



Embodiment of sociopolitical stress during pregnancy and coping strategies among perinatal Filipina women

Kristine J. Chua^{a,b,*}, Kiersten R.M. Reyes^c, Zoe Pamonag^d, M. Claire Art^e, Lia L. Francisco^f, Abigail W. Bigham^g

^a Department of Anthropology, University of Notre Dame, Indiana, USA

^b Eck Institute for Global Health, University of Notre Dame, Indiana, USA

^c Joe C. Wen School of Population & Public Health, University of California Irvine, California, USA

^d Department of International Health, Johns Hopkins Bloomberg School of Public Health, Maryland, USA

^e Department of Anthropology, University of California, Santa Barbara, California, USA

^f College of Commerce and Business Administration, University of Santo Tomas, Manila, Philippines

^g Department of Anthropology, University of California, Los Angeles, California, USA

ARTICLE INFO

Keywords:

Sociopolitical stress
Pregnancy
Embodiment
Coping strategies
Agency
Philippines

ABSTRACT

Fear and uncertainty surrounding contemporary sociopolitical environments are emerging as global concerns for maternal and fetal health. However, limited research has examined how pregnant individuals perceive and embody these conditions and their implications for health. We focus on the Philippines, a country marked by intense State violence, to explore how fraught sociopolitical environments shape the impacts of stress during pregnancy among Filipina women. Through the lens of embodiment, this study investigates how perinatal women perceive sociopolitical stress and the coping strategies they employ to manage these stressors. We interviewed 21 pregnant and recently pregnant Filipina women across multiple regions of the Philippines. Participants reflected on their experiences of the current political climate and its perceived impact on their pregnancies. We found that stress arises from an interplay of everyday and sociopolitical stressors, and that awareness of and interaction with Filipino news and media contributed to levels of perceived stress. Using thematic analyses, we identified two primary forms of agentive coping strategies aimed at mitigating potential harm. These themes were (1) reframing stress (i.e., community viewing, familial support, humor); and (2) exercising agency through political apathy (i.e., disengagement, *bahala na*, avoidance, silence). This is one of the first studies to examine how perinatal women navigate and manage the embodied effects of sociopolitical stress. Our findings highlight the importance of considering sociopolitical contexts in shaping maternal health during pregnancy.

1. Introduction

The sociopolitical environment is deeply personal. It affects our future, safety, health, and well-being of our families. In recent years, we have witnessed the everchanging sociopolitical landscape become more violent, uncertain, and fear-inducing (World Economic Forum, 2026). Global trends point to increased levels of sociopolitical stress—or the stress associated with exposure to or involvement in intense social, political, and/or economic events—widening existing inequities across gender, age, and class (Canaletti et al., 2026). The biological impacts of sociopolitical stressors can manifest in a range of psychological and

physiological outcomes including anger, frustration, and isolation from social networks due to differing viewpoints (e.g., Hooghe and Dassonneville, 2018; Hoyt et al., 2018; Waldinger, 2018; Zeiders et al., 2020) as well as increased risk of acute cardiovascular disease and increased death rates (Chatterjee et al., 2025; Mefford et al., 2020). Sociopolitical stress also may negatively impact maternal and fetal health during pregnancy, with potentially lasting consequences. Growing evidence reports an association between criminalizing immigration policies with elevated levels of maternal pregnancy-related anxiety among ethnic minorities in the U.S., as well as higher rates of preterm birth—one of the leading causes of infant mortality and risk

* Corresponding author. Department of Anthropology, University of Notre Dame, Indiana, USA.

E-mail addresses: kchua2@nd.edu (K.J. Chua), kierster@uci.edu (K.R.M. Reyes), zpamonag@gmail.com (Z. Pamonag), mcart2024@gmail.com (M.C. Art), Franciscolia71@gmail.com (L.L. Francisco), awbigham@ucla.edu (A.W. Bigham).

<https://doi.org/10.1016/j.socscimed.2026.119573>

Received 2 November 2025; Received in revised form 25 June 2026; Accepted 6 July 2026

Available online 10 July 2026

0277-9536/© 2026 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

factor for cardiovascular disease and neurological disorders in adulthood (Blencowe et al., 2013; Gemmill et al., 2019, 2020; Goldenberg et al., 2008; Ohuma et al., 2023; Perin et al., 2022; Sudhinaraset et al., 2021; Torche and Sirois, 2019; Wiley et al., 2023). Nevertheless, these associations stop short of identifying how social and cultural factors influence the experience of stress or shape the individual stress responses.

In this paper, we investigate how sociopolitical stress is internalized and interpreted in addition to how cultural practices reveal the strategies perinatal women employ to manage stress. To do so, we draw from embodiment theory (Scheper-Hughes and Lock, 1987) as our guiding theoretical framework wherein Scheper-Hughes and Lock challenged earlier notions of the body as simply biological fact by introducing the concept of “three bodies,” the individual, the social, and the political. Together, they form a heuristic suggesting that mind/body together are shaped by sociopolitical structures, and that sociopolitical structures lead to the systemic inequalities that become incorporated in individual bodies throughout the life course, shaping collective health.

We conceptualize embodiment as the dynamic process through which sociopolitical environments, cultural values, and stress responses interact during pregnancy to influence maternal agency and the tactics mothers employ to protect their bodies and pregnancies. We define cultural values as shared beliefs about resilience, emotional apathy, and agency within the context of the Philippines. These all shape how Filipina mothers navigate exposure to unpredictable administrative policies and social relationships affecting their bodies and pregnancies. In this framing, embodiment enables us to understand how the interactions between the environment, culture, and the body shape experiences of stress and stress relief during the perinatal period. We focus here on the embodiment of maternal stress, as how mothers respond and cope with sociopolitical stress is an increasingly critical topic in today's political milieu. Yet, it is not well understood. This is important as human health and illness cannot be treated identically and depend on a range of factors that are unique to individual experiences (Lock, 2017; Niewöhner and Lock, 2018).

1.1. The Philippines

The Philippines is a prime location for learning about maternal stress and its impact on pregnancy. About 15.5% of its population, or 17.5 million residents, live below the poverty level. While efforts to narrow inequality have brought the Gini index below 40% for the first time in 2023, the Philippines remains one of the most unequal countries in the region. Inequalities manifest in an uneven distribution of opportunities, public aid, and overall well-being (World Bank, 2025). For people living in poverty, most of their income goes to basic necessities such as food, shelter, and electricity, leaving very little for healthcare.

The healthcare system also has a variety of systemic challenges including policy implementation, access, and corruption. The Philippines operates on a dual public-private healthcare system. The public sector, overseen by the Department of Health (DOH), is tax-funded, while the private sector is profit-driven and lacks centralized regulation (Leyso and Umezaki, 2024). Sixty-four percent of the hospitals in the Philippines are private, which contributes to limited access to healthcare facilities and quality services for the poorest communities (Ramos, 2020). These areas are often rural, located in the central and southern regions of the country, and characterized by higher proportions of elderly residents, low-income households, and elevated poverty levels (Leyso and Umezaki, 2024).

To help address issues of equitable healthcare access, the Duterte administration, led by Rodrigo Duterte who was the 16th Philippine president and known for his controversial anti-drug campaign, enacted the Universal Healthcare (UHC) Act in 2019. This was a landmark law that automatically enrolled Filipino citizens in the national health insurance program, PhilHealth, and guaranteed affordable healthcare service while reducing out-of-pocket expenses. However, the UHC Act

struggled to fulfill its promises (Co et al., 2024). Issues stemmed from the lack of clear roles between the local governments and the DOH. For instance, policies under the UHC Act of 2019 included the expansion of the No-Balance-Billing policy. This policy was originally intended to reduce financial burdens from medical fees and to provide free hospital services like dialysis, hospital stays, and even major surgeries for individuals with no visible means of income. It was a mechanism to enable hospitals to provide healthcare to those unable to pay by utilizing revenues from PhilHealth. The No-Balance-Billing policy expansion included private patients who could receive similar medical services. Despite the policy's goal, household out-of-pocket expenses for healthcare remain high with around 42% of patients in 2024 reporting health expenses for medicine, medical supplies, and laboratory services (Philippine Statistics Authority, 2025b). COVID-19-related care also was not covered under the program (Co et al., 2024).

Furthermore, PhilHealth, which receives its funding directly from enrolled members and indirectly through government subsidies and private companies (e.g., employers) fell short due to internal flaws within the system and the lack of transparency and accountability with the funds. In 2020, lawmakers filed charges against top leadership of the PhilHealth corporation regarding disproportionate allocation of funds, lack of appropriate hospital accreditation, and overpriced work equipment. Senate investigators uncovered a long-running corruption scandal in which funds totaling ₱15 billion went unaccounted for with investigation reports alleging that fund mismanagement was due to fraudulent payout claims and overpricing (Lianza, 2025; Ravelo, 2020).

Other forms of political corruption also have a significant impact on the healthcare system in the Philippines. This includes informal payments, the circulation of counterfeit medical supplies, the siphoning or redirection of funds to other programs, and other cases in which reported healthcare expenditures do not align with the quality of care provided (Glynn, 2022). Corruption has contributed to reduced immunization rates among children, long patient wait times, lower satisfaction, and limited access to healthcare facilities (Azfar and Gurgur, 2008). These all have played a part in worsening health outcomes including poor mental health, higher rates of infant and child mortality, and reduced life expectancy (Glynn, 2022; Hanf et al., 2011). The PhilHealth scandal and others like it have likely contributed to the rise of economic and political inequality in the Philippines (Gricius, 2022).

These intersecting issues of corruption, strained public health systems, and widening social inequalities led to the rise and support of former President Rodrigo Duterte. He leaned into a crisis narrative when campaigning against crime and corruption in 2016 and ruled as an authoritarian populist (Arugay, 2017; Curato, 2016, 2017; Gricius, 2022). Former President Duterte's most notable promise was to eradicate drugs in the country using harsh and violent measures (Gricius, 2022; Javate de Dios, 2022). He urged citizens and police to conduct extra-judicial killings of suspected drug users and drug dealers, incentivizing these killings with medals and/or cash rewards. His war on drugs has been heavily publicized around the world and has led to more than 27,000 people being murdered and about 500,000 people turning themselves in for drug-related offenses (Atun et al., 2019; Human Rights Watch, 2018). Underscoring the brutality of his war on drugs, the International Criminal Court in The Hague issued a warrant for his arrest on March 7, 2025. Former President Duterte surrendered to the International Criminal Court on March 12, 2025 after Philippine authorities arrested him. He is currently awaiting trial for crimes against humanity (International Criminal Court, 2025).

The Philippines' war on drugs persisted into 2020 at the same time the COVID-19 pandemic emerged as a global crisis. Government responses to the pandemic in the Philippines were sociopolitical acts with implications for maternal and child health such as inequitable access to medical resources, limited healthcare capacity, poor surveillance, service delivery gaps, ineffective risk communication, and limited testing availability (Amit et al., 2021; Co et al., 2024). The government imposed early travel restrictions on January 28, 2020, followed by strict

quarantine measures (Amit et al., 2021). These measures, however, revealed longstanding weaknesses in the health system and exposed significant shortcomings in pandemic preparedness.

1.2. Current study

Our study explores the impact of sociopolitical stress on maternal health. We seek to highlight the dynamic processes between the sociopolitical environment, culture, and stress response during the perinatal period. We look to the Philippines, where women across the country have been exposed to intense state violence from former President Duterte's administration and policies. We also conceptualize the actions, as well as inactions, of the administration and government's COVID-19 pandemic policies as sociopolitical stressors. Here, we explore the way this fraught sociopolitical environment impacts stress during pregnancy among Filipina women. Through the lens of embodiment, we focus on identifying how pregnant women perceive sociopolitical stress and the creative coping strategies they employ to manage these stressors. We recruited pregnant and recently pregnant Filipina women from various parts of the Philippines and conducted virtual semi-structured interviews. We analyzed the data using thematic analysis grounded in descriptive phenomenology (Braun and Clarke, 2006; Byrne, 2022; Maguire and Delahunt, 2017; Sundler et al., 2019), which allows for a richer understanding of women's lived experience with their environment, stress, and specific concerns about their pregnancy. There is currently no study, to our knowledge, that describes how pregnant women internalize and conceptualize the stress of these administrative policies on their pregnancies in the Philippines. Our study, therefore, offers a critical lens of how sociopolitical unrest can affect maternal embodiment and the coping strategies used by mothers.

2. Methods

2.1. Positionality

In this study, we employed a virtual semi-structured interviewing method, which had embedded aspects of *kuwentuhan* or a conversational style rooted in indigenous Filipino oral storytelling (Javier, 2004; Palma et al., 2025). Interviews were conducted by the first author, a Chinese-Filipina American with family roots in Manila and Iloilo who was born and raised in the United States. She is proficient in Tagalog/Taglish (mixing of English and Tagalog) and works on research topics related to reproductive biology, health inequities, and maternal health among Filipino communities and communities of color. She is the primary investigator and main interviewer for this study. The second author is Filipina American with family roots in Cavite and Leyte and was born and raised in the United States. She helped interpret the results. The third author is Filipina American with family roots in Bulacan. She was born in the Philippines and raised in the United States. She is proficient in Tagalog/Taglish and served as the second interviewer for this study. She also helped translate and interpret the results. The fourth author is Chinese American with research interests in mental health inequalities among Asian Americans. She helped interpret results. The fifth author is Filipina and is from Manila. She provided research guidance with our interview prompts, methods, and helped with recruitment and data interpretations. The last author is white American and is the senior author. Her research is in understanding human genetic adaptations to extreme environmental pressures and its influence on health and disease susceptibility. She works extensively with Indigenous communities using community-engaged methods to inform her work. She helped interpret results and supervised this project.

2.2. Study participants

Using convenience sampling, we collaborated with Filipino and Filipino American scholars using our broad network of community

contacts to recruit 21 participants from across the Philippines in August 2021 (Table 1). Most participants received some form of higher education, having either obtained a college degree or attended college. Several of our participants' household monthly incomes were also above the monthly national average (~₱21,544; Philippine Statistics Authority, 2025a). We note here that fathers were intentionally excluded from the study design. This was because we were specifically interested in the pregnancy experience from the mother's perspective.

2.3. Virtual semi-structured interviews

We note that there is no direct translation for the word *stress* in Tagalog/Taglish. Interviewers used synonyms like *concerns*, *worries*, or *problems* to elicit responses associated with their experiences of stress and stress relief. While the physiological stress response may present similarly across individuals, the construct of stress does not (Hutmacher, 2021; Monroe, 2008; Pollock, 1988). This is well-established in the anthropological literature on embodiment where many idioms of “stress” have been identified in distinct contexts, such as *ghar ki tension* among Gaddi women in India (Simpson, 2023), *nervos* among Northeastern Brazilian women (Rebhun, 1993), and *sati* in Thai Buddhism (Cassaniti, 2019). Since the term “stress” does not map onto our research participants' idioms of “stress,” medical and biological anthropologists have emphasized the importance of understanding the meaning, expression, and social interpretation of embodied stress across other contexts (e.g., Hutmacher, 2021; Manthey et al., 2026; Simpson, 2023). Virtual semi-structured interviews were conducted in Tagalog/Taglish by two researchers, the first and third author, who identify as Filipina American, have cultural ties to the Philippines, and are proficient in Tagalog/Taglish. All interviews were recorded, transcribed, and translated by Filipino American undergraduate research assistants, all of whom are proficient to fluent in English and Tagalog/Taglish and received course credit. In an effort to position the participants respectfully within the research and to engage with the participants, the interviews utilized a conversational format. This conversational style helped build trust with the participants, and followed several aspects of *kuwentuhan*, “an indigenous Filipino oral storytelling method used to preserve history and values and demonstrates how cultural values and knowledge are passed down through generations (Javier, 2004; Palma et al., 2025).” *Kuwentuhan* is used across diverse fields ranging from public health to sociology to provide a comfortable space for study participants, or storytellers, to share their cultural experiences (Javier, 2004; Palma et al., 2025). Interviews also utilized guided prompts to help move the conversation forward, which aligns with Western approaches.

While *kuwentuhan* was not strictly used, several aspects of this methodology were incorporated into the interview design. First, starting every interview with a greeting (e.g., *Hello, po/Hello* [respectful]) and basic demographic questions (e.g., *Taga saan po kayo?/Where are you from?*) to establish a relationship with the participants. Second, the interviewers spoke only Tagalog/Taglish to minimize power imbalances. Third, participants were given prompts that first established their everyday lives (e.g., *Ano po ba ang pinoproblema ninyo sa buhay sa araw-araw? Ano po ba ang inyong main concern tungkol sa inyong pagbubuntis?/What are your everyday stressors? What are your concerns about your pregnancy?*) before being asked to describe their experiences regarding the current political situation and how much they felt their sociopolitical environment contributed to the overall health of their pregnancy (e.g., *Ano po ba ang masasabi ninyo sa war on drugs ni President Duterte? Naa-pektuhan po ba ang inyong pagbubuntis?/What can you tell me about President Duterte's war on drugs. Has it affected your pregnancy?*). After each prompt, participants were free to share as little or as much as they felt comfortable doing as they recounted past and present life events. Fourth, if novel insights were gleaned from these stories, interviewers pursued new lines of inquiry. Examples included asking participants to expand on precautions families took during the height of the war on

Table 1
Participant Demographics.

Participant Number	Age	Pregnancy status	Gestational age	Household monthly income (₱)	Education	Region/Province	Number of children including current pregnancy	Marital Status
1	29	Pregnant	20 weeks	17,000	Vocational degree	Ilocos Norte	1	Married
2	25	Pregnant	38 weeks	3240	College degree	Bicol	1	Single
3	27	Pregnant	31 weeks	100,000	College degree	Quezon City	2	Married
4	22	Pregnant	35 weeks	30,000 - 40,000	College degree	Calabarzon	2	Single
5	29	Pregnant	26 weeks	30,000–60,000	College degree	Pampanga	3	Single
6	29	Pregnant	29 weeks	20,000	Some college	Bulacan	3	Single
7	36	Pregnant	25 weeks	17,000	College degree	Davao	2	Married
8	26	Pregnant	28 weeks	28,000	College degree	Davao	2	Married
9	21	Pregnant	35 weeks	50,000	High School degree	Baguio	1	Single
10	31	Pregnant	32 weeks	100,000 - 120,000	College degree	Metro Manila	1	Married
11	26	Pregnant	36 weeks	15,000 - 18,000	College degree	Las Piñas	4	Married
12	29	Postpartum	NA	10,000	College degree	Davao	3	Single
13	26	Postpartum	N/A	24,000	College degree	Bulacan	2	Married
14	39	Postpartum	N/A	30,000	Master's degree	National Capital Region	3	Married
15	23	Postpartum	N/A	35,000	College degree	Quezon City	1	Single
16	25	Postpartum	N/A	20,000	College degree	Camarines Sur	1	Single
17	27	Postpartum	N/A	Not provided	College degree	Davao	1	Married
18	28	Postpartum	N/A	35,000 - 40,000	College degree	Cavite	4	Single
19	34	Postpartum	N/A	75,000	College degree	Bicol	3	Single
20	33	Pregnant	39 weeks	30,000 - 40,000	College degree	La Union	1	Married
21	32	Postpartum	N/A	20,000 - 35,000	Some college	La Union	2	Married

Note. Demographics of participants interviewed. N = 21 participants. Pregnancy status = designates whether participants were actively pregnant (pregnant) or already given birth (postpartum) at the time of the interview. Monthly household income = shown in Philippine pesos (₱), the Philippine currency. Region/province = region in the Philippines that participants were residing in at the time of the interview. Number of children = inclusive of the current or most recent pregnancy. Marital status = marital status at the time of the interview. N/A = not applicable.

drugs and COVID-19 lockdown. Interviewers also shared their own experiences. This resulted in interviews ranging from 45 minutes to 2 hours.

2.4. Data analysis

We used thematic analysis to identify themes describing feelings and concerns related to pregnancy (Braun and Clarke, 2006; Byrne, 2022; Maguire and Delahunt, 2017; Sundler et al., 2019). We generated codes and defined themes characterizing how pregnant Filipina women perceived and coped with sociopolitical stress. This was an iterative process in which themes were discussed among the research team and regrouped until consensus was reached. We also consulted with Filipino community members to ensure the trustworthiness of the themes generated (Nowell et al., 2017).

3. Results

We explored how sociopolitical stress affected pregnant and recently pregnant Filipina women among a cohort of 21 female participants. We describe sociopolitical stress as an umbrella term to broadly reference the presidential administration within the context of both drug-related policies and responses to the COVID-19 pandemic. We also note that these sentiments may reflect concerns that are consistent among middle class women, as indicated by their average household monthly income. We were unable to recruit women from all class statuses.

3.1. Embodiment of stress

Our interviews reflect the inextricable link between different sources of stress, financial or sociopolitical. Many participants stated that everyday stressors like financial stress (67%), quality medical care (38%), and cultural pressures (52%) affected their emotional, physical, and mental well-being. Financial concerns were described as common stressors exacerbated by ever-changing lockdown restrictions and protocols during the pandemic and even the PhilHealth scandal. Our

interviews highlight the multidimensional nature of stress (Epel et al., 2018).

3.2. Media participation and consumption shaped women's perceptions of sociopolitical stress

Among our study participants, sociopolitical stress arose from awareness of and interaction with Filipino news and media. Main topics were related to economic hardship, access to resources, government corruption, and local elections. Participants described how these issues were all interconnected; government corruption heightens general poverty in the Philippines by reducing access to essential services and healthcare resources. There were mixed feelings of distrust, frustration, and helplessness that surfaced among our participants, as they described their views and engagement with politics surrounding policy, government corruption, and healthcare procedures, alongside a lack of government transparency. Increased stress among expecting women contributed to a sense of frustration in government services. The economic inequality and opaque governmental policies also extended to safety concerns for their children's future, current safety, and their families' general well-being.

Digital participation and consumption (i.e., engaging in political discourse online) emerged as one of the primary drivers contributing to perceptions of elevated stress. Online media platforms, mainly Facebook, were one of the main modes of gathering information about the sociopolitical climate. Many stated exerting caution about “fake news” (43%), biases (43%), and corruption (48%). Some felt they circumvented this misinformation by fact-checking the information they consumed. Despite their knowledge of the presence of fake news and misinformation on social media as well as the need to cross-reference sources for accurate reporting/reduction of media bias, many participants (62%) still cited Facebook or other social media sites as their primary source of information. One participant recounted, “It's not in our [Filipino] culture to be thorough [Filipinos] don't really process the articles very much, only the things that are easily digestible (Participant 10).” On social media sites, serious news gets

sensationalized into clickbait, and parts of the story that are not “easily digestible” are lost. We inferred a positive relationship between the amount of digital participation and levels of perceived sociopolitical stress, which participants linked to potentially harming their pregnancies (Fig. 1). This was based on participant responses stating that the news they ingested had a profound impact on their perceived stress levels.

“[The news about politics and other issues] gives me a lot of stress, and it affects my pregnancy. I always think of what will happen, and I also plan things based on what I hear on the news ... (Participant 3).”

“Yes, I’m very stressed about [the news I read], especially news about corruption nowadays (Participant 4).”

“[The news] has a big impact. (Participant 21).”

“Politics is the biggest factor that affects my pregnancy these days ... [the news] is dirty (Participant 1).”

These examples show that perceived sociopolitical stress when experienced through the media can become embodied with potentially negative impacts on pregnancy. We reason that participants who are attending to the sociopolitical stressors, especially through their consumption and engagement with online news outlets and media, are shaping how their bodies, namely their pregnancies, react to the stressors (Fig. 1). Those who are attuned to sociopolitical stressors and who may perceive them to have a direct impact on their bodies may express insecurity and emotional distress.

The PhilHealth financial scandal emerged as a specific sociopolitical stressor impacted by news consumption. A number of our participants had household members who contributed a portion of their monthly wages to PhilHealth, meant to provide financial support to families seeking medical attention, operating similarly to Western health insurances. Some participants were particularly focused on issues regarding the lack of transparency around PhilHealth and COVID-19-related aid, but there were some mixed viewpoints concerning the level of aid dispersed throughout the country. These viewpoints were well captured by the following two quotes.

“[PhilHealth] said that the monthly PhilHealth contributions that my husband put away never went through. It was super stressful for us because the contributions were so big. I was about to give birth and we needed money for it. We ended up paying. Nothing came out of my husband’s PhilHealth. Instead of us saving money, we ended up still having to pay because my husband’s contributions weren’t going through ... We [also] aren’t feeling any help [from the politicians] during the pandemic. Sometimes it shows on TV that there are funds

coming to a certain region, but we don’t receive any of those funds. They say that there will be aid for one thing, and our street doesn’t receive it, but the next street over does. So there really is no equality and transparency (Participant 13).”

“The biggest issue here is PhilHealth. Their budget was 15 billion but I feel like things are very overpriced. They were not able to use the whole budget so I hope it went to more things that was more important. I was not able to feel it directly but I hope that it was able to help [others] (Participant 16).”

These quotes offer two different accounts that present distinct perceptions of sociopolitical stress. In the first account, Participant 13 discusses two related issues highlighting the financial burden that she is faced with, which stems from government aid that she was entitled to but did not receive. The first is the lack of transparency and corruption stemming from PhilHealth. She describes how she internalized the stress she experienced from being unable to utilize their financial contributions to PhilHealth while pregnant. This showcases how the exposure to sociopolitical stressors can become embodied and impact the maternal body during pregnancy. The second is the unequal distribution of governmental financial aid that was meant to support families during the pandemic. She explains how it was through watching the news on T. V. that she realized that there was an unequal distribution of government funds, which contributed to a sense of frustration. It also suggests how the media can influence perceived stress levels. These examples show how sources of embodied stress from the sociopolitical environment may arise.

Conversely, Participant 16 provides a different account where she is not focused on the systemic inequities caused by sociopolitical structures. She appears to have also been a victim of the PhilHealth scandal and yet, it seems like she does not perceive PhilHealth to have impacted her like Participant 13. We offer this alternative account to demonstrate the heterogeneity of perspectives within our cohort. While PhilHealth was discussed by several participants as a major sociopolitical stressor, there are some participants who may not perceive PhilHealth, but other issues, as contributing to their perceived stress levels.

We found that controversial policies that criminalized drug-related activities, which began a few years before the start of these interviews (2016), were only discussed when explicitly asked. Participant 5 stated, “Even though they’re not saying it, [the war on drugs] are still happening,” implying that the media was no longer covering the ongoing war on drugs. Rather, the COVID-19 pandemic response and the PhilHealth financial scandal were the main media highlights when these interviews were conducted. Therefore, it is possible that our participants perceived the war on drugs to have a lesser impact on their pregnancies

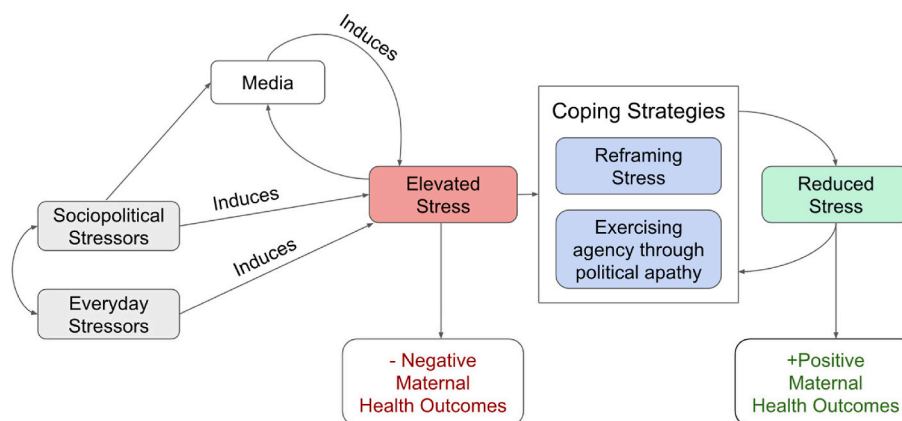


Fig. 1. Note. Conceptual model of stressors and coping strategy feedback loops. Conceptual model demonstrating how everyday and sociopolitical stressors (in grey) can become embodied during pregnancy. Elevated stress levels can lead to negative maternal health outcomes (in red). Media consumption can exacerbate stress levels. Coping strategies (in blue) can reduce stress (in green). Reduction in stress levels can lead to positive maternal health outcomes. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

because it received less media attention, supporting the role of media in shaping perceptions of stress. What participants are currently attending to and perceiving as stressful while pregnant are embodied to later shape maternal and fetal health, thus revealing the interaction of the “three bodies” (i.e., biological, social, and political entities) theorized by Scheper-Hughes and Lock.

3.3. Coping strategy: Reframing stress

Our participants described coping strategies for sociopolitical stress, most notable among which was their ability to *reframe stressors* (Fig. 1). They objectified the stressors to create distance between the experience and feelings tied to the stressors. This perspective shift was evident when participants described a sociopolitical stressor and then immediately dismissed any negative emotions tied to it. We consider this reframing of stress to be a coping strategy, perhaps even a necessity, for this community. We argue that reframing stress serves as a protective factor by helping participants objectify stressors and create a psychological distance, defined as the degree to which participants feel removed from a stressor. This process may reduce the potential downstream consequences stress might have on women's pregnancies. Doing so provides an agentive action enacted by perinatal women to cope with sociopolitical stressors. By reframing their stressors in this particular way, women can mitigate the power sociopolitical stressors might have over their bodies. We identified three main forms through which perinatal women may be exercising their agency to cope with sociopolitical stressors and describe each below.

The first mechanism women used for reframing stress is the concept of *community viewing*, or the ability to consider one's own experiences in relation to others in your community. It allows individuals to ask the question of whether they perceive themselves to be “doing better” compared to others (Chan and Litam, 2021; Tuliiao, 2014). In our interviews, “worse off than them” implied conditions of death, extreme poverty exacerbated by financial hardship, and limited access to food availability. This is exemplified by Participant 20 who states, “I'm comparing myself to other people ... those that are poor are still able to raise their children so why can't I do it ... It's not like we are poor poor ... we are still able to eat 3 times [a day] and sometimes we even get to eat snacks.” We argue that the use of community viewing under these circumstances is a way to redirect and objectify stressors, potentially reducing their perceived impact on our participants and their pregnancies. To some extent, it can provide our participants with the courage to face challenges without succumbing to the stressors themselves, an idea previously discussed by Pe-Pua and Protacio-Marcelino (2000).

A second mechanism for reframing stress was a positive outlook. This is an attitude our participants might utilize to protect their bodies and fetuses from the negative impacts of sociopolitical stress. For instance, one participant mentions that “Filipinos are mostly happy even though they are at rock bottom ... like it is nothing to us [Filipinos] and you just laugh it off (Participant 19).” This ability to “laugh it off” can act as a coping mechanism to reframe the feelings of stress and help build resiliency against adversity.

As a third mechanism, some of our participants looked toward their familial relationships as a mode to reframe their experiences of stress. “We cope by remembering the blessings that we have and that are yet to come, and it's up to them [the government] to do whatever they want. We cope by taking care of and looking out for each other, and we are just grateful that we have enough to eat. (Participant 13).” Despite the uncertainty with the ongoing global pandemic, limited vaccine resources, and opaque quarantine protocols, this participant emphasized reliance on familial support as a means of coping. She described reorienting herself away from the sociopolitical stressors and instead focusing on the positive elements rooted in family. This strategy showcases participants' assertion of agency and the use of psychological distancing. It also highlights participants' capacity to reframe stress and adapt to challenging circumstances. Notably, asserting agency also involved

navigating tradeoffs. As one participant described, this included a prioritization of “self-preservation over long-term preservation” (Participant 10). Participants use this framing to describe a temporal reorientation of care and decision-making toward immediate stress relief over the maintenance of long-term health or stability. In contexts marked by sociopolitical uncertainty, immediate needs often take precedence over preventive health behaviors or future-oriented planning. This orientation should not be read as shortsightedness or a lack of health knowledge, but rather as a pragmatic response to structural constraints.

Importantly, we found that familial dynamics to be more complicated than previously thought. Familial support can likely act as a protective factor that buffers recipients from the impacts of stressors noted by Participant 10 as well as in the literature on stress and resilience (Takács et al., 2021). However, some of our participants expressed sentiments where familial dynamics were their primary sources of stress labeling them as “toxic” (Participant 19).

“Actually, that is one of the reasons why I left my family because they are very traditional and they feel like you owe them something ... I was not able to do whatever I wanted for my baby (Participant 15).”

“There are some family members who are toxic. If you would want to get away from those toxic people, you have to be on your own, you have to have your own house, you have to be separated from your family. As much as I wanted to do that when I was pregnant, I could not do that because first of all, money issues ... so you have to just accept it (Participant 19).”

While familial relationships were frequently described as buffering stress, they also were characterized as potential sources of stress. Participant narratives suggest that familial support cannot be neatly categorized as either protective or harmful. Rather, it operates dynamically where stress can be produced or mitigated. This dual role reflects the importance of families as a central, but not an exclusive mode of stress relief.

3.4. Coping strategy: Exercising agency through political apathy

Another coping strategy that emerged from our data was related to maintaining an apathetic disposition when faced with sociopolitical stressors. We reason that political apathy is a response that provides women agency, while demonstrating the linkage between embodiment and sociopolitical stressors. Political apathy could be another mode our participants use to manage stress levels (Fig. 1). This could manifest in different types of cultural practices, including disengagement, fatalistic optimism, avoidance, and/or silence.

Some of our participants reported that they were choosing to disengage from their perceived sociopolitical stressors. For instance, when probed on her views about the future of Philippine politics, Participant 10 mentions, “There are a lot of people indifferent to the government because they've been suffering for so long. It's just going to be the same, so they just want money.”

Another participant states, “I don't want it to affect me. The news goes in one ear and out the other. I don't want to think about politics because I don't want it to affect my pregnancy. So what I watch and hear, just goes out of the other ear. That's all (Participant 1).” In this case, it is implied that she may view the news of the sociopolitical environment as one that is negative, and therefore potentially harmful to her body and pregnancy. As such, political apathy through disengagement becomes an important tactic of resistance.

Our participants also invoke the mentality of *bahala na*, a fatalistic optimism driven by their belief that, “God will provide” (Participant 20) and that regardless of things beyond their control, they will survive (Joaquin, 2023). The *bahala na* mentality, often translated into “whatever happens, happens,” is commonly interpreted as a passive orientation toward uncertainty. However, alternative accounts suggest that

bahala na may function as an active coping strategy (Pe-Pua and Protacio-Marcelino, 2000). In this framing, it can enable individuals to cultivate determination and perseverance when confronted with socio-political stress. Rather than reflecting fatalism alone, *bahala na* may be linked to resilience and a willingness to endure adversity, including the acceptance of individual sacrifice alongside a sense of trust in outcomes.

Similar to other stress reframing strategies described by participants, *bahala na* provides a form of agency in how stressors are embodied during pregnancy. It can facilitate psychological distancing from overwhelming stressors, as discussed in the previous section. This distancing may also be expressed through acceptance or emotional detachment that functions as a protective response to systemic inequities embedded within sociopolitical structures.

“Regarding politics, I think that whatever happens, happens, [bahala na] even though I know it isn’t supposed to be like that (Participant 13).”

“About the health issues, for the negative things, it’s like whatever happens, happens (Participant 12).”

“You would need to let it go and just keep moving forward in life that even though it is hard right now (Participant 15).”

This cultural orientation also materialized in participants who reported reducing their digital participation and media consumption, specifically on topics about the sociopolitical environment. As noted in an earlier section, some of our participants felt that the more they engaged with the political discourse online or in the media, the more heightened their stress became.

“I actually don’t watch the news too much. I think it’s another thing that adds stress is about politics. For example, on Facebook, you see the news, like the one about Manila Bay being renovated. Some Filipinos [don’t know what’s] happening or being done. They always say negative things, even if the outcomes are positive. You read negative comments, and it will affect you and adds stress. Instead of having a positive outcome, the impact is negative (Participant 6).”

“I don’t read enough information about [the war on drugs]. Lately, especially now that I’m getting close to giving birth, I have been trying to disassociate myself from negative things, although they’re realities and they’re happening. I also want to take care of my mental health ... (Participant 3).”

“[The news] has a big impact [on me]. I tell my husband ... and he tells me like ‘don’t read things like that’ or ‘don’t let that ruin your mood’ (Participant 21).”

“Actually, I only watch positive news, because it is really stressful if I just keep on watching news about COVID-19 and the pandemic (Participant 1).”

Other responses included expressions of apathy through avoidance and/or silence, which we interpreted as protective factors that enabled participants to move forward with daily living. In some instances, participants described choosing to stay silent and ignore political discussions they perceived to be stressful or frustrating. This selective avoidance is consistent with cultural orientations that encourage expecting mothers to avoid unpleasant or negative experiences during pregnancy. Such practices may include minimizing stress, avoiding exposure to the cold due to concerns that may predispose the infant to colds/illnesses, limiting consumption of sweets, and reducing physically demanding labor (Cabigon, 2014). Avoiding negative experiences is understood as a way to support maternal well-being while pregnant, protect against negative influences on pregnant bodies, and promote fetal health. To this end, participants described focusing on concerns within their immediate control as opposed to engaging in political debates or attempting to change political opinions. One participant states:

“If I know that it is going to stress me out, I just ignore it. I know that I have more important things to think about instead of causing conflict or having a debate regarding their political opinion. (Participant 15).”

Echoing this sentiment, another participant expresses clear frustration with their sociopolitical context and describes how she manages to invoke these feelings of political apathy through avoidance.

“It’s annoying with the corruption and you don’t understand why some people are still so gullible to [the current administration]. Personally, I try to manage it by avoiding it, so if you’re super vocal, I’ll avoid you for now ... it’s going to be the same as before with every election. So, you just do what you can and think about it and just vote (Participant 10).”

Participant 10 is one of several examples in which silence emerges as a deliberate coping strategy. Similarly, Participant 5 explained that she would “just keep quiet ... because the issue about politics is very sensitive.” These narratives suggest that by withdrawing and being apathetic to the sociopolitical environment, it is a calculated form of self-protection during the perinatal period. It can be seen as a necessity against circumstances where participants may feel vulnerable. It is a way of enacting agency and power during the perinatal period of waiting for birth in a fraught sociopolitical context.

4. Discussion

Our study aimed to investigate how pregnant and recently pregnant Filipina women perceive and cope with sociopolitical stress. We situate our analysis within embodiment theory to examine how sociopolitical conditions are embodied, thus shaping perceptions of stress during pregnancy. We observed various stressors ranging from broader sociopolitical issues, like healthcare complications, and political corruption that were intertwined with everyday challenges, such as familial conflict and financial hardship. Media consumption and engagement played a role in heightening levels of perceived stress. We also identified key coping strategies that highlight the complexity of these experiences, including the use of creative avoidance mechanisms. These strategies reflect the varied ways perinatal women exercise their agency to mitigate the impact of sociopolitical stressors on their pregnancies. Through the lens of embodiment theory, we examined the connection across biological, social, and political bodies to discuss the objectification of “stress” during pregnancy, where Filipina women may employ socially-accepted coping strategies.

We identified, in sum, two major coping strategies: 1. reframing stress and 2. exercising agency through political apathy. With regard to reframing stress, one possible explanation may be related to Filipino cultural orientations that espouse resilience, or a push to maintain a positive mindset, all of which could be a mechanism that enables them to persevere against natural disasters, poverty, and other everyday challenges. Traits like community viewing, humor, and familial support all seem to play a part in reinforcing a positive outlook, which is consistent with the literature (Reyes et al., 2020). However, evidence from our interviews also suggest that these traits (i.e., familial support) could worsen stress levels. Unpacking strategies that reframe stress is necessary to understand the cultural nuances involved in managing stress.

With regard to exercising agency through political apathy, we found that responses to the stress from the war on drugs and the global pandemic may reflect acts of resilience and agency. We grouped these acts as political apathy, which included strategies to disengage, avoid, stay silent, and employ a fatalistic mentality. Disengagement, avoidance, and silence seemed to be strategies to modulate how stress can be absorbed. We reason that these strategies may help reduce exposure to conflict. They can also be effective if the likelihood of influencing outcomes appear trivial.

Filipino *bahala na*, however, was seen as an important practice in their cultural repertoire (Chan and Litam, 2021; Tuliao, 2014). Employing *bahala na* may be a necessity that Filipina women implement to preserve their well-being and that of their unborn child. This could be particularly useful for our participants to move forward when facing insurmountable instability. *Bahala na* can be interpreted as a clear defiance and rejection of the sociopolitical environment, as these women were exercising agency over issues that directly impacted their families (Bagnas and Choy, 2025). This strategy is likely not limited to Filipina values as other cultures appear to have similar forms of coping when living under heightened sociopolitical and economic vulnerability (Maercker et al., 2019).

We were unable to discern whether reframing stress or exercising agency through political apathy are helpful or harmful. Could these forms of coping strategies inadvertently exacerbate perceived stress or increase pressure to conform to societal pressures? We cannot say with certainty the directionality between stressors and culturally-informed coping strategies. We can only speculate that these coping mechanisms could potentially work to reduce perceived stressors. More work is needed to ascertain how embodied practices for coping can potentially act as protective factors and/or increase stress levels. There is a likely aspect of bi-directionality that exists, and it remains to be seen in what contexts these coping strategies manifest on the spectrum from helpful to harmful.

To the extent that these coping mechanisms can be harmful, it is unclear how much of that reduction in perceived stress levels translates to the biological mechanisms of stress. In other words, there is a possibility that these stress reduction tactics are only effective in outwardly conveying to others that they are unaffected by various forms of stress. Yet, these strategies could be less effective in acting as a protective factor against the biological breakdown that stress can induce. This may, in turn, only exacerbate their allostatic load rather than reduce it.

We have also described how the extrajudicial killings that began in 2016 and extended through 2022, along with the onset of the COVID-19 pandemic from 2020 to 2023, constituted recent and overlapping sociopolitical stressors of significance. Although our participants did not identify extrajudicial killings as a primary political concern, we surmised that this reflected the temporal context in which the study was conducted. When these interviews took place, the pandemic may have represented a more immediate and tangible threat, particularly to maternal and fetal health, than the more diffuse or temporally distant effects of the drug war. Participants often referenced current stressors, indicating a focus on more proximal challenges. This was evident by the heightened media coverage on the pandemic in contrast to the limited coverage of the extrajudicial killings despite their continued occurrence. As such, the perceived salience of the drug war may have been overshadowed by the pandemic's direct impact on their daily lives. If this study were conducted today, participants might express different views regarding the relative importance of these sociopolitical stressors and their coping responses.

Another possible explanation for why the extrajudicial killings were not considered a primary stressor among our study participants may be attributed to class distance. The war on drugs disproportionately impacted those of lower socioeconomic standing (Atun et al., 2019). Our participants' middle class standing may have enabled them to distance themselves from the war on drugs where they may not have been directly affected. Future directions could investigate class differences and recruit pregnant women from the Pantawid Pamilyang Pilipino Program (4Ps). The 4Ps is a nationwide conditional cash transfer program meant to help poor families meet maternal health and child education targets. It is likely that beneficiaries of this program may not identify similar stressors or employ similarly coping strategies as our participants. This cohort of women may also have had direct experiences with war on drugs as well as variable experiences with the COVID-19 pandemic.

Our study presented limitations that require further inquiry. We have

not focused, for example, on the study of the lasting effects of the war on drugs in the Philippines. There is growing concern in this regard among researchers examining governmental policies, particularly in authoritarian populist governments. While this study could have focused more heavily on the war on drugs, we wanted to explore the coping strategies that women employ and focus the work on stress management. Second, we are unable to report any quantitative regional differences. At most, five women were recruited from a single region. Our sample size of 21 women, all stemming from relatively similar backgrounds precluded us from making larger claims. We focused on nuances that could inform mechanisms for stress relief for maternal health in the Philippines. While we noted that fathers were intentionally excluded from the study to center the narratives around mothers, future work is needed to determine whether expecting mothers and their partners similarly embody and cope with stress. This may affect the generalizability of our study. Lastly, women may not have been forthcoming with their own beliefs about their environment or who might have decided not to participate due to risks to safety and well-being (e.g. retaliation for expressing views, etc.). We mitigated against these possibilities by explicitly stating the study goals, providing options for women to decline to answer any of the questions, and informing women of our data storage policy that anonymizes their identities.

We hope to have demonstrated that our contributions with this study outweigh any of its shortcomings. Our study is one of the first to examine how Filipina women *embody* politics that may impact maternal health and stress levels during pregnancy. While we have strong evidence to support that sociopolitical stress plays a role in pregnancy, our study also underscores the nuances tied to cultural orientations, current events, and responses to stressors. We expect these findings to contribute to the advancement of women's health on a local, and also global level by demonstrating the complexities associated with stress embodiment, management, and its impact on fetal development.

Data statement

The data is currently unsuitable to post due to the potential harm it may pose to the participants and their families. To protect our participants from unintended consequences for participating in our study, the data will not be made publicly available.

Ethics statement

All materials and procedures were approved by the Institutional Review Board of the participating institution on August 14, 2021, approval #21-001107. This study adheres to the tenets of the Declaration of Helsinki. Informed consent was obtained from all participants prior to their participation. Participant privacy was protected and all data were deidentified prior to analysis.

Funding

This work was generously supported by the Wenner-Gren Foundation [Post-PhD Research Grant #10769].

CRediT authorship contribution statement

Kristine J. Chua: Conceptualization, Formal analysis, Funding acquisition, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Kiersten R.M. Reyes:** Formal analysis, Visualization, Writing – review & editing. **Zoe Pamonag:** Formal analysis, Writing – review & editing. **M. Claire Art:** Formal analysis, Writing – review & editing. **Lia L. Francisco:** Methodology. **Abigail W. Bigham:** Supervision, Writing – review & editing.

Acknowledgement

We are deeply grateful to the study participants for sharing their stories, especially during a global pandemic. We thank Cecilia Chung for her unwavering support. We also thank Christopher Bautista, Angel Joy Estrella, and Danielle Mangaliag for their efforts in transcribing and translating interviews. We are grateful to Vania Smith-Oka, Jeremi Panganiaban, and Luis Felipe Murillo for their valuable feedback and guidance on earlier drafts. Lastly, we thank the reviewers for their time and expertise in helping to strengthen the manuscript.

Data availability

The data that has been used is confidential.

References

- Amit, A.M.L., Pepito, V.C.F., Dayrit, M.M., 2021. Early response to COVID-19 in the Philippines. *West. Pac. Surveill. Response J. : WPSAR* 12 (1), 56–60. <https://doi.org/10.5365/wpsar.2020.11.1.014>.
- Arugay, A.A., 2017. The Philippines in 2016: the electoral Earthquake and its aftershocks. In: Singh, D., Cook, M. (Eds.), *Southeast Asian Affairs 2017*. ISEAS–Yusof Ishak Institute, pp. 277–296. <https://www.cambridge.org/core/books/southeast-asian-affairs-2017/philippines-in-2016-the-electoral-earthquake-and-its-aftershocks/B2F66C91C81253AC210AAB6D6ED23A74>.
- Atun, J.M.L., Mendoza, R.U., David, C.C., Cossid, R.P.N., Soriano, C.R.R., 2019. The Philippines' antidrug campaign: spatial and temporal patterns of killings linked to drugs. *Int. J. Drug Pol.* 73, 100–111. <https://doi.org/10.1016/j.drugpo.2019.07.035>.
- Azfar, O., Gurgur, T., 2008. Does corruption affect health outcomes in the Philippines? *Econ. Govern.* 9 (3), 197–244. <https://doi.org/10.1007/s10101-006-0031-y>.
- Bagnas, N.C., Choy, A.H.C., 2025. “Come What May”: an Interpretative Phenomenological Analysis of Disaster Survivors' resilience and meaning-making of fatalism. *BMC Psychol.* 13 (1), 1175. <https://doi.org/10.1186/s40359-025-03423-3>.
- Blencowe, H., Cousens, S., Chou, D., Oestergaard, M., Say, L., Moller, A.B., Kinney, M., Lawn, J., Born Too Soon Preterm Birth Action Group, 2013. Born too soon: the global epidemiology of 15 million preterm births. *Reprod. Health* 10 (1), S2. <https://doi.org/10.1186/1742-4755-10-S1-S2>.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101. <https://www.tandfonline.com/doi/abs/10.1191/1478088706qp0630a>.
- Byrne, D., 2022. A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Qual. Quantity* 56 (3), 1391–1412. <https://doi.org/10.1007/s11135-021-01182-y>.
- Cabigon, J.V., 2014. Use of health services by Filipino women during childbearing episodes. In: *Maternity and Reproductive Health in Asian Societies*. Routledge, pp. 83–99.
- Canaletti, E.F., Lun, P., Stutzman, L.D., Chan, M., Cheung, F., 2026. Rising tide of stress: global trends and structural predictors over 18 years. *Wellbeing, Space and Society* 10, 100319. <https://doi.org/10.1016/j.wss.2025.100319>.
- Cassaniti, J., 2019. Keeping it together: idioms of resilience and distress in Thai Buddhist mindfulness. *Transcult. Psychiatry* 56 (4), 697–719. <https://doi.org/10.1177/1363461519847303>.
- Chan, C.D., Litam, S.D.A., 2021. Mental health equity of Filipino communities in COVID-19: a framework for practice and advocacy. *The Professional Counselor* 11 (1), 73–85. <https://doi.org/10.15241/cdc.11.1.73>.
- Chatterjee, S., Hasan, I., Manfredonia, S., 2025. The health costs of losing political representation: evidence from U.S. Presidential elections. *PLoS One* 20 (10), e0334507. <https://doi.org/10.1371/journal.pone.0334507>.
- Co, P.A., Vilcu, I., De Guzman, D., Banzon, E., 2024. Staying the course: reflections on the progress and challenges of the UHC law in the Philippines. *Health Systems and Reform* 10 (3), 2397829. <https://doi.org/10.1080/23288604.2024.2397829>.
- Curato, N., 2016. Politics of anxiety, politics of hope: penal populism and Duterte's rise to power. *J. Curr. Southeast Asian Aff.* 35 (3), 91–109. <https://doi.org/10.1177/186810341603500305>.
- Curato, N., 2017. Flirting with authoritarian fantasies? Rodrigo Duterte and the new terms of Philippine populism. *J. Contemp. Asia* 47 (1), 142–153. <https://doi.org/10.1080/00472336.2016.1239751>.
- Epel, E.S., Crosswell, A.D., Mayer, S.E., Prather, A.A., Slavich, G.M., Puterman, E., Mendes, W.B., 2018. More than a feeling: a unified view of stress measurement for population science. *Front. Neuroendocrinol.* 49, 146–169. <https://doi.org/10.1016/j.ynr.2018.03.001>.
- Gemmell, A., Catalano, R., Alcalá, H., Karasek, D., Casey, J.A., Bruckner, T.A., 2020. The 2016 presidential election and perinatal births among Latina women. *Early Hum. Dev.* 151, 105203. <https://doi.org/10.1016/j.earlhumdev.2020.105203>.
- Gemmell, A., Catalano, R., Casey, J.A., Karasek, D., Alcalá, H.E., Elser, H., Torres, J.M., 2019. Association of preterm births among US Latina women with the 2016 presidential election. *JAMA Netw. Open* 2 (7), e197084. <https://doi.org/10.1001/jamanetworkopen.2019.7084>.
- Glynn, E.H., 2022. Corruption in the health sector: a problem in need of a systems-thinking approach. *Front. Public Health* 10. <https://doi.org/10.3389/fpubh.2022.910073>.
- Goldenberg, R.L., Culhane, J.F., Iams, J.D., Romero, R., 2008. Epidemiology and causes of preterm birth. *Lancet* 371 (9606), 75–84.
- Gricius, G., 2022. Populism and authoritarianism. In: Oswald, M. (Ed.), *The Palgrave Handbook of Populism*. Springer International Publishing, pp. 177–193. https://doi.org/10.1007/978-3-030-80803-7_10.
- Hanf, M., Van-Melle, A., Fraisse, F., Roger, A., Carme, B., Nacher, M., 2011. Corruption kills: estimating the global impact of corruption on children deaths. *PLoS One* 6 (11), e26990. <https://doi.org/10.1371/journal.pone.0026990>.
- Hooghe, M., Dassonneville, R., 2018. Explaining the trump vote: the effect of racist resentment and anti-immigrant sentiments. *PS Political Sci. Polit.* 51 (3), 528–534. <https://doi.org/10.1017/S1049096518000367>.
- Hoyt, L.T., Zeiders, K.H., Chaku, N., Toomey, R.B., Nair, R.L., 2018. Young adults' psychological and physiological reactions to the 2016 U.S. presidential election. *Psychoneuroendocrinology* 92, 162–169. <https://doi.org/10.1016/j.psyneuen.2018.03.011>.
- Human Rights Watch, 2018. Philippines: events of 2017. In: *World Report 2018*. <https://www.hrw.org/world-report/2018/country-chapters/philippines>.
- Hutmacher, F., 2021. Putting stress in historical context: why it is important that being stressed out was not a way to be a person 2,000 years ago. *Front. Psychol.* 12, 539799. <https://doi.org/10.3389/fpsyg.2021.539799>.
- International Criminal Court, 2025. Duterte case. International Criminal Court. <https://www.icc-cpi.int/victims/duterte-case>.
- Javate de Dios, A., 2022. Democracy under strain in the Philippines: the populist politics and diplomacy of President Rodrigo Duterte. In: Patman, R.G., Köllner, P., Kiglics, B. (Eds.), *From Asia-Pacific to Indo-Pacific: Diplomacy in a Contested Region*. Springer, pp. 303–325. https://doi.org/10.1007/978-981-16-7007-7_14.
- Javier, R.E., 2004. Kuwentuhan: a study on the methodological properties of pakikipagkuwentuhan. *The URCO Digest of De La Salle University Manila* 5 (3).
- Joaquin, J., 2023. Bahala Na: fatalism or an open future? In: Hongladarom, S., Joaquin, J.J., Hoffman, F.J. (Eds.), *Philosophies of Appropriated Religions: Perspectives from Southeast Asia*. Springer Nature, pp. 81–91. https://doi.org/10.1007/978-981-99-5191-8_7.
- Leyso, N.L., Umezaki, M., 2024. Spatial inequality in the accessibility of healthcare services in the Philippines. *GeoJournal* 89 (3), 120. <https://doi.org/10.1007/s10708-024-11098-3>.
- Lianza, T., 2025. Creative accounting and accountability failures in the Philippine health sector: a Case study of PhilHealth during COVID-19. *International Journal of Multidisciplinary Research and Explorer* 5 (3), 54–64. <https://doi.org/10.70454/IJMR.2025.05034>.
- Lock, M., 2017. Recovering the body. *Annu. Rev. Anthropol.* 46 (1), 1–14. <https://doi.org/10.1146/annurev-anthro-102116-041253>.
- Maercker, A., Ben-Ezra, M., Esparza, O.A., Augsburger, M., 2019. Fatalism as a traditional cultural belief potentially related to trauma sequelae: measurement equivalence, extent and associations in six countries. *Eur. J. Psychotraumatol.* 10 (1), 1657371. <https://doi.org/10.1080/2008198.2019.1657371>.
- Maguire, M., Delahunt, B., 2017. Doing a thematic analysis: a practical, step-by-step guide for learning and teaching scholars, 8 (3).
- Manthey, C., Gildner, T.E., Urlacher, S.S., Mallott, E.K., Chaney, C., Zhang, A., et al., 2026. Embodied immunity: place, inequality, and reproductive outcomes in two US communities. *Am. J. Hum. Biol.* 38 (4), e70256. <https://doi.org/10.1002/ajhb.70256>.
- Mefford, M.T., Mittleman, M.A., Li, B.H., Qian, L.X., Reynolds, K., Zhou, H., Harrison, T. N., Geller, A.C., Sidney, S., Sloan, R.P., Mostofsky, E., Williams, D.R., 2020. Sociopolitical stress and acute cardiovascular disease hospitalizations around the 2016 presidential election. *Proc. Natl. Acad. Sci.* 117 (43), 27054–27058. <https://doi.org/10.1073/pnas.2012096117>.
- Monroe, S.M., 2008. Modern approaches to conceptualizing and measuring human life stress. *Annu. Rev. Clin. Psychol.* 4 (4), 33–52. <https://doi.org/10.1146/annurev.clinpsy.4.022007.141207>, 2008.
- Niewöhner, J., Lock, M., 2018. Situating local biologies: anthropological perspectives on environment/human entanglements. <https://doi.org/10.1057/S41292-017-0089-5>.
- Nowell, L.S., Norris, J.M., White, D.E., Moules, N.J., 2017. Thematic analysis: striving to meet the trustworthiness criteria. *Int. J. Qual. Methods* 16 (1), 1609406917733847. <https://doi.org/10.1177/1609406917733847>.
- Ohuma, E.O., Moller, A.B., Bradley, E., Chakwera, S., Hussain-Alkhatteeb, L., Lewin, A., Okwaraji, Y.B., Mahanani, W.R., Johansson, E.W., Lavin, T., Fernandez, D.E., Domínguez, G.G., de Costa, A., Cresswell, J.A., Kravsevic, J., Lawn, J.E., Blencowe, H., Requejo, J., Moran, A.C., 2023. National, regional, and global estimates of preterm birth in 2020, with trends from 2010: a systematic analysis. *Lancet* 402 (10409), 1261–1271. [https://doi.org/10.1016/S0140-6736\(23\)00878-4](https://doi.org/10.1016/S0140-6736(23)00878-4).
- Palma, M.L., Demanarig, D.L., Alarcon, K.C., Kronenberg, M.A., Capuli, M.A., Nagtalon-Ramos, J., Sabado-Liwag, M., Javier, J., 2025. Using a decolonizing research method to address underrepresentation and health disparities of Filipinx/a/o Americans: the importance of kuwentuhan as a research method. *Qual. Health Res.* 35 (4–5), 506–521. <https://doi.org/10.1177/10497323251323219>.
- Pe-Pua, R., Protacio-Marcelino, E.A., 2000. Sikolohiyang pilipino (Filipino psychology): a legacy of Virgilio G. Enriquez. *Asian J. Soc. Psychol.* 3 (1), 49–71.
- Perin, J., Mulick, A., Yeung, D., Villavicencio, F., Lopez, G., Strong, K.L., Prieto-Merino, D., Cousens, S., Black, R.E., Liu, L., 2022. Global, regional, and national causes of under-5 mortality in 2000–19: an updated systematic analysis with implications for the Sustainable development goals. *Lancet Child Adolesc. Health* 6 (2), 106–115. [https://doi.org/10.1016/S2352-4642\(21\)00311-4](https://doi.org/10.1016/S2352-4642(21)00311-4).
- Philippine Statistics Authority, 2025a. Average monthly wage rate of time-rated workers on full-time basis in the Philippines was at PHP 21,544 in 2024. <https://psa.gov.ph/content/average-monthly-wage-rate-time-rated-workers-full-time-basis-philippines-was-php-21544-2024>.

- Philippine Statistics Authority, 2025b. Government shares 44.7 percent to the country's health spending in 2024; primary health care expenditure registered PhP 748.80 billion. <https://psa.gov.ph/content/government-shares-447-percent-countrys-health-spending-2024-primary-health-care-expenditure>.
- Pollock, K., 1988. On the nature of social stress: production of a modern mythology. *Soc. Sci. Med.* 26 (3), 381–392. [https://doi.org/10.1016/0277-9536\(88\)90404-2](https://doi.org/10.1016/0277-9536(88)90404-2).
- Ramos, C.G., 2020. Change without transformation: Social Policy reforms in the Philippines under Duterte. *Dev. Change* 51 (2), 485–505. <https://doi.org/10.1111/dech.12564>.
- Ravelo, J.L., 2020. Corruption Allegations Rock Philippine Health Insurance Corporation amid COVID-19. *Devex*. <https://www.devex.com/news/sponsored/corruption-allegations-rock-philippine-health-insurance-corporation-amid-covid-19-98048>.
- Rebhun, L.A., 1993. Nerves and emotional play in Northeast Brazil. *Med. Anthropol. Q.* 7 (2), 131–151.
- Reyes, A.T., Constantino, R.E., Cross, C.L., Tan, R.A., Bombard, J.N., 2020. Resilience, trauma, and cultural norms regarding disclosure of mental health problems among foreign-born and US-born Filipino American women. *Behav. Med.* 46 (3–4), 217–230. <https://doi.org/10.1080/08964289.2020.1725413>.
- Scheper-Hughes, N., Lock, M.M., 1987. The mindful body: a prolegomenon to future work in medical anthropology. *Med. Anthropol. Q.* 1 (1), 6–41. <https://doi.org/10.1525/maq.1987.1.1.02a00020>.
- Simpson, N., 2023. Ghar Ki tension: domesticity and distress in India's aspiring middle class. *J. R. Anthropol. Inst.* 29 (3), 573–592. <https://doi.org/10.1111/1467-9655.13956>.
- Sudhinarsat, M., Woofter, R., Young, M.-E.D.T., Landrian, A., Vilda, D., Wallace, S.P., 2021. Analysis of state-level immigrant policies and preterm births by Race/Ethnicity among women born in the US and women born outside the US. *JAMA Netw. Open* 4 (4), e214482. <https://doi.org/10.1001/jamanetworkopen.2021.4482>.
- Sundler, A.J., Lindberg, E., Nilsson, C., Palmér, L., 2019. Qualitative thematic analysis based on descriptive phenomenology. *Nurs. Open* 6 (3), 733–739. <https://doi.org/10.1002/nop2.275>.
- Takács, L., Štipl, J., Gartstein, M., Putnam, S.P., Monk, C., 2021. Social support buffers the effects of maternal prenatal stress on infants' unpredictability. *Early Hum. Dev.* 157, 105352. <https://doi.org/10.1016/j.earlhumdev.2021.105352>.
- Torche, F., Sirois, C., 2019. Restrictive immigration law and birth outcomes of immigrant women. *Am. J. Epidemiol.* 188 (1), 24–33. <https://doi.org/10.1093/aje/kwy218>.
- Tuliao, A.P., 2014. Mental health help seeking among Filipinos: a review of the literature. *Asia Pac. J. Counsell. Psychother.* 5 (2), 124–136. <https://doi.org/10.1080/21507686.2014.913641>.
- Waldinger, R., 2018. Immigration and the election of Donald Trump: why the sociology of migration left us unprepared ... and why we should not have been surprised. *Ethn. Racial Stud.* 41 (8), 1411–1426. <https://doi.org/10.1080/01419870.2018.1442014>.
- Wiley, K.S., Knorr, D.A., Chua, K.J., García, S., Fox, M.M., 2023. Sociopolitical stressors are associated with psychological distress in a cohort of Latina women during early pregnancy. *J. Community Psychol.* 51 (7), 3044–3059. <https://doi.org/10.1002/jcop.23065>.
- World Bank, 2025. Philippines Poverty and Equity Brief: April 2025. The World Bank. <https://www.worldbank.org/en/topic/poverty/publication/poverty-and-equity-briefs>.
- World Economic Forum, 2026. The global risks report 2026. <https://www.weforum.org/publications/global-risks-report-2026/>.
- Zeiders, K.H., Nair, R.L., Hoyt, L.T., Pace, T.W.W., Cruze, A., 2020. Latino early adolescents' psychological and physiological responses during the 2016 U.S. presidential election. *Cult. Divers. Ethnic Minor. Psychol.* 26 (2), 169–175. <https://doi.org/10.1037/cdp0000301>.