strategies used around the globe to slow the spread of coronavirus disease (COVID-19) have radically changed everyday life for millions of households. Conversing behind masks, avoiding physical proximity with people from outside the household, and viewing one another as potential biohazard carriers have severely disrupted the social and cultural connections that are vital for human communities, especially during crises. The adverse mental health effects of previous infectious disease outbreaks, such as Ebola, severe acute respiratory syndrome (SARS), and H1N1 influenza epidemics, have been documented on a number of populations and subgroups.^{1,2}

However, with the notable exception of HIV/AIDS, the literature on the mental health effects of recent epidemics has left out one particularly vulnerable group—expectant and new mothers.^{3,4} The current pandemic was different in this regard. There has been an increased awareness of its maternal mental health ramifications, with more than 2 dozen studies already published within a year on the mental health effects of the pandemic on pregnant and postpartum women.^{5,6} The majority of the studies highlighted the impact of containment measures implemented to stem the spread of COVID-19, such as social distancing, as core reasons for the increased maternal mental morbidity. Social distancing measures range from isolation of infected individuals, to closures of schools and nonessential businesses, to national lockdowns.⁷ As the world marks 1 year since the World Health Organization declared COVID-19 a global pandemic, nearly every country remains under some form of social distancing.

Since the beginning of 2020, pregnant, laboring, and postpartum women have been navigating the challenges inherent to the perinatal period in the context of sudden, severe, and cumulative stressful events with concurrent reductions of vital social connections and protections. It is therefore critical to mitigate the enormous impact of COVID-19 on maternal mental health. In this article, we argue that formal and informal social support systems for mothers need to be prioritized, even during pandemics, and failure to do so will greatly affect the mothers, their infants, and their whole households. Furthermore, we call for the dissemination of feasible and innovative adaptive strategies that ensure continuation of social support to this population.

THE PERINATAL PERIOD: A VULNERABLE TIME

The perinatal period, which includes both the gestational and postpartum phases, is characterized by substantial biological changes and major life adjustments that can result in various degrees of emotional distress.^{8,9} Globally, a significant portion of perinatal women develop symptoms of depression and anxiety. In high-income countries (HICs), the prevalence of depression ranges

^aTeachers College, Columbia University, New York, NY, USA.

Correspondence to Alaa Alhomaizi (ama2239@tc.columbia.edu).

from 7.0% to 20.0% for pregnant women and 9.3% to 13.0% for postpartum women.^{10–13} In a review of low- and middle-income countries (LMICs), higher prevalence rates of perinatal depression were generally found, with studies reporting prevalence rates that ranged from 4.8% to 57.0% and 3.8% to 48.5% for antepartum and postpartum depression, respectively.¹⁴ Although perinatal anxiety is not as widely investigated and understood as perinatal depression, research indicates that it is an equally common condition globally. The range of prevalence rates for antepartum anxiety is 5.8% to 35.9% in HICs compared to 6.6% to 61.1% in LMICs, while the prevalence rates of postpartum anxiety range from 4.7% to 36.1% in HICs compared with 2.2% to 38.3% in LMICs.^{15–19} Additionally, extensive literature over the past 50 years has shown associations between maternal mental illness and maternal morbidity and mortality, including suicide.^{20,21} Moreover, maternal antepartum and postpartum psychopathology has been associated with a range of adverse fetal (e.g., preterm delivery), child (e.g., emotional difficulties, externalizing behavior), and adolescent outcomes (e.g., increased risk for depression).²² These adverse effects are compounded by socioeconomic disadvantages, and in LMICs, they include worse child physical development outcomes, such as stunting.²³

Many of the determinants of maternal psychopathology are exacerbated by the realities of life during the COVID-19 pandemic.²⁴ Perinatal women must now cope with elevated stress in their environments due to heightened fears of infection and contamination, concern for their family's and their own health, and exposure to media coverage of the pandemic.^{25,26} Further, daily life has changed drastically due to increased isolation and loneliness as well as disruption of meaningful life experiences such as family gatherings, birth celebrations, and mourning rituals for the death of loved ones. Women and their families are also facing significant economic hardships as unemployment has surged and economies are struggling worldwide. Food shortages have been widely reported during the pandemic, increasing food insecurity, a known risk factor for maternal psychopathology.²⁷ These experiences exacerbate the psychological toll of pregnancy, labor, and childcare. This circumstance is especially true for women with a history of mental disorders, who are at a heightened risk of developing episodes following exposure to stressful life events.⁸

Furthermore, the preexisting gender disparity in mental disorders will likely worsen as a result

of the differential, deleterious impact of the pandemic on women in general and mothers in particular.²⁸ Women have historically been significantly more likely than men to be living in poverty, doing considerably more domestic and unpaid work, and providing the majority of care to children, the elderly, and the sick.²⁹ As COVID-19 swept the globe and lockdowns were instituted, this gender imbalance increased significantly, and women, particularly working mothers, have been taking on even more responsibilities at home to the detriment of their mental health.^{29,30} Although staying home protects people from infection, it can become at times an unsafe option for women. Countries have reported increases in domestic violence that range from 25% to 30% as communities went into lockdown.^{31–33} Critically, the lack of access to protective familial, community, and governmental networks due to social distancing measures may leave women without the social protections needed to flee a dangerous situation, hold their perpetrators accountable, or access the means for them and their children to survive after leaving their homes.³⁴ This situation is a human rights and health catastrophe since intimate partner violence, historically higher during the perinatal period, is associated with a range of adverse obstetric, maternal, and child outcomes.³⁵

Given the increase in the number and the impact of the determinants of maternal mental ill health, it is not surprising to see a subsequent rise in the prevalence rates of maternal psychopathology. In a systematic and meta-analytic review of maternal mental health studies during the COVID-19 pandemic, Yan and colleagues⁵ reported an upsurge in the prevalence rates of antepartum depression (8%–71%) and anxiety (11%–82%), as well as postpartum depression (15%–29%), surpassing prepandemic prevalence rates. Notably, the rates of psychopathology reported for the maternal population exceeded those of the general population and even the highly overburdened health care workers.^{5,36} Given the documented increases in the prevalence rates of maternal mental disorders and the heightened vulnerability of this population, it is vital to harness protections to mitigate the effects of the pandemic on pregnant and postpartum women.

■ LIFE DURING A PANDEMIC: THE PERFECT STORM OF HIGH STRESS AND LOW SUPPORT

A well-established protective factor against maternal mental morbidity is social support,³⁷ defined as

Many of the determinants of maternal psychopathology are exacerbated by the realities of life during the COVID-19 pandemic.

the comfort and assistance that persons receive from members of their social network “to help them cope with biological, psychological, and social stressors.”³⁸ There are various forms of social support that are beneficial to mothers, including emotional, informational, and instrumental support.³⁷ Social support is associated with lower rates of antepartum and postpartum depression and increased maternal self-efficacy.^{39–41} It also mitigates the effects of maternal depression on child outcomes, decreasing behavioral problems and the overall risk of mental disorders in children.⁴² Of critical importance, social support has a “buffering” effect on stressors. In fact, the more stressful a situation is, the more impactful social support will be.³⁷

However, as people navigate the “new normal” of living with social and movement restrictions, countries and community members are deciding what is considered “essential” and what can be forgone to ensure infection control. Frequently, that has meant restricting physical proximity at the expense of social connection. As a result, community support systems, from maternal support groups to breastfeeding and prenatal classes, and informal in-person support systems, such as visits from friends and relatives, are significantly less available to perinatal women. Even before the pandemic, aspects of motherhood could be lonely and isolating, especially for first-time mothers.^{43,44} These social networks were sources of aid, encouragement, and community that served as a lifeline for many women. However, during the pandemic, mothers are finding themselves without support when they most need it.

Moreover, women have to routinely engage with health care facilities before, during, and after childbirth. But, due to infection control measures instituted to reduce the spread of COVID-19 in health care settings, perinatal women are interacting with a medical system that lacks many of the support networks that existed prepandemic. A number of health care facilities globally, including many in HICs, have reduced prenatal visits and prohibited support persons, such as partners, from being present during prenatal appointments.^{45,46} During labor and delivery, many hospitals are banning doulas and support persons from attending births. After birth, some hospitals are limiting in-person lactation consultations, forbidding visitations from family and friends, and restricting parents and other helpers from visiting neonatal intensive care units.^{47,48} And, in LMICs, where mothers frequently report unsupportive birthing experiences in health facilities, including disrespectful, neglectful, and

abusive treatment from providers, their birth experience may worsen due to the pandemic-related burden on the health care systems.⁴⁹

■ **CHILDCARE DURING COVID-19: DIMINISHED SUPPORT NETWORKS**

Beyond their pregnancy, laboring, and birthing experience, numerous mothers will be spending their postpartum period in a radically restricted society in which they will have to limit their interactions to members of their own households. Globally, there are cultural social support practices that risk disruption, such as the postpartum recovery rituals found in many regions that require at-home support from female relatives and caregivers to ensure rest and recuperation for the new mother.⁵⁰ These practices have been consistently shown to provide instrumental, emotional, and informational support for the mother and to reduce the risk of postpartum depression.⁵¹ Moreover, social support can help mothers engage in activities that promote mental well-being, such as exercise and spending time outdoors.⁵²

Worldwide, many mothers rely on grandmothers to help with childcare, which has been shown to protect against parenting stress and maternal depression as well as improve child outcomes.^{41,53,54} However, many mothers are losing this vital source of support because of restricted visitation between households owing to social distancing mandates, especially those for older adults. In LMICs, where multigenerational households are typical, live-in grandparents are a source of much-needed support and reprieve for the mothers. However, live-in elders face an increased risk of infection when they share their home with family members who leave the house for work or food aid. Also, since they are more vulnerable to the effects of the infection, they disproportionately become sick or perish, leaving the household members bereaved and helpless. Therefore, the tension between benefits and costs associated with social support for mothers has become enormous during this pandemic.

In both high- and low-income regions, partner support is the most predictive of maternal mental and physical health outcomes, surpassing every other type of social support.^{8,55–58} In every stage of the perinatal journey, from pregnancy to postpartum, the partner’s involvement is central to maternal well-being and crucial to stress alleviation.^{58,59} Intimate partners are a vital source of emotional support, offering affection, reassurance, and encouragement to women as they

During the pandemic, mothers are finding themselves without support when they most need it.

The tension between benefits and costs associated with social support for mothers has become enormous during this pandemic.

Pandemic guidelines that do not account for the social support needs of perinatal women will have disproportionate psychological consequences on these women.

navigate the challenges of motherhood. They also provide instrumental support, including practical, financial, and most importantly, childcare support. With diminished help from outside the household due to COVID-19 restrictions, women need their partner's aid more than ever. Yet, numerous countries reported that despite a substantial increase in fathers' contributions to household duties during the pandemic, mothers were still shouldering most of the increased burden of childcare and housework.^{60–62}

Expectant and new working mothers have been experiencing substantial levels of psychological distress and morbidity during the pandemic, with a study revealing that as much as a third of pregnant working women are experiencing significant anxiety.⁵ Global studies have revealed that the disruption of childcare support within the home (i.e., domestic caregiver) as well as outside of the home (i.e., childcare centers) during the pandemic has had a disproportionate impact on working mothers.^{60,63,64} For instance, compared with working fathers, working mothers are 3 times as likely to be the only household member providing childcare.⁶⁴ Moreover, historically, whenever childcare has been unavailable or unaffordable, it is usually mothers who end up choosing to stay home, work part time, or quit their jobs.^{65–67} This pattern also seems to be the case during the current pandemic.⁶⁸ Furthermore, worldwide, women are 1.8 times as likely to lose their job due to COVID-19 as men, which increases the risk for maternal mental distress and psychopathology.⁶⁹ Therefore, the pandemic-induced childcare crisis and its resultant impact on maternal employment is one of the biggest threats to maternal well-being.

Among mothers struggling with lost childcare support, there are particularly vulnerable populations. For example, in LMICs, 64% to 90% of women work in the informal sector and do not have the economic stability to afford to not work to care for their infants.⁷⁰ In the past, this frequently meant that children were left home without adult supervision or that the mother brought her children to work with her,⁵⁴ both options that are especially dangerous during the coronavirus pandemic. The mental burden of working in unsafe conditions with little formal protections, coupled with the ambivalence of either leaving one's children unattended or exposing them to the pandemic's hazardous conditions, may put these women at an especially high risk for significant distress. For another vulnerable group, single mothers in both HICs and LMICs, who tend to rely on support from their family or community, social distancing rules

may result in enormous isolation and lack of support.⁷¹ Pandemic guidelines that do not account for the social support needs of perinatal women will have disproportionate psychological consequences on these especially vulnerable women.

■ CONSIDERATIONS FOR POLICY MAKERS

Many experts believe that COVID-19 and its effects will be around for some time and that even with the approval of multiple safe and effective vaccines, the pandemic will not end abruptly.^{72,73} Further, in LMICs, widespread availability of vaccines may not be possible until 2023.⁷⁴ At the beginning of this crisis, a core mitigation strategy was for everyone to stay at home and everything that was deemed not essential be closed or banned.⁷⁵ However, a public health strategy that may be appropriate for an acute crisis that will resolve in the short term may not be realistic or feasible for a crisis that will continue for some time. Now, a year into this pandemic⁷⁶:

people are seeking social contact not out of selfishness but because, like going to the grocery store, human connection is an essential activity.

During the COVID-19 pandemic, nationwide public health guidelines, such as 24-hour lockdowns, that did not consider the needs of the maternal population, led to catastrophic consequences, including maternal deaths and stillbirths.^{77,78} These incidents suggest a dangerous parallel to prior epidemics in which maternal and neonatal deaths indirectly caused by the epidemic surpassed the number of deaths directly caused by the infection.⁷⁹ Therefore, a need exists to alter COVID-19-related policies and practices of health and social care systems to become more inclusive of the needs of mothers, including their increased need for social support. Policy makers need to engage and empower mothers as well as the associated professional communities to voice their needs, inform, and participate in the policy formulation process. Participatory policy-making practices increase transparency and accountability, and will help ensure the creation of policies that are better informed of maternal needs during the pandemic.⁸⁰

Further, we recommend that policies implement a “harm reduction” approach to social interactions rather than the “abstinence-only” approach that was initially adopted during the pandemic.⁸¹ Rather than perceiving risk as all or nothing, a harm reduction approach to public health policies is based on the understanding that risk is not binary

A harm reduction approach to public health policies is based on the understanding that risk is not binary and that the risk of an action should be compared against its benefits.

and that the risk of action should be compared against its benefits as well as the risk of inaction.^{81,82} The transmission dynamics of COVID-19 and their multiple impacts on people, while not fully known, are better understood now than at the start of the pandemic.⁸³ As a result, infection control guidelines, such as recommending that everyone wear masks, have developed to reflect the latest empirical evidence. Similarly, policies and programs that impact the provision of social support for perinatal women need to be continuously informed by and consistently updated to reflect the newest research findings.

The following key considerations may guide policies that aim to be inclusive of maternal social support needs..

Prioritize Safe Access to Support Services

- Ensure that any social support activity that could be done outdoors (e.g., support groups; and breastfeeding, prenatal, and parenting classes) is not banned given that the risk of COVID-19 transmission outdoors is significantly lower than indoors.⁸⁴ These activities should include infection prevention strategies (e.g., social distancing, routine disinfecting, mask-wearing, and respiratory hygiene).
- Ensure perinatal women have access to remote mental health and social support services (e.g., support groups, psychological/psychiatric services, and counseling for gender-based violence), which may be via internet or mobile technology—the latter being much more common in LMICs.^{85–87}
- Ensure active outreach is available, because many mothers may be reluctant, unable, or unwilling to reach out for help. For example, midwives, community health workers, and women's protection officers around the world have stepped in during this pandemic to reach out to mothers and ensure their well-being.^{88,89} Outreach may be done via mobile and internet technologies or safe in-person meetings.
- Offer safe options of in-person support for pregnant and postpartum women, including at-home for women who are quarantining at home to reduce their own or their newborn's risk of contracting COVID-19, especially if they or their infants are in an at-risk category (e.g., chronic lung disease, diabetes, cancer, or cardiovascular disease). For in-person services, the health and safety of the providers (i.e., community health workers; midwives; mental

health counselors; and perinatal health care providers, such as doulas and breastfeeding consultants) must be prioritized as they provide this highly beneficial support to mothers.^{90,91} Safety protocols should include access to vaccines (if available), routine COVID-19 testing, and personal protective equipment for the support providers.

Support the Safe Continuation of Childcare and Schooling

- Prioritize safe ways for childcare services to remain open^{92,93} or propose innovative alternatives for specific populations, such as infants and older children of essential workers or expectant and new mothers.⁹⁴
- Provide safe options for children to receive their education in person, especially when community COVID-19 transmission rates are low. Infection prevention strategies that can be implemented to ensure a safe school environment may include ensuring access to COVID-19 testing and vaccines, as well as access to personal protective equipment for school staff; requiring physical distancing between individuals; performing routine disinfection; mandating mask wearing; encouraging respiratory hygiene; reducing school hours; reducing classroom sizes; using outdoor classrooms; and alternating attendance days for groups of students.
- Prioritize governmental investment in supported isolation and quarantine,⁹⁵ such as providing alternative living arrangements for infected individuals living in crowded or multigenerational homes. Multigenerational homes are vital sources of support for new mothers, and safeguarding these environments is crucial for the physical and mental health of the whole family.

Ensure Positive Health Care Interactions and Birth Experience

- Commit to having a safe environment for childbirth to reduce potential harm on mother and infant due to direct and indirect effects of COVID-19, which includes ensuring that laboring women get tested for COVID-19 when they are admitted to the hospital and have personal protective equipment during their hospital stay.
- Safeguard a mother's right to a "positive birth experience,"⁹⁶ which includes being "assisted

Policies and programs that impact providing social support for perinatal women need to be consistently updated to reflect the newest research findings.

by a kind and technically competent health care provider.” Support provided by health care providers is very beneficial to laboring women, and this is especially important because of the restrictions on other types of intrapartum support for laboring women due to COVID-19 restrictions.⁹⁷

- Prioritize the safe presence of a support person during health care visits throughout the perinatal period, especially during labor, given its established importance for positive maternal outcomes.⁸⁷ This includes ensuring that the support person has access to COVID-19 testing and personal protective equipment during the delivery to safeguard the mother, infant, support person, and health care workers.

CONCLUSION

The coronavirus pandemic has shed light on the irrefutable mental health repercussions of global crises. Crucially, this pandemic highlighted the detrimental effects of overlooking vulnerable populations when developing crisis mitigation strategies. Therefore, as we continue to navigate the current emergency, it is vital to ensure that mothers and their families are able to receive the highest level of support safely possible as they manage these severe adversities. It is imperative that we prioritize the maternal population in COVID-19 policies, regulations, and recommendations to prevent harmful consequences that may surpass the effects of the crisis itself. Moreover, as we look on to the future after the pandemic, we ought to “build back better,” integrating the lessons we learned and innovations we discovered to ensure that we are better prepared for the next crisis. Given climate change, increased state fragility leading to the highest rates ever of forcibly displaced persons (the majority of whom are women and children), and the documented rise in infectious diseases, the lessons learned during this pandemic are critical for the protection of expectant and new mothers.

Author contributions: AA and DA conceptualized initial idea and framework; HV revised the initial idea; AA and DA searched literature and wrote first draft; SW and HV reframed paper and recommendations; AA and DA completed additional literature searches for subsequent drafts; and AA wrote all subsequent drafts and incorporated other authors’ edits. All authors provided comments and feedback on every draft.

Competing interests: HV reports grants from the U.S. Agency for International Development, grants from National Institute for Health Research (Research and Innovation for Global Health Transformation), grants from Eleanor Crook Foundation, and grants from Global Challenges Research Fund (R4HC-MENA), outside the submitted work. All other authors declare no competing interests.

REFERENCES

1. Mak IWC, Chu CM, Pan PC, Yiu MGC, Chan VL. Long-term psychiatric morbidities among SARS survivors. *Gen Hosp Psychiatry*. 2009;31(4):318–326. [CrossRef](#). [Medline](#)
2. Shultz JM, Althouse BM, Baingana F, et al. Fear factor: the unseen perils of the Ebola outbreak. *Bull At Sci*. 2016;72(5):304–310. [CrossRef](#). [Medline](#)
3. Topalidou A, Thomson G, Downe S. Covid-19 and maternal and infant health: are we getting the balance right? A rapid scoping review. *The Practising Midwife*. 2020;23(7):36–45.
4. Zhu QY, Huang DS, Lv JD, Guan P, Bai XH. Prevalence of perinatal depression among HIV-positive women: a systematic review and meta-analysis. *BMC Psychiatry*. 2019;19(1):330. [CrossRef](#). [Medline](#)
5. Yan H, Ding Y, Guo W. Mental health of pregnant and postpartum women during the coronavirus disease 2019 pandemic: a systematic review and meta-analysis. *Front Psychol*. 2020;11:617001. [CrossRef](#). [Medline](#)
6. Hessami K, Romanelli C, Chiurazzi M, Cozzolino M. COVID-19 pandemic and maternal mental health: a systematic review and meta-analysis. *J Matern Fetal Neonatal Med*. 2020;1–8. [CrossRef](#). [Medline](#)
7. Taylor S. *The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease*. Cambridge Scholars Publishing; 2019.
8. Yim IS, Tanner Stapleton LR, Guardino CM, Hahn-Holbrook J, Dunkel Schetter C. Biological and psychosocial predictors of postpartum depression: systematic review and call for integration. *Annu Rev Clin Psychol*. 2015;11(1):99–137. [CrossRef](#). [Medline](#)
9. Furtado M, Chow CHT, Owais S, Frey BN, Van Lieshout RJ. Risk factors of new onset anxiety and anxiety exacerbation in the perinatal period: a systematic review and meta-analysis. *J Affect Disord*. 2018;238:626–635. [CrossRef](#). [Medline](#)
10. Evans J, Heron J, Francomb H, Oke S, Golding J. Cohort study of depressed mood during pregnancy and after childbirth. *BMJ*. 2001;323(7307):257–260. [CrossRef](#). [Medline](#)
11. Marcus SM, Flynn HA, Blow FC, Barry KL. Depressive symptoms among pregnant women screened in obstetrics settings. *J Womens Health (Larchmt)*. 2003;12(4):373–380. [CrossRef](#). [Medline](#)
12. Campbell SB, Cohn JF. Prevalence and correlates of postpartum depression in first-time mothers. *J Abnorm Psychol*. 1991;100(4):594–599. [CrossRef](#). [Medline](#)
13. O’Hara MW, Swain AM. Rates and risk of postpartum depression—a meta-analysis. *Int Rev Psychiatry*. 1996;8(1):37–54. [CrossRef](#)
14. Gelaye B, Rondon MB, Araya R, Williams MA. Epidemiology of maternal depression, risk factors, and child outcomes in low-income and middle-income countries. *Lancet Psychiatry*. 2016;3(10):973–982. [CrossRef](#). [Medline](#)
15. Dennis CL, Falah-Hassani K, Shiri R. Prevalence of antenatal and postnatal anxiety: Systematic review and meta-analysis. *Br J Psychiatry*. 2017;210(5):315–323. [CrossRef](#). [Medline](#)
16. Figueiredo B, Conde A. Anxiety and depression in women and men from early pregnancy to 3-months postpartum. *Arch Women Ment Health*. 2011;14(3):247–255. [CrossRef](#). [Medline](#)
17. Keeton CP, Perry-Jenkins M, Sayer AG. Sense of control predicts depressive and anxious symptoms across the transition to parenthood. *J Fam Psychol*. 2008;22(2):212–221. [CrossRef](#). [Medline](#)
18. Shi SX, Tang YF Shi SX, Tang YF, Cheng LN. An investigation of the prevalence of anxiety or depression and related risk factors in women with pregnancy and postpartum. [*Chinese Mental Health Journal*]. 2007;21(4):254–258.
19. Edhborg M, Nasreen HE, Kabir ZN. Impact of postpartum depressive and anxiety symptoms on mothers’ emotional tie to their infants 2–3

- months postpartum: a population-based study from rural Bangladesh. *Arch Women Ment Health*. 2011;14(4):307–316. [CrossRef](#). [Medline](#)
20. Fuhr DC, Calvert C, Ronsmans C, et al. Contribution of suicide and injuries to pregnancy-related mortality in low-income and middle-income countries: a systematic review and meta-analysis. *Lancet Psychiatry*. 2014;1(3):213–225. [CrossRef](#). [Medline](#)
 21. Cantwell R, Clutton-Brock T, Cooper G, et al. Saving Mothers' Lives: reviewing maternal deaths to make motherhood safer: 2006–2008. *BJOG*. 2011;118(Suppl 1):1–203. [CrossRef](#). [Medline](#)
 22. Stein A, Pearson RM, Goodman SH, et al. Effects of perinatal mental disorders on the fetus and child. *Lancet*. 2014;384(9956):1800–1819. [CrossRef](#). [Medline](#)
 23. Avan B, Richter LM, Ramchandani PG, Norris SA, Stein A. Maternal postnatal depression and children's growth and behaviour during the early years of life: exploring the interaction between physical and mental health. *Arch Dis Child*. 2010;95(9):690–695. [CrossRef](#). [Medline](#)
 24. Doyle FL, Klein L. Postnatal depression risk factors: an overview of reviews to inform COVID-19 research, clinical, and policy priorities. *Frontiers in Global Women's Health*. 2020;1:577273. [CrossRef](#)
 25. Corbett GA, Milne SJ, Hehir MP, Lindow SW, O'Connell MP. Health anxiety and behavioural changes of pregnant women during the COVID-19 pandemic. *Eur J Obstet Gynecol Reprod Biol*. 2020;249:96–97. [CrossRef](#). [Medline](#)
 26. Ali NA, Shahil Feroz A. Maternal mental health amidst the COVID-19 pandemic. *Asian J Psychiatr*. 2020;54:102261. [CrossRef](#). [Medline](#)
 27. Huddleston-Casas C, Charnigo R, Simmons LA. Food insecurity and maternal depression in rural, low-income families: a longitudinal investigation. *Public Health Nutr*. 2009;12(8):1133–1140. [CrossRef](#). [Medline](#)
 28. Yu S. Uncovering the hidden impacts of inequality on mental health: a global study. *Transl Psychiatry*. 2018;8(1):98. [CrossRef](#). [Medline](#)
 29. United Nations Women. *Policy Brief: The Impact of COVID-19 on Women*. United Nations; 2020. Accessed March 12, 2021. <https://asiapacific.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/policy-brief-the-impact-of-covid-19-on-women-en.pdf>
 30. Cox J. New research shows Covid-19's impact on gender inequality and mothers' mental health. *Forbes*. July 20, 2020. Accessed March 12, 2021. <https://www.forbes.com/sites/josiecox/2020/07/30/covid-19-gender-equality-mental-health-working-mothers-flexible-working/>
 31. Sánchez OR, Vale DB, Rodrigues L, Surita FG. Violence against women during the COVID-19 pandemic: an integrative review. *Int J Gynaecol Obstet*. 2020;151(2):180–187. [CrossRef](#). [Medline](#)
 32. Javed S, Mehmood Y. No lockdown for domestic violence during COVID-19: a systematic review for the implication of mental-well being. *Life Sci*. 2020;1(suppl):96–101. [CrossRef](#)
 33. UN Women. *COVID-19 and Ending Violence Against Women and Girls*. United Nations; 2020. Accessed March 12, 2021. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/issue-brief-covid-19-and-ending-violence-against-women-and-girls-en.pdf>
 34. Thibaut F, van Wijngaarden-Cremers PJM. Women's mental health in the time of Covid-19 pandemic. *Frontiers in Global Women's Health*. 2020;1:588372. [CrossRef](#)
 35. Hahn CK, Gilmore AK, Aguayo RO, Rheingold AA. Perinatal intimate partner violence. *Obstet Gynecol Clin North Am*. 2018;45(3):535–547. [CrossRef](#). [Medline](#)
 36. Krishnamoorthy Y, Nagarajan R, Saya GK, Menon V. Prevalence of psychological morbidities among general population, healthcare workers and COVID-19 patients amidst the COVID-19 pandemic: a systematic review and meta-analysis. *Psychiatry Res*. 2020;293:113382. [CrossRef](#). [Medline](#)
 37. Milgrom J, Hirshler Y, Reece J, Holt C, Gemmill AW. Social support—a protective factor for depressed perinatal women? *Int J Environ Res Public Health*. 2019;16(8):1426. [CrossRef](#). [Medline](#)
 38. Social Support. American Psychological Association website. Accessed March 12, 2021. <https://dictionary.apa.org/social-support>
 39. Beck CT. Predictors of postpartum depression: an update. *Nurs Res*. 2001;50(5):275–285. [CrossRef](#). [Medline](#)
 40. Biaggi A, Conroy S, Pawlby S, Pariante CM. Identifying the women at risk of antenatal anxiety and depression: a systematic review. *J Affect Disord*. 2016;191:62–77. [CrossRef](#). [Medline](#)
 41. Leahy-Warren P, McCarthy G, Corcoran P. Postnatal depression in first-time mothers: prevalence and relationships between functional and structural social support at 6 and 12 weeks postpartum. *Arch Psychiatr Nurs*. 2011;25(3):174–184. [CrossRef](#). [Medline](#)
 42. Loureiro SR, Silva APC. Analysis of studies on social support and children of depressed mothers: a systematic review. *Paidéia (Ribeirão Preto)*. 2014;24(59):397–405. [CrossRef](#)
 43. Samuel Centre for Social Connectedness. Never alone but always lonely: the social isolation of being a new mother. Samuel Centre for Social Connectedness; 2019. Accessed March 12, 2021. <https://www.socialconnectedness.org/never-alone-but-always-lonely-the-social-isolation-of-being-a-new-mother/>
 44. Luscombe B. “You feel trapped and overwhelmed”: mothers understood isolation before the pandemic. *Time*. May 8, 2020. Accessed March 12, 2021. <https://time.com/5832733/motherhood-isolation-photos/>
 45. Michigan Medicine. Prenatal care during the COVID-19 pandemic: prenatal patient resources. Accessed March 12, 2021. <https://medicine.umich.edu/dept/obgyn/patient-care/prenatal-care-during-covid-19-pandemic-prenatal-patient-resources>
 46. Royal College of Obstetricians & Gynecologists. *Guidance for Antenatal and Postnatal Services in the Evolving Coronavirus (COVID-19) Pandemic*. Royal College of Obstetricians & Gynecologists; 2020. Accessed March 12, 2021. <https://www.rcog.org.uk/globalassets/documents/guidelines/2020-07-10-guidance-for-antenatal-and-postnatal.pdf>
 47. Furlow B. US NICUs and donor milk banks brace for COVID-19. *Lancet Child Adolesc Health*. 2020;4(5):355. [CrossRef](#). [Medline](#)
 48. Lee V. Childbirth in a time of Covid-19: online doulas and virtual lactation consultations. *The Straits Times*. April 25, 2020. Accessed March 12, 2021. <https://www.straitstimes.com/lifestyle/childbirth-in-a-time-of-covid-19-online-doulas-and-virtual-lactation-consultations>
 49. Afulani PA, Phillips B, Aborigo RA, Moyer CA. Person-centred maternity care in low-income and middle-income countries: analysis of data from Kenya, Ghana, and India. *Lancet Glob Health*. 2019;7(1):e96–e109. [CrossRef](#). [Medline](#)
 50. Dennis CL, Fung K, Grigoriadis S, Robinson GE, Romans S, Ross L. Traditional postpartum practices and rituals: a qualitative systematic review. *Womens Health (Lond Engl)*. 2007;3(4):487–502. [CrossRef](#). [Medline](#)
 51. Robertson E, Grace S, Wallington T, Stewart DE. Antenatal risk factors for postpartum depression: a synthesis of recent literature. *Gen Hosp Psychiatry*. 2004;26(4):289–295. [CrossRef](#). [Medline](#)
 52. Davenport MH, Meyer S, Meah VL, Strynadka MC, Khurana R. Moms are not ok: COVID-19 and maternal mental health. *Frontiers in Global Women's Health*. 2020;1:1. [CrossRef](#)
 53. Samman E, Presler-Marshall E, Jones N, et al. *Women's Work: Mothers, Children and the Global Childcare Crisis*. Overseas Development Institute; 2016. Accessed March 12, 2021. <https://odi.org/en/publications/womens-work-mothers-children-and-the-global-childcare-crisis/>

54. Chung EO, Hagaman A, LeMasters K, et al. The contribution of grandmother involvement to child growth and development: an observational study in rural Pakistan. *BMJ Glob Health*. 2020;5(8):e002181. [CrossRef](#). [Medline](#)
55. Gardner KA, Cutrona CE. Social support communication in families. In: Vangelisti AL, ed. *Handbook of Family Communication*. Lawrence Erlbaum & Associates; 2004:495–512.
56. Campbell SB, Cohn JF, Flanagan C, Popper S, Meyers T. Course and correlates of postpartum depression during the transition to parenthood. *Dev Psychopathol*. 1992;4(1):29–47. [CrossRef](#)
57. O'Hara MW. Social support, life events, and depression during pregnancy and the puerperium. *Arch Gen Psychiatry*. 1986;43(6):569–573. [CrossRef](#). [Medline](#)
58. Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes: systematic review and meta-analysis. *J Epidemiol Community Health*. 2015;69(6):604–612. [CrossRef](#). [Medline](#)
59. Racine N, Plamondon A, Hentges R, Tough S, Madigan S. Dynamic and bidirectional associations between maternal stress, anxiety, and social support: the critical role of partner and family support. *J Affect Disord*. 2019;252:19–24. [CrossRef](#). [Medline](#)
60. Andrew A, Cattani S, Costa Dias M, et al. *How Are Mothers and Fathers Balancing Work and Family Under Lockdown*. Institute for Fiscal Studies; 2020. Accessed March 12, 2021. <https://www.ifs.org.uk/uploads/BN290-Mothers-and-fathers-balancing-work-and-life-under-lockdown.pdf>
61. Deshpande A. Did Indian men do more housework during lockdown? It depends. *HuffPost*. July 28, 2020. Accessed March 12, 2021. https://www.huffpost.com/archive/in/entry/indian-men-housework-lockdown_in_5f201d9bc5b6945e6e3fe80e
62. Farré L, Fawaz Y, González L, Graves J. *How the COVID-19 Lockdown Affected Gender Inequality in Paid and Unpaid Work in Spain*. IZA Institute of Labor Economics; 2020. Accessed March 12, 2021. <http://ftp.iza.org/dp13434.pdf>
63. Mathur N. Nearly 50% of India's working women more stressed due to pandemic: LinkedIn. *Mint*. September 10, 2020. Accessed March 12, 2021. <https://www.livemint.com/companies/news/nearly-50-of-india-s-working-women-more-stressed-due-to-pandemic-linkedin-11599722943378.html>
64. Zammaro G, Prados MJ. Gender differences in couples' division of childcare, work and mental health during COVID-19. *Rev Econ Househ*. 2021;16:1–30. [Medline](#)
65. Chun H, Oh J. An instrumental variable estimate of the effect of fertility on the labour force participation of married women. *Appl Econ Lett*. 2002;9(10):631–634. [CrossRef](#)
66. Lokshin MM, Glinskaya E, Garcia M. The effect of early childhood development programs on women's labor force participation and older children's schooling in Kenya. The World Bank; 2000. Accessed March 12, 2021. <https://openknowledge.worldbank.org/bitstream/handle/10986/21441/wps2376.pdf>
67. Madurawala DS. Labour force participation of women in child-bearing ages, Sri Lanka. *Sri Lanka J Popul Stud*. 2009;11:1–38.
68. Hinchliffe E. 14% of women considered quitting their jobs because of the coronavirus pandemic. *Fortune*. April 23, 2020. Accessed March 12, 2021. <https://fortune.com/2020/04/23/coronavirus-women-should-i-quit-my-job-covid-19-childcare/>
69. Madgavkar A, White O, Krishnan M, Mahajan D, Azcue X. COVID-19 and gender equality: countering the regressive effects. McKinsey Global Institute; 2020. Accessed March 12, 2021. <https://www.mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-countering-the-regressive-effects#>
70. Bonnet F, Vanek J, Chen M. *Women and Men in the Informal Economy: A Statistical Brief*. WIEGO; 2019. Accessed March 12, 2021. https://www.ilo.org/wcmsp5/groups/public/-ed_protect/-protrav/-travail/documents/publication/wcms_711798.pdf
71. Armstrong M. The Hidden impact of Covid-19 on single motherhood. Discovery Society. April 18, 2020. Accessed March 12, 2021. <https://discoversociety.org/2020/04/18/the-hidden-impact-of-covid-19-on-single-motherhood/>
72. Scudellari M. How the pandemic might play out in 2021 and beyond. *Nature website*. August 20, 2020. Accessed March 12, 2021. <https://www.nature.com/articles/d41586-020-02278-5>
73. Andrew S. More than 130 countries don't have a single Covid-19 vaccine, while 10 countries have already dispersed 75% of all vaccines, the UN says. *CNN*. February 18, 2021. Accessed March 12, 2021. <https://www.cnn.com/2021/02/18/world/united-nations-130-countries-no-vaccine-trnd/index.html>
74. More than 85 poor countries will not have widespread access to coronavirus vaccines before 2023. The Economist Intelligence Unit (EIU). January 27, 2021. Accessed March 12, 2021. <https://www.eiu.com/n/85-poor-countries-will-not-have-access-to-coronavirus-vaccines/>
75. Marcus J. Quarantine fatigue is real. *The Atlantic*. May 11, 2020. Accessed March 12, 2021. <https://www.theatlantic.com/ideas/archive/2020/05/quarantine-fatigue-real-and-shaming-people-wont-help/611482/>
76. Marcus J. The fun police should stand down. *The Atlantic*. May 11, 2020. Accessed March 12, 2021. <https://www.theatlantic.com/ideas/archive/2020/08/containing-the-pandemic-isnt-a-job-for-cops/615298/>
77. Biryabarema E. In Uganda, mothers in labour die amidst coronavirus lockdown. *U.S. News*. April 9, 2020. Accessed March 12, 2021. <https://www.usnews.com/news/world/articles/2020-04-09/in-uganda-mothers-in-labour-die-amidst-coronavirus-lockdown>
78. Bisht R, Sarma J, Saharia R. COVID-19 lockdown: guidelines are not enough to ensure pregnant women receive care. *The Wire*. May 8, 2020. Accessed March 12, 2021. <https://thewire.in/women/covid-19-lockdown-pregnant-women-childbirth>
79. Jones SA, Gopalakrishnan S, Ameh CA, White S, van den Broek NR. 'Women and babies are dying but not of Ebola': the effect of the Ebola virus epidemic on the availability, uptake and outcomes of maternal and newborn health services in Sierra Leone. *BMJ Glob Health*. 2016;1(3):e000065. [CrossRef](#). [Medline](#)
80. Rietbergen-McCracken J. *Participatory Policy Making*. World Alliance for Citizen Participation; 2017. Accessed March 12, 2021. http://www.civicus.org/documents/toolkits/PGX_F_ParticipatoryPolicy%20Making.pdf
81. Kutscher E, Greene RE. A harm-reduction approach to coronavirus disease 2019 (COVID-19)—safer socializing. *JAMA Health Forum*. June 2, 2020. Accessed March 12, 2021. [CrossRef](#)
82. Klein E. How to think about coronavirus risk in your life. *Vox Website*. Accessed March 18, 2021. <https://www.vox.com/2020/9/10/21430547/covid-19-julia-marcus-the-ezra-klein-show-outside-inside-risk>
83. Cevik M, Marcus JL, Buckee C, Smith TC. SARS-CoV-2 transmission dynamics should inform policy. *Clin Infect Dis*. 2020;ciaa1442. [CrossRef](#). [Medline](#)
84. Nishiura H, Oshitani H, Kobayashi T, et al. Closed environments facilitate secondary transmission of coronavirus disease 2019 (COVID-19). Preprint. Posted online April 16, 2020. medRxiv. [CrossRef](#)
85. Demand for counselling services spikes in Palestine amid COVID-19 lockdown. United Nations Population Fund; 2020. Accessed March 12, 2021. <https://www.unfpa.org/news/demand-counselling-services-spikes-palestine-amid-covid-19-lockdown>
86. Wind TR, Rijkeboer M, Andersson G, Riper H. The COVID-19 pandemic: the 'black swan' for mental health care and a turning point for e-health. *Internet Interv*. 2020;20:100317. [CrossRef](#). [Medline](#)

87. Gjerdingen DK, Froberg DG, Fontaine P. The effects of social support on women's health during pregnancy, labor and delivery, and the postpartum period. *Fam Med*. 1991;23(5):370–375. [Medline](#)
88. In their words: community health workers fight Covid-19. Action Against Hunger. Accessed March 12, 2021. <https://www.actionagainsthunger.org.uk/blog/their-words-community-health-workers-fight-covid-19>
89. United Nations Regional Information Centre (UNRIC). Pregnant women are worried about giving birth during the pandemic. Midwives are stepping up to support them – from afar. UNRIC; 2020. Accessed March 12, 2021. <https://unric.org/en/pregnant-women-are-worried-about-giving-birth-during-the-pandemic-midwives-are-stepping-up-to-support-them-from-afar/>
90. Kozhimannil KB, Vogelsang CA, Hardeman RR, Prasad S. Disrupting the pathways of social determinants of health: doula support during pregnancy and childbirth. *J Am Board Fam Med*. 2016;29(3):308–317. [CrossRef](#). [Medline](#)
91. Patel S, Patel S. The effectiveness of lactation consultants and lactation counselors on breastfeeding outcomes. *J Hum Lact*. 2016;32(3):530–541. [CrossRef](#). [Medline](#)
92. Centers for Disease Control and Prevention (CDC). Guidance for operating child care programs during COVID-19. CDC; 2020. Accessed March 12, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/guidance-for-childcare.html>
93. United Kingdom. Department for Education. Guidance. Safe working in education, childcare and children's social care settings, including the use of personal protective equipment (PPE). Accessed March 12, 2021. <https://www.gov.uk/government/publications/safe-working-in-education-childcare-and-childrens-social-care/safe-working-in-education-childcare-and-childrens-social-care-settings-including-the-use-of-personal-protective-equipment-ppe>
94. Covid-19 coronavirus: government will fund home-based childcare for essential workers. NZ Herald. March 24, 2020. Accessed March 12, 2021. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12319791
95. Stokel-Walker C. Covid-19: why test and trace will fail without support for self-isolation. *BMJ*. 2021;372:n327. [CrossRef](#). [Medline](#)
96. World Health Organization (WHO). *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*. WHO; 2016. Accessed March 12, 2021. <https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf>
97. Olde E, Vanderhart O, Kleber R, Vanson M. Posttraumatic stress following childbirth: a review. *Clin Psychol Rev*. 2006;26(1):1–16. [CrossRef](#). [Medline](#)

Peer Reviewed

Received: August 10, 2020; **Accepted:** March 2, 2021; **First published online:** April 23, 2021.

Cite this article as: Alhomaizi A, Alhomaizi D, Willis S, Verdelli H. Social distancing in the Era of COVID-19: a call for maintaining social support for the maternal population. *Glob Health Sci Pract*. 2021;9(2):229-237. <https://doi.org/10.9745/GHSP-D-20-00398>

© Alhomaizi et al. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are properly cited. To view a copy of the license, visit <https://creativecommons.org/licenses/by/4.0/>. When linking to this article, please use the following permanent link: <https://doi.org/10.9745/GHSP-D-20-00398>
