Understanding the COVID-19 pandemic gendered policy responses in Alaska through the prism of a holistic wellness concept[1]

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The Arctic has historically been vulnerable when met with emergencies, and the COVID-19 pandemic has been no exception. The geographic remoteness of many Arctic communities, along with insufficient social infrastructures, elevates the importance of nuanced subnational and local regulations for this region. In focusing on gendered policy responses to the pandemic, this paper examines Alaska's legislation and administrative measures through a gender lens, focusing on one of its at-risk demographics: women.

With analysis of Alaska's policy compendiums, the paper provides a classification of policies by their responsiveness to women's needs. Through the prism of the United Nations Development Programme/United Nations Women's methodology and the

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Substance Abuse and Mental Health Services Administration's holistic wellness framework, this study seeks to improve understanding and informed decision-making to better reflect and address women's needs in crisis and recovery from a holistic perspective.

Introduction

Women were disproportionately impacted by the onset of the COVID-19 pandemic. This was seen through higher rates of women's unemployment, domestic violence, greater health-related risks, and increased burdens of responsibility during lockdown, namely through child/elderly care and household tasks (Azcona et al., 2020). The pre-pandemic gender earnings gap in Alaska was recorded at 28% in 2019 (US Bureau of Labor Statistics, 2023), and, although its severity varied across the state (Figure 1), it placed women at an additional risk for economic instability, which was further exacerbated by the pandemic (National Women's Law Center, 2023).

Although sex-disaggregated data for change in employment status from 2020-22 remains unavailable from Alaska Department of Labor and Workforce Development, preliminary findings show that 'the pandemic has hit women harder than men" (Wiebold, 2021, p. 5). In particular, women with children were more likely to be adversely affected by labor inequalities. Women within the 25-to-34-year-old age group, the most common reproductive age for women in Alaska, comprised the majority of unemployment claimants (Alaska Department of Health, 2022). The closure of schools and care facilities left mothers to shoulder additional domestic responsibilities, increasing unpaid care and providing additional context to the gendered impacts women faced in their employment status during the pandemic (Robinson, 2022, p. 6; UN Women, 2020a).

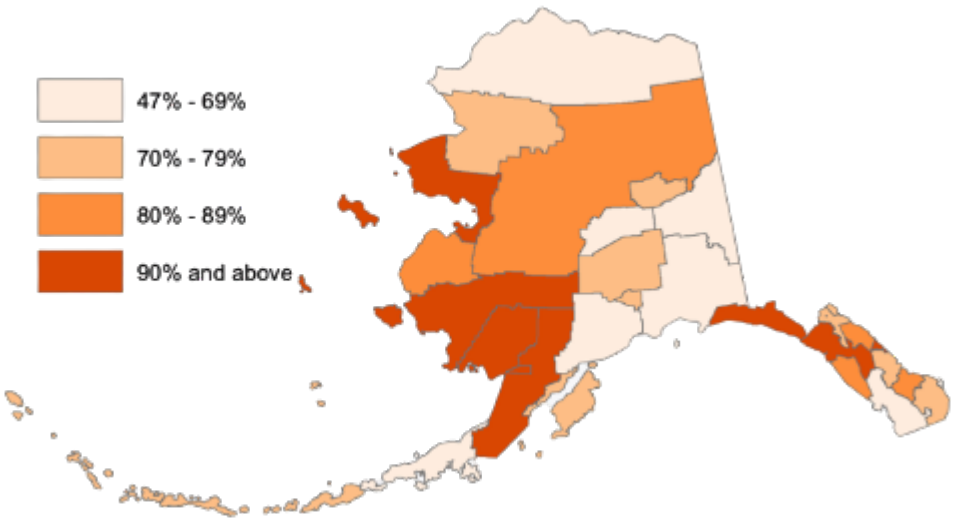

Figure 1. Women's wage as a percent of men's in Alaska, by borough (Wiebold, 2021). Source: Alaska Department of Labor and Workforce Development.

The pandemic worsened occupational conditions for women working in female-dominated spheres, such as healthcare, as they experienced increased workloads and stress in addition to heightened COVID-19 contraction risks. Before the pandemic, in 2019, nearly 1 in 4 Alaskan women worked in health care and social assistance (Alaska Department of Labor & Workforce

Development, 2021). Overall, women comprised 80% of healthcare support workers, 89% of childcare workers, 87% of registered nurses, 94% of preschool teachers, and 81% of elementary school teachers (Robinson, 2022, p. 9). In addition, women's overrepresentation in significantly-affected sectors of the economy, such as the hospitality industry, placed them at heightened risk for economic instability during COVID-19 (Robinson, 2022, p. 5). For example, in 2019, women comprised 79% of restaurant, lounge, and coffee shop workers, 74% of hotel, motel, and resort desk clerks, and 71% of waitstaff (Wiebold, 2021, p. 11).

Women also experienced increased levels of physical violence during the COVID-19 pandemic (UN Women, 2020b). This is an especially relevant issue in Alaska, as the state has held the highest homicide rate in the nation for women killed by men since 2014 (Violence Policy Center, 2021). The 2020 Alaska Victimization Survey revealed that during the first year of the pandemic, "about twice as many women in households with financial or employment difficulties related to the COVID-19 pandemic experienced intimate partner violence, sexual violence, or both" (The Alaska Criminal Justice Comission, 2022). This indicates another pertinent gender inequality of the pandemic.

While longitudinal research is necessary to fully evaluate the gendered impacts of the COVID-19 pandemic and subsequent policy measures, recent studies suggest that overall, the pandemic had detrimental effects on physical (Koh et al., 2021; Shanbehzadeh et al., 2021; Raveendran et al., 2021), mental/emotional (Lades et al., 2020; Shanbehzadeh et al., 2021; World Health Organization, 2022), financial (Findling et al., 2021; Horowitz et al., 2021; Kodjamanova et al., 2022), spiritual (Buchtova et al., 2022; Captari et al., 2022; Coppola et al., 2021) , occupational (Alrawashdeh et al., 2021; Haave et al., 2023; Johnson & Whillans, 2022), social (Borel et al., 2022; Ernst et al., 2022; Luijten et al., 2022; Weissbourd et al., 2021), intellectual (Becker et al., 2021; Kuhfeld et al., 2022), and environmental (Adisa et al., 2022; Ammar et al., 2020; Kourti et al., 2023) aspects of health. Thus, a more holistic approach is essential to address public health challenges for planning subsequent gendered pandemic response and recovery policies.

Methodology

In this study, a relevant theoretical framework for a holistic health approach is adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA), a subsidiary of the US Department of Health and Human Services (HHS) (SAMHSA, 2016). Originally created by Dr. Margaret Swarbrick in her seminal paper "A Wellness Approach," Eight Dimensions of Wellness (also known as the SAMHSA Wheel) were initially created to encourage recovery amongst individuals dealing with mental/behavioral health issues or substance use (Figure 3) (Swarbrick, 2006) (SAMHSA, 2016). Despite its original focus on this group of individuals, this SAMHSA Wheel framework is able to provide a nuanced view of health and wellbeing, as well as be used in a holistic gendered approach to crisis response.

The SAMHSA model uses the term 'wellness' to emphasize that 'health' does not solely refer to 'physical health,' countering the dominant U.S. medical model, where physical health and overall health are essentially synonymous (White, 2017). This model shares similarities with many North American Indigenous concepts of health and wellness. In Alaska, these holistic practices have long been suppressed and undermined due to colonization; however, their efficacy in creating and maintaining positive health outcomes is becoming increasingly accepted within the Western

medical model. The continued development of co-management relationships and health-response cooperation between Alaska Tribal and state authorities, as employed during the COVID-19 pandemic, could be conducive to the widespread adoption of more nuanced approaches to health policy.

In this paper, we will apply the SAMHSA theoretical model to understand gendered policy responses in Alaska during the COVID-19 pandemic from a holistic perspective. This study analyzes policies at the State of Alaska level of governance, as well as the municipal policies of Anchorage, Fairbanks, Juneau, and Nome.

This study is based on secondary data analysis sourced from findings compiled in the Arctic COVID-19 Gender Response Tracker (Rozanova-Smith, 2022), a policy compendium based on a methodology created by the United Nations (UN) Development Programme (UNDP) and UN Women to evaluate global gender responses to the COVID-19 pandemic (UNDP, & UN Women, 2021). Developing the COVID-GEA Tracker, we examined publicly available sources on gendered policy measures for Alaska, including legal databases such as LexisNexis, the Alaska State Legislature website, Alaska city administration websites, government reports, council meeting minutes, press releases, and local newspapers. The criteria for gendered categorization of the COVID-19 policy data were modeled on the COVID-19 Global Gender Response Tracker (UNDP/UN Women's Tracker), created by the UNDP/UN Women. The UNDP/UN Women's Tracker divides all COVID-19 policies into four general categories: social protection measures, labor market measures, fiscal and economic measures, and violence against women. COVID-19 policy measures of social protection measures, labor market measures, fiscal and economic measures are subsequently categorized as 'gendered' if they meet gender lens criteria of targeting or prioritizing women, or targeting female-dominated sectors of the economy (Figure 2).

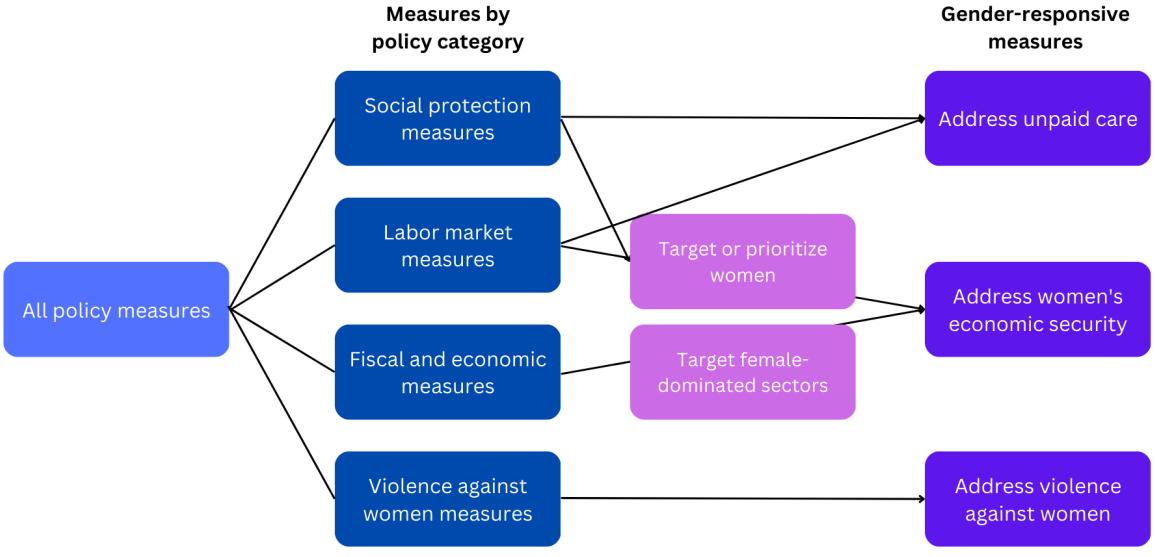

Figure 2. UNDP/UN Women's methodology for determining gender-responsive policies during the COVID-19 pandemic.
Source: UNDP and UN Women (2020) COVID-19 Global Gender Response Tracker: Methodological note. UN Women, p. 2. Available at: https://data.undp.org/wp-content/uploads/2020/09/COVID-19_Global_Gender_Response_Tracker_Methodological_Note_20092020.pdf.

While the UNDP/UN Women's Tracker exclusively focuses on policies at a national level, the novelty of the COVID-GEA tracker lies in its inclusion of measures implemented by various levels of governance, including regional and municipal (UN Women, 2021). Utilizing the COVID-GEA Tracker's database of Alaska's gendered COVID-19 policy measures, we evaluated the state and municipal government responses through the prism of the SAMHSA Wheel (Figure 3) by categorizing COVID-19 policies based on the dimension(s) of wellness that best correlate to policy contents and their responsiveness to women's needs.

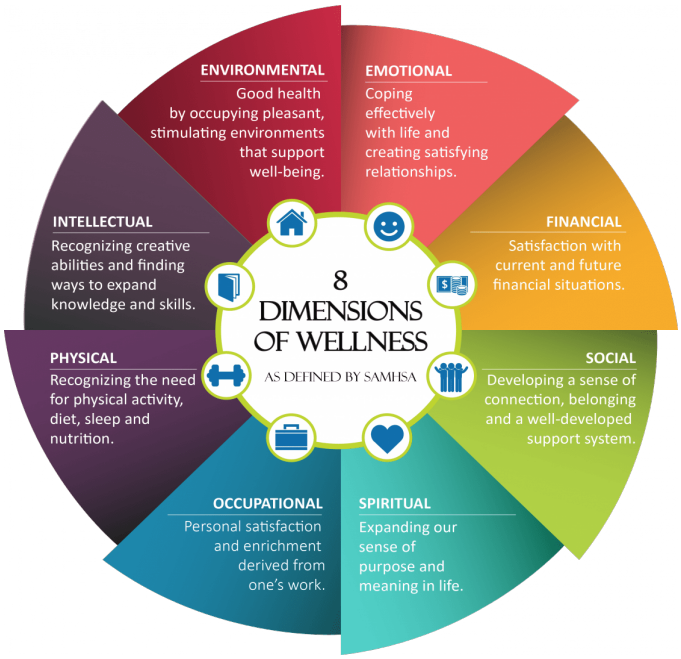

Figure 3. Eight dimensions of wellness, presented in the SAMHSA Wheel.
Source: University of Florida Health. Available at: https://education.health.ufl.edu/community/wheel/

Though women across social, economic, and cultural backgrounds hold varying needs as they relate to the eight dimensions of wellness, the SAMHSA Wheel presents a general, widely-applicable conceptual framework. Applying a gender perspective, policy measures are categorized primarily as *physical health* if they target the prevention of disease spread in female dominated-industries through efforts such as vaccinations, mask-wearing, social distancing, and limiting capacities of indoor spaces. Physical health also applies to policies specifically targeting women and women's health. *Emotional health* measures prioritize the protection of women's mental health, for example through counseling support, non-profit funding, and psychiatric programming. *Social health* measures are aimed at maintaining and increasing connection with other individuals, family members, and the general community in a way that addresses unpaid care or targeted women, for instance through volunteering, events centered around shared interests, and spending time with others. Measures that sought to protect *intellectual health* primarily focus on broadening educational opportunities for women. *Environmental health* measures encompass a wide range of determinants, such as access to nature and clean water, further supporting a safe and positive living environment. Environmental health, as it pertains to this paper and dataset, is linked to policies that combated domestic violence, a public health issue in which women are victimized disproportionately. Though

domestic violence is an issue that permeates many facets of life, it is first and, perhaps, best, addressed through policy measures that offer a safe living space. While *occupational* and *financial health* may seem interchangeable, policies are categorized as financial if the measure seeks to directly infuse cash or remove monetary barriers to services for women or targeted female-dominated sectors. *Occupational health*, in this context, refers to policies that are meant to help women remain in employment in their chosen industry. Additionally, policies that protect industries with a disproportionate number of female workers fall into this domain of occupational health. Lastly, *spiritual health* refers to women's ability to find and keep purpose and meaning in life as well as a sense of balance and peace. Spirituality can also refer to organized religion, beliefs in traditions, community, and beyond (SAMHSA, 2016).

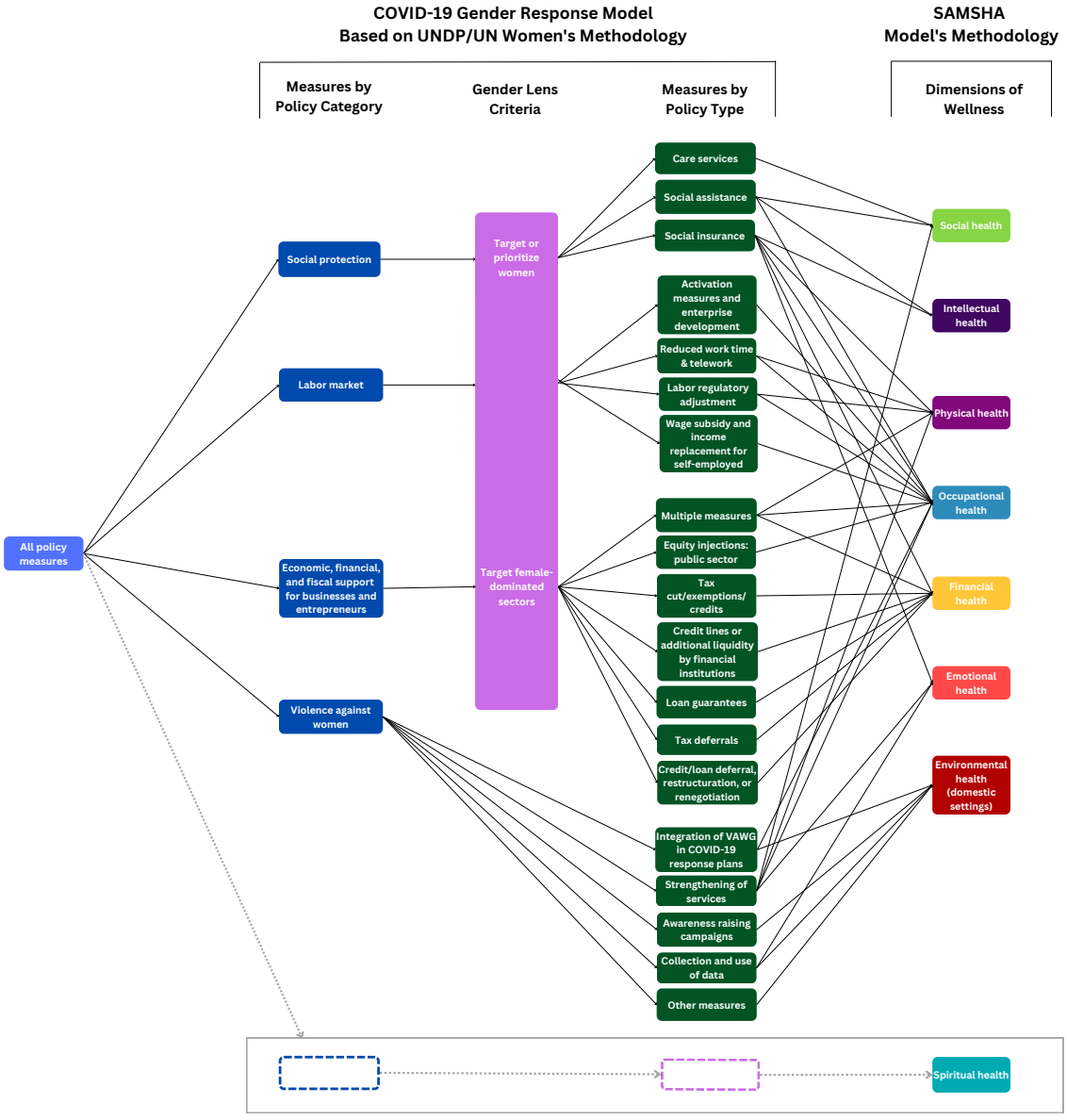

Figure 4: The integrated conceptual framework of UNDP/UN Women's COVID-19 Gender Response methodology and SAMHSA Wheel's model for gendered policy analysis.
Note: The outlined boxes at the bottom represent the proposed creation of a new policy category and policy type within the UNDP/UN Women methodology to better incorporate spiritual health in a gendered policy analysis framework.

The major methodological novelty in this study is the integrated use of the UNDP/UN Women's COVID-19 Gender Response methodology and the SAMHSA Wheel's model (Figure 4) for gendered policy analysis. In the first step of the analysis, policies are categorized based on the UNDP/UN Women gendered policy criteria (whether policies target or prioritize women or target female-dominated sectors) and then analyzed using the SAMHSA's dimensions of wellness: physical, emotional, intellectual, social, environmental, occupational, financial, and spiritual.

For the UNDP/UN Women conceptual framework, the study outlines the necessity for an additional policy category and policy measure type in order to adapt a holistic approach that incorporates the *spiritual needs* of women into this integrated model (Figure 4).

As an example of applying the integration of the UNDP/UN and SAMHSA models, here we show an analysis of Alaska State's Elementary and Secondary School Emergency Relief Fund, an initiative to help schools safely reopen, practice methods to limit the spread of COVID-19, provide mental health services, and upgrade educational technology (Alaska Department of Education and Early Development, 2021). This policy addresses women's *physical health*, as implementing public health measures such as masks, contact tracing, and diagnostic and screening in order to reduce COVID-19 transmission in a female-dominated industry (see Figure 4). This policy measure is also considered gendered based on the UNDP/UN Women methodology, as women in Alaska make up the majority of educators (Robinson, 2021, p. 9). Following SAMHSA methodology, this measure is categorized as providing women's *occupational health* support, as teachers are given social assistance in a female-dominated industry. Additional paid hours for engaging in academic support for students outside of regular classroom time, allow them to remain in the field of their choice.

Another example of how policy measures are categorized using the UNDP/UN Women and SAMHSA theoretical framework through a gender lens examines the State of Alaska's "People First Initiative," a policy measure that seeks to address domestic violence and sexual assault, missing and murdered Indigenous persons, human/sex trafficking, foster care, and homelessness (Osborne, 2021). Resources are also allocated to provide for staffing additions for nonprofits that deal directly with victims of domestic violence. Based on the UNDP/UN Women methodology, this policy is considered gendered as women in Alaska experience disproportionate rates of domestic violence. Using the SAMHSA wheel, domestic violence prevention falls under the *environmental health* dimension. While SAMHSA's definition of environmental health is expansive, covering both domestic and natural environments, its relevance in this study's analysis pertains to policy measures that involve wellness in the home. This policy is also categorized as serving women's *emotional health*, as it provides "strengthening of services" to combat violence against women, specifically counseling services (see Figure 4). Lastly, this policy supports women's occupational health, as women are disproportionately employed in the nonprofit and social services sector, also providing supplementary employee funding through the "strengthening of services" (see Figure 4) (Camarena et al., 2021). Additional hiring under this initiative allows women to gain access to greater economic security through employment in the field of their choice.

Results

In this study, we identified 82 policy measures passed during the COVID-19 pandemic across the state and city levels of governance in Alaska. Among them, only 23 measures were gender-responsive, as defined based on the UNDP/UN Women methodology. Of the 23 identified gendered policies, 11 were adopted on the state level. The remaining 12 measures were implemented on the municipal level of the cities: 5 in Anchorage, 4 in Fairbanks, 2 in Juneau, and 1 in Nome.

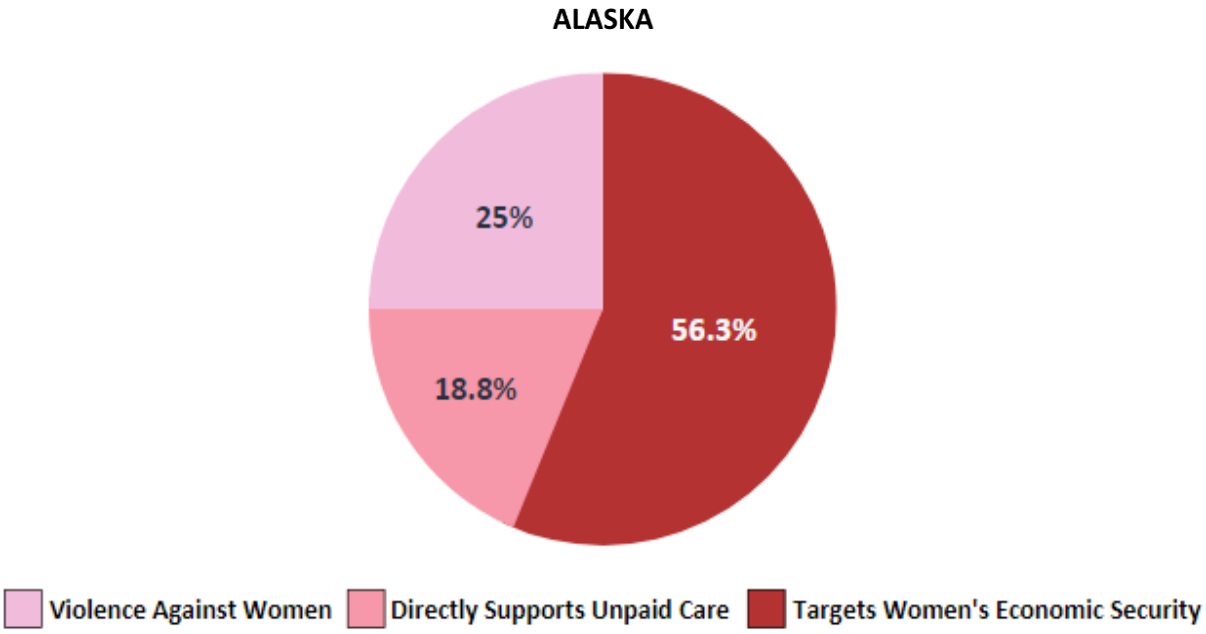

Figure 5: Breakdown of COVID-19 gender-responsive measures based on UNDP/UN Women Methodology: State of Alaska level of governance. Based on COVID-GEA Tracker data.

The State of Alaska's policies targeting women's economic security comprised 56.3% of the state response, with 18.8% directly supporting unpaid care, and 25% addressing violence against women (Figure 5). The policy response at the city level exhibited similar trends in focusing on supporting women's economic and occupational security (see Figure 6). At the same time, municipal approaches were not consistent across the sample. The largest cities in the study, Anchorage and Fairbanks, differed in their policy priorities: 71.4% of Anchorage's policies addressed women's economic security, while 80% of Fairbanks' policies directly supported unpaid care. State policy approaches to the pandemic (Figure 5) were similar to municipal policy responses (Figure 6) in that both expressed considerable emphasis on targeting women's economic security and supporting unpaid care. The primary focus on these policies demonstrates an apparent lapse in legislation and administrative measures addressing crucial areas of wellness, such as emotional health.

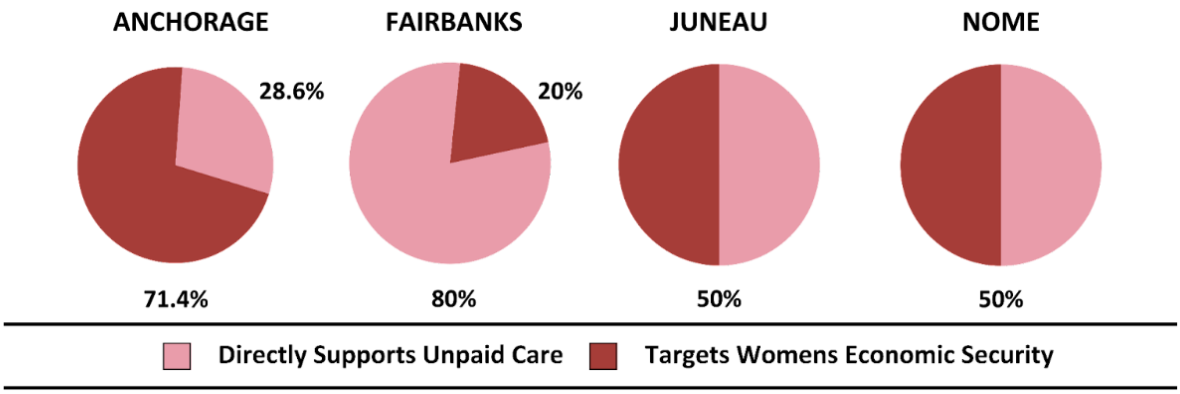

Figure 6: Breakdown of COVID-19 gender-responsive measures based on UNDP/UN Women methodology: City level of governance. Based on COVID-GEA Tracker data.

Based on the SAMHSA methodology, of the 11 gendered policies at the state level, occupational and physical health needs were most prominently addressed (see Figure 7), and occupational health was addressed in 40% of gendered policies (8 total). Physical health appeared in 25% of policies (5 total), and environmental health was represented as 15% of policies addressed violence against women (3 total). Emotional health was addressed in 15% of policies (3 total), and intellectual health was seen in 5% of policies (1 policy). Notably, spiritual, financial, and social health domains do not appear in any policies identified at the state level.

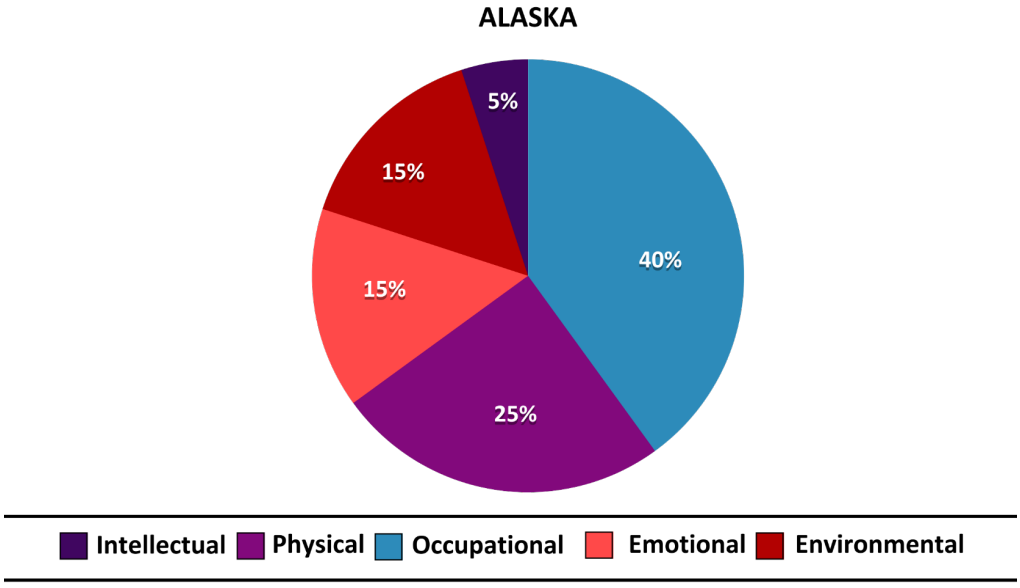

Figure 7: Breakdown of Alaska's state-level COVID-19 gender-responsive measures using the SAMHSA Wheel. Based on COVID-GEA Tracker data.

Note: Percentages represent facets of health, not the total number of policies. More than one aspect of health can be addressed per policy.

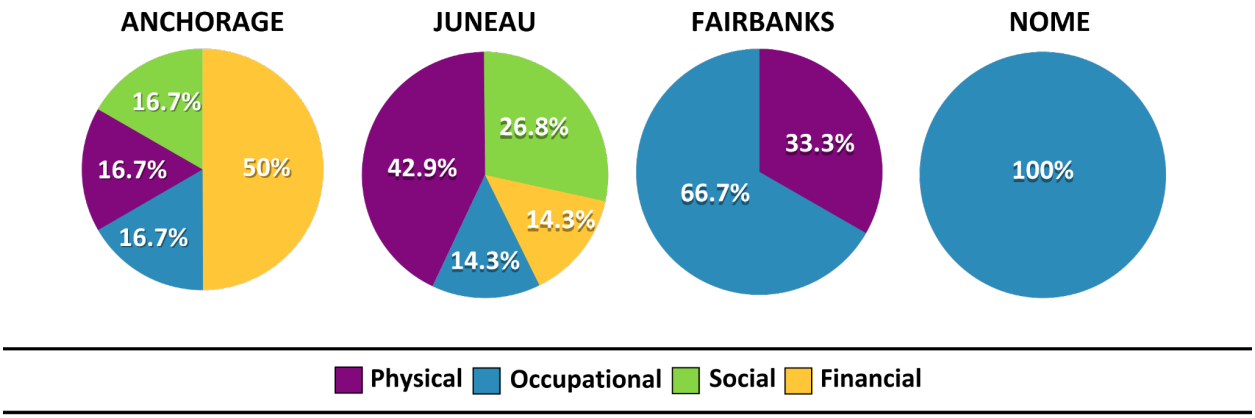

Figure 8: Breakdown of COVID-19 gender-responsive measures using the SAMHSA Wheel Model: Alaska city level of governance. Based on COVID-GEA Tracker data.
Note: Percentages represent facets of health, not the total number of policies. More than one aspect of health can be addressed per policy.

At the municipal city level, physical health, financial health, and occupational health were the most represented facets of health, while emotional, intellectual, and spiritual health domains were not addressed by policy-makers (see Figure 8).

Anchorage's city-level gendered COVID-19 policy response prioritized a financial health dimension, as this facet was addressed in 50% of their policies (3 total). Physical, social, and occupational health were each addressed in 16.7% of policies (1 each, 3 total). Juneau's policy response prioritized physical health dimension, as seen in 49.2% of policies (3 total). Social health constituted 26.8% of the total policy response (2 policies). Financial health and occupational health were each seen in 1 policy each, each representing 14.3% of Juneau's total policy response. Fairbanks had 3 policies classified as gendered, and occupational health was addressed in both, constituting 66.7% of the total response (2 policies), and physical health was addressed in 1 of the policies, representing 33.3% of the health facets addressed. Nome only had 1 identified gendered COVID-19 policy response which focused on occupational health (100%). Violence against women was not addressed at the municipal level in these focal cities, as well as emotional and spiritual dimensions of health were not included in gendered municipal COVID-19 measures.

Discussion

According to a growing volume of literature, women during the pandemic were disproportionately exposed to significant stressors related to increased unpaid care, elevated unemployment rates, and domestic violence, and thus had a higher need for policies that addressed their social and emotional health (UN Women, 2020b). Although further research is needed to support this thesis, the study's findings demonstrate that the gendered policy response to the COVID-19 pandemic was limited in Alaska. It also did not fully address all dimensions of health, seeing as it overwhelmingly prioritized physical, financial, and occupational health.

The study findings further indicate that, although the UNDP/UN Women framework allows for the identification and evaluation of COVID-19 gendered policy responses in a comprehensive manner, it does not explicitly include all eight SAMHSA's dimensions of health and wellness, and

a spiritual health dimension is currently overlooked. Alternatively, while the SAMHSA Wheel framework provides a holistic view of health and wellness, it does not incorporate a gender component. Thus, through the use of the integrated conceptual framework of UNDP/UN Women's COVID-19 Gender Response methodology and SAMHSA Wheel's model, this study presents a more comprehensive methodology to evaluate gendered policy response to the COVID-19 pandemic in Alaska or other regions in the Arctic and beyond.

A community-centric approach to policy is particularly important in Alaska as the state is home to a diverse Indigenous and non-Indigenous population that adds to the complexity of socio-economic, cultural, and political environments; this makes a one-size-fits-all policy approach across different levels of governance at different locations rather inadequate. For instance, though gun violence is a prevalent issue within Alaska, with 25% of female homicide victims in Alaska being killed by guns in 2021 (Stremple, 2022; Violence Policy Center, 2021), gun legislation is a crucial political task requiring nuanced regulation particularly for smaller remote communities to accommodate Alaska's traditional subsistence practices across socio-economic and cultural spheres (Rogerson, 2023).

The co-management model of state-tribal cooperation in Alaska, specifically the collaboration between the Alaska Department of Health and Social Services and the Alaska Native Tribal Health Consortium, demonstrated high efficacy during the pandemic and paved the way for increased trust between the State of Alaska's government and Indigenous organizations (Petrov et al., 2023; Chhean et al., 2021; Halseth & Murdock, 2020). In the context of this co-management model, SAMHSA Wheel's more holistic approach in certain aspects can be considered in line with Indigenous concepts and practices of health. The Indigenous Medicine Wheel, used for thousands of years, emphasizes the physical, mental, emotional, and spiritual components of health (Brumley, 2015; Dapice, 2006; Quinless, 2022). In North American Indigenous communities, connection with oneself, others, and the environment are all important in defining health beyond the physical dimension (Healy, 2017; Quinless, 2022). The convergence of Western and Indigenous knowledge systems can support future holistic public health responses and may ultimately lead to greater outcomes for diverse Arctic communities in general and women in particular.

Conclusion

Using the example of the State of Alaska and the cities of Anchorage, Fairbanks, Juneau, and Nome, the study examined the COVID-19 pandemic gendered policy responses through the prism of a holistic wellness concept. Given the importance of the holistic approach to policies in crises, like the COVID-19 pandemic, developed in this study, the integrated conceptual framework of UNDP/UN Women's COVID-19 Gender Response methodology and SAMHSA Wheel's model proved useful in identifying and highlighting various aspects of gendered policy responses in Alaska. This integrated framework may also provide a platform for better integrating Western science and Indigenous knowledge by using a more holistic approach to evaluating and responding to the gendered impacts of the COVID-19 pandemic.

Findings from this study demonstrate that the gendered policy response to the COVID-19 pandemic at the state and municipal city levels remained limited in Alaska. These policies also did not fully address all SAMHSA's dimensions of health, seen as overwhelmingly prioritizing physical, financial, and occupational health over emotional, social, environmental, intellectual, and spiritual.

The integrated conceptual framework of UNDP/UN Women's COVID-19 Gender Response methodology and SAMHSA Wheel's wellness concept can be useful to better understand lapses in gender-responsive decision-making. Our analysis of gender policies demonstrated that it remains essential for women's needs to be taken into consideration while addressing all dimensions of wellness, as defined by SAMHSA model, in the Arctic and beyond.

Limitations and future directions

Our data collection was limited to open-source, publicly available information. The research included an analysis of gendered policy responses at the state and municipal levels of governance in Alaska, with a special focus placed on four focal cities, as data for local levels of governance, like villages, were unavailable or difficult to access. Additionally, at the time of publication, the Alaska Bureau of Labor Statistics was in the process of preparing updated sex-disaggregated data for the entire pandemic period, so it was inaccessible for our study.

In order to have a nuanced understanding of the co-management model of state-tribal cooperation in Alaska and the complex interactions between federal, state, tribal, and local policies addressing women's needs, future research should be done in close collaboration with Indigenous scholars and knowledge holders.

Collecting primary data is vital for understanding the realities and outcomes of crisis-response-gendered policy implementation as well as the rationale behind decision-making priorities in Alaska. Additionally, future research should include other genders to provide a more complete picture on the gendered impacts of the COVID-19 pandemic.

Potential policy recommendations

Strengthening gender-responsive governance amid and beyond the COVID-19 pandemic includes:

- Improving gender-specific COVID-19 data collection and availability
- Integrating the UNDP/UN Women COVID-19 Gender Response Model and SAMHSA Wheel methodologies to ensure the complex and holistic gendered policy responses
- Expanding frameworks like the UNDP/UN Women COVID-19 Gender Response Model to address women's needs beyond economic and social protection measures
- Mainstreaming considerations of gender within public health policies, post-COVID-19 recovery programs, and political processes
- Prioritizing public health policies based on a holistic concept of health and wellness, such as the SAMHSA Wheel and Indigenous health and wellness models
- Strengthening the co-management model of state-tribal cooperation in Alaska to provide an adequate response to women's needs
- Streamlining Alaskan tribal communities' policy planning approach to adequately respond to Indigenous women's needs, especially in rural communities
- Improving public day-care and childcare facilities by making them more accessible and affordable, especially during crises
- Creating public platforms and forums for the articulation of women's interests.

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