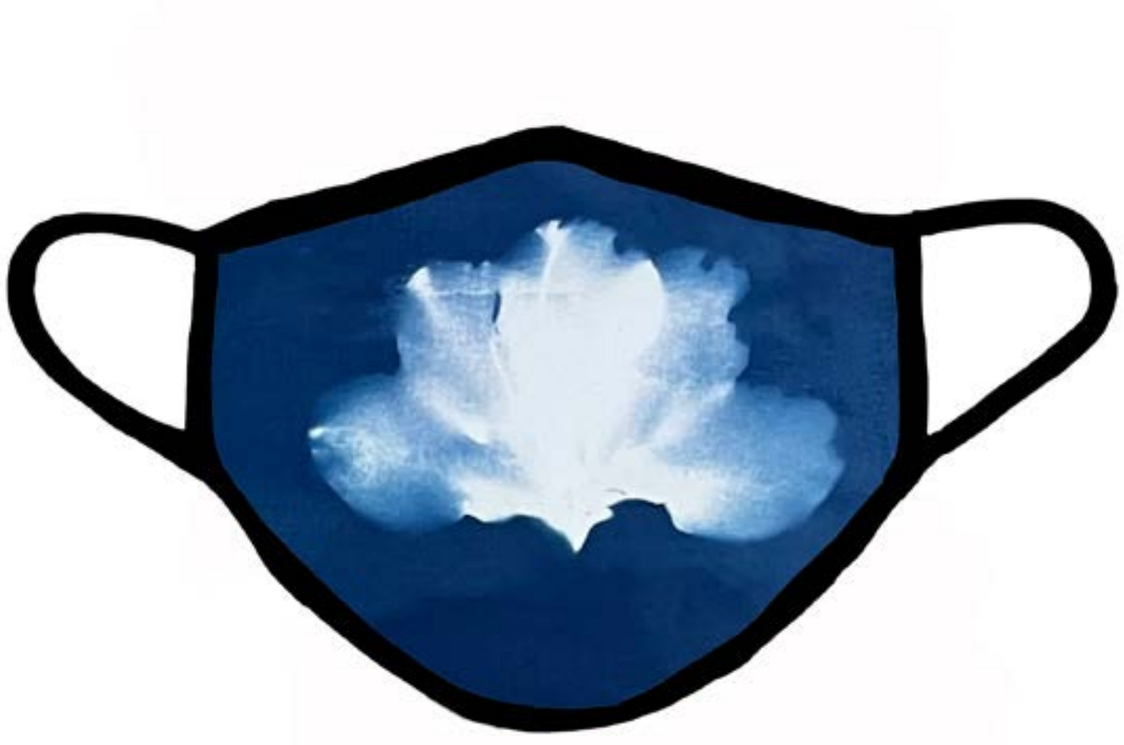
Gender Inequality in Healthcare Delivery: Differences in System Satisfaction During the COVID-19 Pandemic in the United States

Haizhu Song

Volume 4, Issue 1

Article Synopsis

This study examines gender differences in public evaluations of the U.S. healthcare system during the COVID-19 pandemic, using nationally representative data from the 2021–2022 General Social Survey (GSS). While prior research has documented significant gender-based disparities in healthcare access and outcomes, this analysis finds no statistically significant relationship between gender and reported dissatisfaction with the healthcare system, even after controlling for self-reported health status. These findings suggest that broad indicators of system satisfaction may not adequately reflect the gendered nature of healthcare experiences. However, supplementary analysis of perceived access to healthcare,reveals meaningful gender differences, pointing to potential limitations in using general satisfaction measures as proxies for structural inequities. The study underscores the importance of incorporating more specific and experience-based metrics in future research, as well as the need to examine intersecting factors such as income, race, and insurance status to better understand the complexity of gender disparities in healthcare delivery during public health emergencies.



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Vertices: Duke's Undergraduate Research Journal Volume 4, Issue 1 | Spring 2025

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Haizhu Song
Trinity College of Arts and Sciences, Duke University
https://doi.org/10.55894/dv4.13

Abstract

This study examines gender differences in healthcare satisfaction during the COVID-19 pandemic in the United States using data from the 2021-2022 General Social Survey (GSS). Although existing literature generally points to the disadvantages women face in terms of healthcare access and health outcomes, this study assesses gender differences in satisfaction with the U.S. healthcare system, controlling for health conditions. This study is the first to systematically assess gender differences in healthcare satisfaction during an epidemic from a quantitative perspective using large-scale representative data, filling a gap in the existing literature on this critical issue. Bivariate and multivariate analyses of the article showed no statistically significant relationship between gender and healthcare satisfaction, challenging the hypothesis that women are less satisfied. However, the findings also suggest that it is difficult to capture small gender differences by relying solely on broad satisfaction metrics. Future research could consider introducing more specific variables and exploring the interaction between gender and socioeconomic factors. The results of the study not only provide data-based insights for policymakers, but also provide a quantitative foundation for achieving gender equity in the U.S. health system.

Introduction

Gender disparities in healthcare delivery have existed in the United States and globally. Although women have poorer health outcomes than men (Macintyre, Hunt, and Sweeting 1982), they often face greater challenges in accessing primary healthcare services (Sialubanje 2015), reflecting underlying gender inequalities in healthcare delivery.

Taking diabetes as an example, it is more difficult for women to access specialized care, which negatively impacts their quality of life and disease outcomes (Suresh and Thankappan 2019). Also, in the U.S., 10% fewer female coronary heart disease patients receive professional medical care than male patients (Arber et al. 2006), reflecting the disadvantage of women's access to healthcare delivery. Also, in other countries, such as Ghana, women have more difficulty accessing health care due to economic constraints and low health insurance coverage (Seidu et al. 2020). The COVID-19 pandemic has disrupted healthcare systems globally (Bisht, Saharia, and Sarma 2020), increasing the likelihood of expanding these pre-existing inequalities. In this crisis, women have taken on more caregiving responsibilities (Guerrina et al. 2021) and are more susceptible to virus infection (Penfold and Magee 2020).

Thus, to examine the possible gender inequalities in healthcare delivery in the U.S. during the pandemic, this paper aims to examine gender differences in Americans' evaluations of the healthcare system during the COVID-19 pandemic, using data from the General Social Survey (GSS). This is a direct way to study gender differences in healthcare system evaluation. Additionally, a deeper understanding of these disparities can help recognize the existing healthcare system problem and establish a strong foundation for future improvements.

This paper begins with a review of the relevant literature on gender differences and healthcare accessibility, followed by the statement of hypothesis. The methodology section presents data sources, sample selection, and measures. The results of the correlation and impact of gender on evaluating the healthcare system during the pandemic are presented. The key contributions of the study are the possible policy improvements based on these findings discussed.

Literature Review

Research on gender disparities in healthcare delivery, particularly during the COVID-19 pandemic in the U.S., has highlighted inequalities that affect women's health outcomes and life quality. Thus, reviewing the existing literature is essential to understand the broader context and identify gaps that require further research. This literature review is therefore organized into three key subtopics: existing gender disparities in healthcare delivery, the pandemic's impact on these disparities, and gender differences in satisfaction with healthcare delivery.

Gender Differences in Health Care Delivery

Gender has played an essential role in influencing individuals' receiving healthcare services. Generally, research has shown that women are more likely than men to need healthcare services to manage chronic conditions and reproductive healthcare and more likely to seek healthcare services (Case and Paxson 2005; Long et al. 2011). However, women tend to face more barriers to accessing necessary healthcare services than men and have less favorable healthcare experiences than men (Ng 2010; Elliott et al. 2012). Also, in the U.S., the health gap between men and women is well documented over time (Rapp et al. 2021). First, women are more likely than men to delay or forgo medical care for financial reasons or insurance gaps because women generally have higher prices for treatment and insurance costs than men (Lavelle and Smock 2012). Moreover, general gender discrimination within the U.S. influences health service utilization, with many states with high levels of gender discrimination exacerbating gender disparities in health care (Rapp et al. 2021), which is more detrimental to women's receiving health care services. Thus, this existing research shows that women face more challenging conditions than men in receiving healthcare delivery in the U.S. and globally.

Impact of the COVID-19 Pandemic on Healthcare Delivery

Even worse, the COVID-19 pandemic has dramatically changed the landscape of healthcare delivery, which increases the likelihood of enlarging this gender disparity. During the pandemic, demand for healthcare services outstripped supply, resource constraints, and overwhelmed systems, severely impacting vulnerable populations (Rivenbark and Ichou 2020; Siegel and Mallow 2020). Based on this unique context, women, as a vulnerable group, face unique challenges during the pandemic. Firstly, since the majority of frontline healthcare workers are female, they are more susceptible to the virus (Penfold and Magee 2020). Also, due to the increased family responsibilities associated with the pandemic, women suffered severe negative physical and mental effects (Maposa 2024). Therefore, the pandemic increases the possibility that women need professional and comprehensive healthcare services and is likely to exacerbate gender-based challenges in healthcare (Heise et al. 2019). Thus, gender-specific challenges during this period widen the potential for exacerbating pre-existing gaps in health care delivery.

Gender Difference in Satisfaction with the Healthcare System

Considering the persistent gender inequality in the medical field and the unprecedented impact of the pandemic, satisfaction with the healthcare system becomes a crucial indicator for directly assessing these influences. First, gender differences in health care satisfaction have long existed. Women are more likely than men to report difficulties in accessing health care services and are less satisfied with the services they receive than men, particularly regarding drug costs and medical diagnoses (Daher 2021). Additionally, this lower satisfaction among women stems from various factors, including the complexity of the healthcare system and inadequate access to medical care in areas such as reproductive health and chronic disease management (Bryant, Leaver, and Dunn 2009). These perceptions highlight gender differences in the receipt of health care services and reflect the disadvantaged position of women.

Existing Literature Gaps

While existing research provides insights into gender differences in healthcare satisfaction, few studies have used large-scale U.S. datasets such as the GSS to conduct systematic quantitative analyses. Most studies, such as that of Bryant, Leaver, and Dunn (2009), lack a specific focus on the pandemic period, thus leaving a gap in understanding how gender affects healthcare delivery satisfaction during this critical period. Therefore, this study fills this gap by utilizing GSS data to analyze gender differences in healthcare satisfaction during the most recent pandemic.

Hypothesis

Based on the context of gender disparity in the healthcare field, this paper presents one key hypothesis: gender is relevant to satisfaction with the healthcare system, and women are expected to report lower satisfaction during the pandemic compared to men. This hypothesis is grounded in existing research, which indicates that women generally face more barriers to receiving healthcare than men. Also, this gender gap may be exacerbated by the challenges of a pandemic because research has shown women faced more difficulties than men during this critical time period.

Methods

Data

This paper utilizes data from the General Social Survey (GSS), which targets the adult (age 18 and older) household population of the U.S., is a comprehensive, nationally representative survey that captures public opinions, attitudes, and demographic information across the US (Marsden and Smith 2016; NORC at the University of Chicago 2021). The analysis focuses on healthcare system satisfaction as the dependent variable, with gender as the independent variable and health status as a control. Also, the study specifically examines data from the COVID-19 pandemic period (2021-2022) to assess relevant social trends.

Sample Selection

The sample for this study consists of respondents from the 2021-2022 General Social Survey (GSS) who provided complete responses on gender, health status, and healthcare system satisfaction in the United States. By focusing on this subset of respondents, the study aims to analyze gender disparities in healthcare satisfaction during the pandemic.

Measures

Dependent Variable. The dependent variable in this study is the respondents' dissatisfaction with the U.S. healthcare system during 2021-2022, which can directly reflect public attitudes and perceptions of healthcare delivery. Thus, the dissatisfaction level helps to understand the complexity of accessing and receiving healthcare services and gender disparities. In the planned cross-tabulation analysis, the original GSS variable representing healthcare system inefficiency ('HLTHINF') was recoded to collapse attributes into three categories: 1 for "Agree," 2 for "Neither agree nor disagree," and 3 for "Disagree" rather than original five categories. This recording combines responses into distinct categories, clearly reflecting the dissatisfaction level. To be more specific, Table 1 below presents the recoded variable with its attributes, codes, and percentages, and the GSS question prompting this variable will be included verbatim in Appendix A.

Independent Variable. Due to the long history of gender health disparity in the U.S. and worldwide, the chosen independent variable is the respondents' gender. Thus, gender is significant in exploring existing and potential inequalities through analyzing healthcare satisfaction. The original variable 'SEX' was recoded to a binary format that 0 represents "Male" and 1 represents "Female." Also, Table 1 includes the gender variable, showing its attributes, metrics, and distribution percentages, and specific

GSS questionnaire items for gender will be provided in Appendix A.

Control Variable. This study's control variable is the respondents' self-reported health condition. It was chosen to avoid any possible influence on the satisfaction of the healthcare system from an individual's health status. The original variable 'HEALTH' was recoded to classify responses into three categories: 1 for "Excellent," 2 for "Good," and 3 for "Not good," which combines the original "Fair" and "Poor" attributions. This recording was crucial to simplifying interpretation and making the analysis clear and distinct by combining the less-than-good attributions. As previously mentioned, Table 1 presents the health status variable, its attributes, codes, and percentages. The corresponding GSS question will also be included verbatim in Appendix A.

Analytic Plan

To explore the relationships among the variables, this study will use SDA software to perform both bivariate and multivariate cross-tabulation, supported by a Rao-Scott chi-square test statistic at a 95% confidence level.

The bivariate analyses will include (1) a cross-tabulation of the dependent variable (healthcare system dissatisfaction) by the independent variable (gender) to examine the relationship between gender and healthcare dissatisfaction, reflecting the general changes and differences; (2) a cross-tabulation of the dependent variable by the control variable (health condition) to assess how health status relevant to healthcare; and (3) a cross-tabulation of the control variable by the independent variable to analyze relationship between gender and self-reported health status.

Furthermore, the multivariate analysis will involve a cross-tabulation of the dependent variable by the independent variable, with the control variable included. This analysis will help recognize whether the relationship between gender and healthcare satisfaction persists, weakens, or strengthens when considering health status.

Also, each table generated from these analyses will be assessed using the Rao-Scott chi-square statistic, which considers the complexity of the p-values to check the statistical significance. Finally, the elaboration model will be applied to recognize and evaluate the relationship among these three variables, which can show the types of their relevance and impact clearly.

Results

Generally, as Table 2 shows, there are minor differences between genders in healthcare satisfaction. First, 58.4% of males and 60.0% of females consider the U.S. health system inefficient, which does not indicate a large difference between the genders. Similarly, The proportion of respondents

Table 1. Variable Descriptions, Metrics, and Descriptive Statistics for Key Variables

Variable Name	Description	Metric	Percentages (%)
Dependent Variable			
	Respondent's perception of the	1=Agree	60.0
	U.S. healthcare system's	2=Neither	22.0
HLTHINF	inefficiency	3=Disagree	18.0
Independent Variable			
		0=Male	45.1
SEX	Respondents' sex	1=Female	54.9
Control Variable			
		1=Excellent	20.2
		2=Good	54.1
HEALTH	Self-reported health status	3=Not good	25.7

Table 2: Bivariate Cross Tabulation Analysis for Dissatisfaction with the U.S. Healthcare System by Gender (Unweighted N= 1,118)

	Gender	
Healthcare Dissatisfaction	Male	Female
Agree (Dissatisfied)	58.4	60.0
Neither agree nor disagree	22.3	22.0
Disagree (Satisfied)	19.3	18.0
Column Total	100%	100%
Unweighted Column Total	(501)	(617)
Chi-Square = 0.37	p = 0.93	

Table 3: Bivariate Cross Tabulation Analysis for Dissatisfaction with the U.S. Healthcare System by Health Condition (Unweighted N= 1,119)

	Health Condition		
Healthcare Dissatisfaction	Excellent	Good	Not Good
Agree (Dissatisfied)	49.5	61.3	61.2
Neither agree nor disagree	24.7	23.2	18.1
Disagree (Satisfied)	25.8	15.5	20.7
Column Total	100%	100%	100%
Unweighted Column Total	(226)	(591)	(302)
Chi-Square = 17.20	p = 0.19		

who neither agree nor disagree is 22.3% for males and 22.0% for females, while those who disagree are 19.3% for males and 18.0% for females. This phenomenon can also be supported by the chi-square test result ($\chi^2 = 0.37$, $p = 0.93$), which indicates no statistically significant relationship between gender and attitude towards the healthcare system ($p > 0.05$).

Table 3 shows the percentage difference between healthcare satisfaction and self-reported health condition. First, the respondents in "Excellent" health are less likely to agree that the U.S. healthcare system is inefficient (49.5%) compared to those in "Good" (61.3%) and "Not Good" (61.2%) health. Also, the percentage of respondents who disagree is higher among those in "Excellent" health (25.8%) compared to those in "Good" (15.5%) and "Not Good" (20.7%) health status. This phenomenon shows that the respondents with excellent health status are more satisfied than those with less good health status. Moreover, the respondents who have "Not Good" health status are less likely to choose the neutral option (18.1%) compared to others (24.7% for excellent and 23.2% for good). These percentage differences seem to suggest there may be an association, as those with excellent health report being less dissatisfied.

Table 4: Bivariate Cross Tabulation Analysis for the Health Condition by Gender (Unweighted N= 7,458)

	Gender	
Health Condition	Male	Female
Excellent	20.8	18.4
Good	53.0	55.8
Not Good	26.2	25.7
Column Total	100%	100%
Unweighted Column Total	(3,360)	(4,098)
Chi-Square = 8.13	p = 0.08	

However, the chi-square statistic ($\chi^2 = 17.20$, $p = 0.19$) indicates that the relationship between health conditions and healthcare satisfaction is not statistically significant ($p > 0.05$). Thus, the percentage differences are insignificant enough to confirm a strong relevance between health conditions and attitudes toward the U.S. healthcare system.

According to Table 4, there appear to be slight differences between gender and health conditions. First, the data shows that a higher percentage of males (20.8%) report being in "Excellent" health compared to females (18.4%). A more significant percentage of females (55.8%) report being in "Good" health compared to males (53.0%). Also, the "Not Good" health status percentage is similar for both genders (26.2% for males and 25.7% for females). Moreover, the chi-square test shows these slight differences do not bear out a relationship between the two variables, which is not statistically significant ($\chi^2 = 8.13$, $p = 0.08$, $p > 0.05$).

The trivariate analysis provides comprehensive and detailed data on the relationship between gender and satisfaction with the U.S. healthcare system, controlled for health conditions, and the chi-square test shows the significance of each relationship.

Partial Table 5a, controlling for people with excellent health, shows a difference in satisfaction levels between genders of the healthcare system. Males are more likely to agree (63.0%) than females (39.3%), and females have a higher percentage of disagreement (29.6%) compared to males (19.4%). Also, female respondents are more likely to choose the neutral option than males (31.1% for women and 17.6% for men). In addition, although the chi-square test result ($\chi^2 = 12.63$, $p = 0.06$) is close, it did not reach conventional significance ($p < 0.05$), reflecting that the likelihood of an existing relationship between the dependent and independent variables is not supported.

For respondents who have a good health status, the percentages for dissatisfaction with the healthcare system ("Agree" (the system is inefficient)) are relatively similar, with males at 58.9% and females at 63.2%. Similarly, the proportion of respondents who neither agree nor disagree is also close (23.5% for males and 23.0% for females). Regarding the dissatisfaction choice ("Disagree" (the system is efficient)), the rates are higher for males (17.6%) than for females (13.7%). The chi-square test ($\chi^2 = 1.85$, $p = 0.70$) indicates no significant relationship between gender and satisfaction in this health group.

Finally, there is a significant difference in the "Agree" choice for the unhealthy respondents, with 68.3% of females agreeing compared to 54.2% of males. Also, the percentage of respondents who neither agree nor disagree is higher among males (23.2%) than females (12.8%). Similarly, for the "Disagree" option, the males (22.5%) are also higher than females (18.9%). Despite those apparent differences, the chi-square statistic ($\chi^2 =$

Table 5a: Trivariate Cross Tabulation Analysis for Dissatisfaction with the U.S. Healthcare System by Gender, Controlling for Health Condition = Excellent (Unweighted N= 225)

	Gender	
Healthcare Dissatisfaction	Male	Female
Agree (Dissatisfied)	63.0	39.3
Neither agree nor disagree	17.6	31.1
Disagree (Satisfied)	19.4	29.6
Column Total	100%	100%
Unweighted Column Total	(100)	(125)
Chi-Square = 12.63	p = 0.06	

Table 5b: Trivariate Cross Tabulation Analysis for Dissatisfaction with the U.S. Healthcare System by Gender, Controlling for Health Condition = Good (Unweighted N= 590)

	Gender	
Healthcare Dissatisfaction	Male	Female
Agree (Dissatisfied)	58.9	63.2
Neither agree nor disagree	23.5	23.0
Disagree (Satisfied)	17.6	13.7
Column Total	100%	100%
Unweighted Column Total	(264)	(326)
Chi-Square = 1.85	p = 0.70	

Table 5c: Trivariate Cross Tabulation Analysis for Dissatisfaction with the U.S. Healthcare System by Gender, Controlling for Health Condition = Not Good (Unweighted N= 302)

	Gender	
Healthcare Dissatisfaction	Male	Female
Agree (Dissatisfied)	54.2	68.3
Neither agree nor disagree	23.2	12.8
Disagree (Satisfied)	22.5	18.9
Column Total	100%	100%
Unweighted Column Total	(137)	(165)
Chi-Square = 7.45	p = 0.12	

7.45, p = 0.12) suggests that these differences are not statistically significant.

To conclude, although there are some observable proportion differences in satisfaction levels between genders based on various health statuses, these differences do not reach statistical significance in all health situations. This result shows that when considering health status, gender alone cannot significantly influence the satisfaction of the healthcare system.

Finally, based on the results from Tables 2 to 5, this study's most fitting elaboration model appears to be replication. The initial relationship between gender and satisfaction with the U.S. healthcare system remains consistent across different levels of the control variable (health condition) without huge changes. Thus, while the satisfaction level may change due to different genders and health conditions, these do not result in a statistically significant change when the health condition is controlled. Therefore, the original relationship between gender and satisfaction, which was not statistically significantly different, is not significantly impacted by the control variable since each partial table shows no statistical significance.

Discussion

The results section of this study indicates no statistically significant relationship between gender (IV), the U.S. healthcare system dissatisfaction (DV), and health conditions (CV) based on the cross-tabulation analyses. This conclusion is supported by p-values greater than 0.05 for all chi-square tests. However, Table 4 (cross-tabulation of health conditions by gender) demonstrates a p-value of 0.08, which suggests a potential relationship between gender and health status at the 90% confidence level. This result, while not reaching the traditional threshold of significance, suggests a potential relationship between health conditions and gender that warrants further investigation.

Additionally, the findings align with the replication elaboration model. According to this model, the initial relationship between gender and healthcare system dissatisfaction remains consistent even after controlling for health conditions. Thus, in this study, the relationship between dissatisfaction and gender was not statistically significant, and the health conditions neither significantly strengthened nor significantly weakened the observed relationship. In addition, this result reflects that other unexamined factors, such as respondents' age, may contribute to differences in satisfaction (Xesfingi and Vozikis 2016).

Thus, the results refute the hypothesis that women would report lower satisfaction with the healthcare system than men during the pandemic, as no significant relationship was found between the two variables. Also, while prior literature suggests that women face more significant challenges in accessing healthcare and are often less satisfied with healthcare systems (Daher et al. 2021; Bryant, Leaver, and Dunn 2009), this study did not find statistically significant gender disparities. One possible explanation is that healthcare system satisfaction may be too broad to measure and capture the subtle experiences of gender disparities. In addition, the widespread stress caused by a pandemic may produce consistent feelings of health system dissatisfaction across genders, thus masking the specific differences. Therefore, although the results refute the hypothesis and do not align with existing literature, the gender disparities in healthcare need more diverse and specific measures to explore.

Moreover, this study's limitations could have influenced the findings. First, some demographic factors, such as respondents' age, were not included in the analysis, and these factors may intersect with gender in influencing healthcare experiences. Thus, excluding these variables may have masked essential or subtle changes during analysis. In addition, the dependent variable - dissatisfaction with the healthcare system - may not be sufficient to measure differences in healthcare access. For example, other measures, such as HLTHACC3 in GSS data (Appendix A), which focuses on gender perspectives on ease of access to healthcare services, show significant gender differences during the pandemic (Appendix B). This result suggests the likelihood of exploring other more appropriate and specific measurements of gender differences in access to healthcare delivery in the U.S.

Based on the findings and limitations of the study, this paper suggests that future research use more targeted measurement to address these issues, such as accessibility, affordability, and timeliness of healthcare services, rather than relying solely on the broad satisfaction variable. Also, including cross-cutting variables such as socio-economic status provides a more complete description of healthcare disparities. Specifically, future research could analyze gender interaction with age or income to better capture subtle differences. In addition, qualitative methods such as qualitative interviews can complement quantitative analysis by capturing the lived experiences and perceptions behind the statistics. By closing these gaps, future research can better explore the structural and contextual factors contributing to gender disparities in healthcare delivery, ultimately contributing to a more equitable U.S. healthcare system.

Conclusion

This study explored gender disparities in satisfaction with the U.S. healthcare system during the COVID-19 pandemic and aimed to find and improve this potential unequal social issue. While no statistically significant differences were found, the results suggest that potential and subtle gender disparities need more precise measurements to capture in healthcare experiences.

This research is essential because it focuses on how healthcare inequalities persist or evolve during a pandemic, providing insights into the challenges women face in accessing equitable healthcare delivery. Also, by addressing gender disparities, we can build a health system that better meets the needs of all people and promotes greater trust and accessibility. By identifying gaps in current measurements and emphasizing the role of external factors, this study provides a foundation for future research to develop targeted solutions that promote healthcare gender equity and improve outcomes for all populations.

References

Arber, Sara, John McKinlay, Ann Adams, Lisa Marceau, Carol Link, and Amy O'Donnell. 2006. "Patient Characteristics and Inequalities in Doctors' Diagnostic and Management Strategies Relating to CHD: A Video-Simulation Experiment." Social Science and Medicine 62(1):103–15. doi: 10.1016/j.socscimed.2005.05.028.

Bisht, Ramila, Rajashree Saharia, and Jyotishmita Sarma. 2021. "COVID-19 and the Burden of Ill-Health: A Double Crisis of Disruptions and Inequalities." Journal of Social and Economic Development 23:342–56. doi: 10.1007/s40847-020-00117-x.

Bryant, Toba, Chad Leaver, and James Dunn. 2009. "Unmet Healthcare Need, Gender, and Health Inequalities in Canada." Health Policy 91(1):24–32. doi: 10.1016/j.healthpol.2008.11.002.

Case, Anne, and Christina Paxson. 2005. "Sex Differences in Morbidity and Mortality." Demography 42(2):189–214. doi: 10.1353/dem.2005.0011.

Daher, Marilyne, Mahmoud Al Rifai, Riyad Y. Kherallah, Fatima Rodriguez, Dhruv Mahtta, Erin D. Michos, Safi U. Khan, Laura A. Petersen, and Salim S. Virani. 2021. "Gender Disparities in Difficulty Accessing Healthcare and Cost-Related Medication Non-Adherence: The CDC Behavioral Risk Factor Surveillance System (BRFSS) Survey." Preventive Medicine. doi: 10.1016/j.ypmed.2021.106779.

Elliott, Marc N., William G. Lehrman, Megan K. Beckett, Elizabeth Goldstein, Katrin Hambarsoomian, and Laura A. Giordano. 2012. "Gender Differences in Patients' Perceptions of Inpatient Care." Health Services Research 47(4):1482–1501. doi: 10.1111/j.1475-6773.2012.01389.x.

Guerrina, Roberta, Bettina Borisch, Leigh F. Callahan, Jeremy Howick, Jean-Yves Reginster, and Ali Mobasheri. 2021. "Health and Gender Inequalities of the COVID-19 Pandemic: Adverse

Impacts on Women's Health, Wealth and Social Welfare." Frontiers in Global Women's Health. doi: 10.3389/fgwh.2021.670310.

Heise, Lori, Margaret E. Greene, Neisha Opper, Maria Stavropoulou, Caroline Harper, Marcos Nascimento, and Debrework Zewdie. 2019. "Gender Inequality and Restrictive Gender Norms: Framing the Challenges to Health." Lancet 393:2440-2454. doi: 10.1016/S0140-6736(19)30652-X

Lavelle, Bridget, and Pamela J. Smock. 2012. "Divorce and Women's Risk of Health Insurance Loss." Journal of Health and Social Behavior 53(4):413–31. doi: 10.1177/0022146512465758.

Long, Sharon K., Karen Stockley, and Shanna Shulman. 2011. "Have Gender Gaps in Insurance Coverage and Access to Care Narrowed under Health Reform? Findings from Massachusetts." American Economic Review 101(3):640–44. doi: 10.1257/aer.101.3.640.

Macintyre, Sally, Kate Hunt, and Helen Sweeting. 1996. "Gender Differences in Health: Are Things Really as Simple as They Seem?" Social Science and Medicine 42(4):617–24. doi: 10.1016/0277-9536(95)00335-5.

Maposa, Abraham. 2024. "Addressing Gender Disparities in Healthcare Delivery: Strategies and Innovations for a Post-COVID-19 Era." Zimbabwe Journal of Health Sciences 4(1):17–35.

Ng, Judy H., Shakeh J. Kaftarian, Wilma M. Tilson, Paul Gorrell, Xiuhua Chen, Francis D. Chesley Jr, and Sarah Hudson Scholle. 2010. "Self-Reported Delays in Receipt of Health Care among Women with Diabetes and Cardiovascular Conditions." Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health 20(5):316–22. doi: 10.1016/j.whi.2010.06.002.

NORC at the University of Chicago. 2023. "50 Years of the General Social Survey." https://gss.norc.org/us/en/gss/gss50.html.

Penfold, Rose, and Lucia Magee. 2020. "Gender Balance in an Unprecedented Time." Future Healthcare Journal 7(3):212–13. doi: 10.7861/fhj.2020-0029.

Rapp, Kristen Schorpp, Vanessa V. Volpe, Tabitha L. Hale, and Dominique F. Quartararo. 2022. "State–Level Sexism and Gender Disparities in Health Care Access and Quality in the United States." Journal of Health and Social Behavior 63(1):2–18. doi: 10.1177/00221465211058153.

Rivenbark, Joshua G., and Mathieu Ichou. 2020. "Discrimination in Healthcare as a Barrier to Care: Experiences of Socially Disadvantaged Populations in France from a Nationally Representative Survey." BMC Public Health 20(1):31-31. https://doi.org/10.1186/s12889-019-8124-z.

Seidu, Abdul-Aziz, Eugene Kofuor Maafo Darteh, Ebenezer Agbaglo, Louis Kobina Dadzie, Bright Opoku Ahinkorah, Edward Kwabena Ameyaw, Justice Kanor Tetteh, Linus Baatiema, and Sanni Yaya. 2020. "Barriers to Accessing Healthcare among Women in Ghana: A Multilevel Modelling." BMC Public Health 20(1). doi: 10.1186/s12889-020-10017-8.

Sialubanje, Cephas, Karlijn Massar, Marit S. G. van der Pijl, Elisa Maria Kirch, Davidson H. Hamer, and Robert A. C. Ruiter. 2015. "Improving Access to Skilled Facility-Based Delivery Services: Women's Beliefs on Facilitators and Barriers to the Utilisation of Maternity Waiting Homes in Rural Zambia." Reproductive Health 12(1). doi: 10.1186/s12978-015-0051-6.

Siegel, Robert M., and Peter J. Mallow. 2021. "The Impact of COVID-19 on Vulnerable Populations and Implications for Children and Health Care Policy." Clinical Pediatrics 60(2):93–98. doi: 10.1177/0009922820973018.

Suresh, Neethu, and Kavumpurathu Raman Thankappan. 2019. "Gender Differences and Barriers Women Face in Relation to Accessing Type 2 Diabetes Care: A Systematic Review." Indian Journal of Public Health 63(1):65–72. doi: 10.4103/ijph.IJPH_26_18.

Xesfingi, Sofia, and Athanassios Vozikis. 2016. "Patient Satisfaction with the Healthcare System: Assessing the Impact of Socio-Economic and Healthcare Provision Factors." BMC Health Services Research 16:94. https://doi.org/10.1186/s12913-016-1327-4.

Marsden, Peter V., and Tom W. Smith. 2016. "Overview: The General Social Survey Project." GSS Project Report No. 31. Chicago, IL: NORC, University of Chicago. https://gss.norc.org/content/dam/gss/get-documentation/pdf/reports/project-reports/PR31%20-%20GSS%20Overview.pdf.

Vertices: Duke's Undergraduate Research Journal Volume 4, Issue 1 | Spring 2025

APPENDIX A: Original GSS Question Wording

Variable Name	Original Codebook Question Wording
Dependent Variable (HLTHINF)	(How much do you agree or disagree with the following statements?) In general, the healthcare system in the United States is inefficient.
Independent Variable (SEX)	CODE RESPONDENT'S SEX
Control Variable (HEALTH)	Would you say your own health, in general, is excellent, good, fair, or poor?
Other Variable Mentioned Above (HLTHACC3)	In the United States, do you think it is easier or harder to get access to health care... for women than for men?

APPENDIX B:

Bivariate Cross-tabulation Analysis for HLTHACC3 (men vs. women access to healthcare) and Gender (Unweighted N = 1,058)

	Gender	
HLTHACC3	Male	Female
Much easier	5.7	3.4
Somewhat easier	8.5	7.8
About the same	72.6	64.6
Somewhat harder	10.0	18.2
Much harder	3.2	6.0
Column Total	100%	100%
Unweighted Column Total	(471)	(587)
Chi-Square=22.29	p=0.00	

APPENDIX C: SDA Output

Univariates Output

1.

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:14 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**hlthinf**	health care system in us inefficient	1-5	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1

Frequency Distribution

Cells contain:
-Column percent
-N of cases

	Distribution
hlthinf 1: strongly agree	**22.9** 257
2: agree	**37.1** 415
3: neither agree nor disagree	**22.0** 246
4: disagree	**14.8** 166
5: strongly disagree	**3.2** 36
COL TOTAL	*100.0* *1,120*

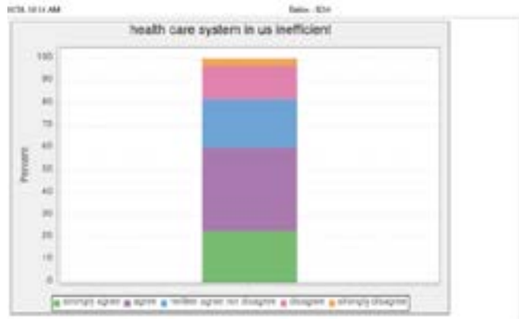
Summary Statistics

Mean =	2.38	Std Dev =	1.09	Coef var =	.46
Median =	2.00	Variance =	1.19	Min =	1.00
Mode =	2.00	Skewness =	.49	Max =	5.00
Sum =	2,669.00	Kurtosis =	-.58	Range =	4.00

Inference about the mean:
Std Err = .03 CV(mean) = .01

Statistics exclude missing-data and out-of-range values.

2.



Allocation of cases

Valid cases	1,120
Cases excluded by filter	64,814
Cases with invalid codes on row variable	6,456
Total cases	72,390

Datasets

1 /sda/cas/gss22/rw2
2 /data/gss22/rd2/NEWVARS

CSM, UC Berkeley

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:14 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**sex**	respondents sex	1-2	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1

Univariates Output, cont.

3.

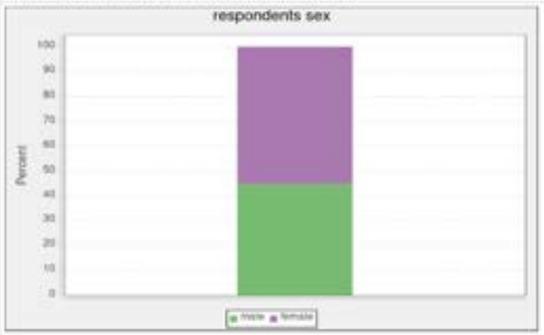
-N of cases		
sex	1: male	**45.1** 3,363
	2: female	**54.9** 4,101
	COL TOTAL	*100.0* 7,464

Summary Statistics

Mean =	1.55	Std Dev =	.50	Coef var =	.32
Median =	2.00	Variance =	.25	Min =	1.00
Mode =	2.00	Skewness =	-.20	Max =	2.00
Sum =	11,565.00	Kurtosis =	-1.96	Range =	1.00

Inference about the mean:
Std Err = .01 CV(mean) = .00

Statistics exclude missing-data and out-of-range values.



Allocation of cases	
Valid cases	7,464
Cases excluded by filter	64,814
Cases with invalid codes on row variable	112
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2

4.

2 /data/gss22re2/NEWVARS

CSM, UC Berkeley

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:14 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**health**	condition of health	1-4	.d, i, j, m, n, p, q, r, s, u, x, y, z	1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d, i, j, m, n, p, q, r, s, u, x, y, z	1

Frequency Distribution

Cells contain:
-**Column percent**
-N of cases

		Distribution
health	1: excellent	**20.2** 1,526
	2: good	**54.1** 4,092
	3: fair	**21.3** 1,614
	4: poor	**4.4** 332
	COL TOTAL	*100.0* 7,564

Summary Statistics

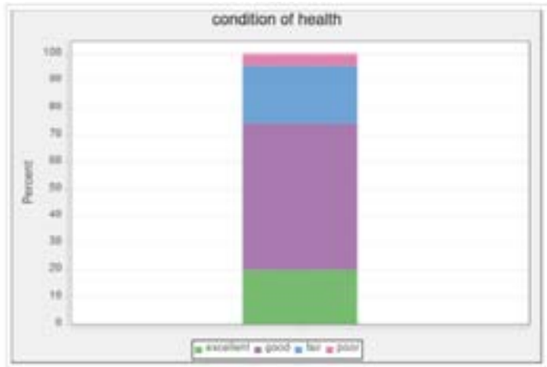
Mean =	2.10	Std Dev =	.76	Coef var =	.36
Median =	2.00	Variance =	.58	Min =	1.00
Mode =	2.00	Skewness =	.43	Max =	4.00
Sum =	15,880.00	Kurtosis =	-.01	Range =	3.00

Inference about the mean:
Std Err = .01 CV(mean) = .00

Statistics exclude missing-data and out-of-range values.

Univariates Output, cont.

5.



Allocation of cases	
Valid cases	7,564
Cases excluded by filter	64,814
Cases with invalid codes on row variable	12
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2
2	/data/gss22re2/NEWVARS

CSM, UC Berkeley

Recoding Output

1.

Recoding Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:18 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**hlthinf(Recoded)**	health care system in us inefficient	1-3		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d, i, j, m, n, p, q, r, s, u, x, y, z	1

Frequency Distribution

Cells contain:
-**Column percent**
-N of cases

		Distribution
hlthinf	1: Agree	**60.0** 672
	2: Neither agree or disagree	**22.0** 246
	3: Disagree	**18.0** 202
	COL TOTAL	*100.0* 1,120

Summary Statistics

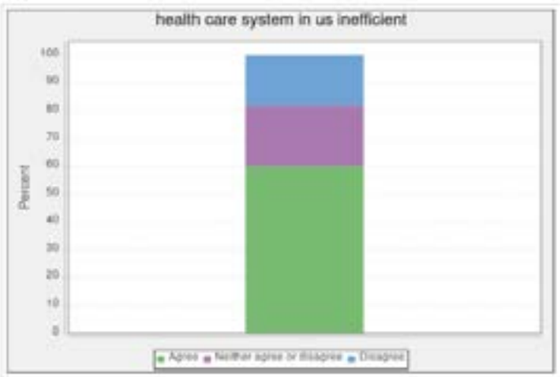
Mean =	1.58	Std Dev =	.78	Coef var =	.49
Median =	1.00	Variance =	.60	Min =	1.00
Mode =	1.00	Skewness =	.88	Max =	3.00
Sum =	1,770.00	Kurtosis =	-.79	Range =	2.00

Inference about the mean:
Std Err = .02 CV(mean) = .01

Statistics exclude missing-data and out-of-range values.

Recoding Output, cont.

2.



Recode for 'hlthinf'
1 = 1-2 "Agree"; 2 = 3 "Neither agree or disagree"; 3 = 4-5 "Disagree"

Allocation of cases	
Valid cases	1,120
Cases excluded by filter	64,814
Cases with invalid codes on row variable	6,456
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2
2	/data/gss22rel2/NEW/VARS

CSM, UC Berkeley

Recoding Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:18 AM PST)

3.

Variables					
Role	Name	Label	Range	MD	Dataset
Row	**sex(Recoded)**	respondents sex	0-1		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	d, i, j, m, n, p, q, r, s, u, x, y, z	1

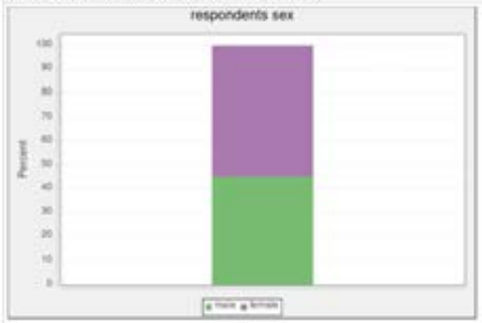
Frequency Distribution		
Cells contain: -Column percent -N of cases		**Distribution**
sex	0: male	**45.1** 3,363
	1: female	**54.9** 4,101
	COL TOTAL	***100.0*** *7,464*

Summary Statistics

Mean =	.55	Std Dev =	.50	Coef var =	.91
Median =	1.00	Variance =	.25	Min =	.00
Mode =	1.00	Skewness =	-.20	Max =	1.00
Sum =	4,101.00	Kurtosis =	-1.96	Range =	1.00

Inference about the mean:
Std Err = .01 CV(mean) = .01

Statistics exclude missing-data and out-of-range values.



Recoding Output, cont.

4.

Recode for 'sex'
0 = 1 "male"; 1 = 2 "female"

Allocation of cases	
Valid cases	7,464
Cases excluded by filter	64,814
Cases with invalid codes on row variable	112
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2
2	/data/gss22rel2/NEW/VARS

CSM, UC Berkeley

Recoding Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:18 AM PST)

Variables					
Role	Name	Label	Range	MD	Dataset
Row	**health(Recoded)**	condition of health	1-3		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	d, i, j, m, n, p, q, r, s, u, x, y, z	1

Frequency Distribution		
Cells contain: -Column percent -N of cases		**Distribution**
health	1: excellent	**20.2** 1,526
	2: good	**54.1** 4,092
	3: not good	**25.7** 1,946
	COL TOTAL	***100.0*** *7,564*

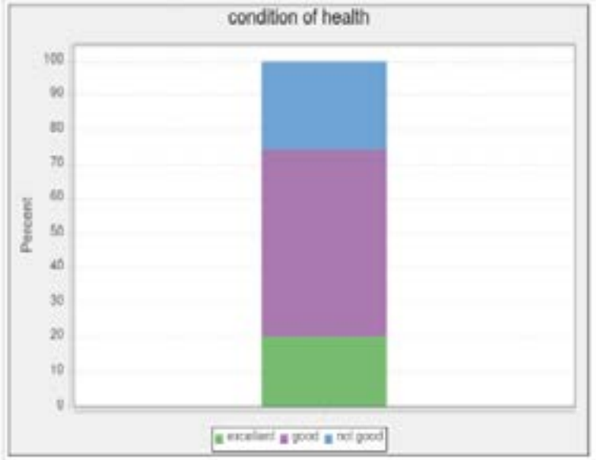
Summary Statistics

Mean =	2.06	Std Dev =	.68	Coef var =	.33
Median =	2.00	Variance =	.46	Min =	1.00
Mode =	2.00	Skewness =	-.07	Max =	3.00

5.

Sum = 15,548.00 Kurtosis = -.81 Range = 2.00
Inference about the mean:
Std Err = .01 CV(mean) = .00

Statistics exclude missing-data and out-of-range values.



Recode for 'health'
1 = 1 "excellent"; 2 = 2 "good"; 3 = 3-4 "not good"

Allocation of cases	
Valid cases	7,564
Cases excluded by filter	64,814
Cases with invalid codes on row variable	12
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2
2	/data/gss22rel2/NEW/VARS

CSM, UC Berkeley

Bivariate Output

1.

Bivariate Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:31 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**hithinf(Recoded)**	health care system in us inefficient	1-3		1
Column	**sex(Recoded)**	respondents sex	0-1		1
Weight	**compwt**	Composite Weight	.0761-17.0027		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1

Frequency Distribution

Cells contain: -Column percent -N of cases -Weighted N		sex 0 male	1 female	*ROW TOTAL*
hithinf	1: Agree	**58.4** 308 305.2	**60.0** 363 352.2	**59.3** *671* *657.4*
	2: Neither agree or disagree	**22.3** 104 116.6	**22.0** 142 128.9	**22.1** *246* *245.5*
	3: Disagree	**19.3** 89 100.6	**18.0** 112 105.6	**18.6** *201* *206.2*
	COL TOTAL	***100.0*** *501* *522.4*	***100.0*** *617* *586.6*	***100.0*** *1,118* *1,109.1*
Means		1.61	1.58	1.59
Std Devs		.79	.78	.78
Unweighted N		501	617	1,118

Color coding:	<-2.0	<-1.0	<0.0	>0.0	>1.0	>2.0	Z
N in each cell:	Smaller than expected			Larger than expected			

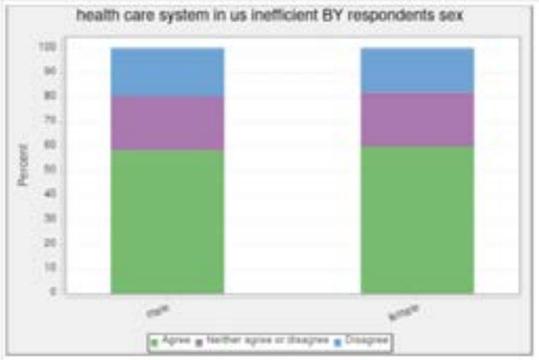
Summary Statistics

Eta* = .02 Gamma = -.03 Rao-Scott-P: F(2,68) = .07 (p= 0.93)
R = -.02 Tau-b = -.02 Rao-Scott-LR: F(2,68) = .07 (p= 0.93)

2.

Somers' d* = -.02 Tau-c = -.02 Chisq-P(2) = .37
Chisq-LR(2) = .37

*Row variable treated as the dependent variable.



Recode for 'hithinf'
1 = 1-2 "Agree"; 2 = 3 "Neither agree or disagree"; 3 = 4-5 "Disagree"

Recode for 'sex'
0 = 1 "male"; 1 = 2 "female"

Standard error calculations

Sample design: stratified cluster sample

Stratum variable = sdastrata
Cluster variable = sdaclusters

Method: Taylor series approximation

Allocation of cases (unweighted)	
Valid cases	1,118
Cases excluded by filter or weight	64,814
Cases with invalid codes on row or column variable	6,458
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2
2	/data/gss22rel2/NEWVARS

Bivariate Output, cont.

3.

Bivariate Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:34 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**hithinf(Recoded)**	health care system in us inefficient	1-3		1
Column	**health(Recoded)**	condition of health	1-3		1
Weight	**compwt**	Composite Weight	.0761-17.0027		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1

Frequency Distribution

Cells contain: -Column percent -N of cases -Weighted N		health 1 excellent	2 good	3 not good	*ROW TOTAL*
hithinf	1: Agree	**49.5** 126 109.4	**61.3** 362 371.0	**61.3** 183 170.0	**58.9** *671* *650.4*
	2: Neither agree or disagree	**24.7** 63 54.5	**23.2** 126 140.8	**18.1** 51 50.2	**22.2** *246* *245.5*
	3: Disagree	**25.8** 41 57.1	**15.5** 103 93.5	**20.7** 58 57.7	**18.9** *202* *208.7*
	COL TOTAL	***100.0*** *226* *221.0*	***100.0*** *591* *605.6*	***100.0*** *302* *277.9*	***100.0*** *1,119* *1,104.5*
Means		1.76	1.54	1.60	1.60
Std Devs		.84	.75	.81	.79
Unweighted N		226	591	302	1,119

Color coding:	<-2.0	<-1.0	<0.0	>0.0	>1.0	>2.0	Z
N in each cell:	Smaller than expected			Larger than expected			

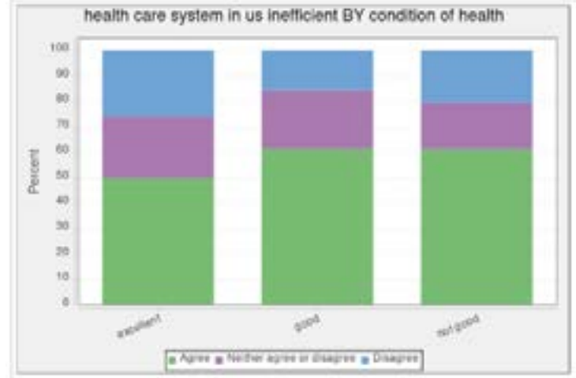
Summary Statistics

Eta* = .11 Gamma = -.10 Rao-Scott-P: F(4,136) = 1.54 (p= 0.19)

4.

R = -.06 Tau-b = -.06 Rao-Scott-LR: F(4,136) = 1.54 (p= 0.19)
Somers' d* = -.06 Tau-c = -.05 Chisq-P(4) = 17.20
Chisq-LR(4) = 17.14

*Row variable treated as the dependent variable.



Recode for 'hithinf'
1 = 1-2 "Agree"; 2 = 3 "Neither agree or disagree"; 3 = 4-5 "Disagree"

Recode for 'health'
1 = 1 "excellent"; 2 = 2 "good"; 3 = 3-4 "not good"

Standard error calculations

Sample design: stratified cluster sample

Stratum variable = sdastrata
Cluster variable = sdaclusters

Method: Taylor series approximation

Allocation of cases (unweighted)	
Valid cases	1,119
Cases excluded by filter or weight	64,814
Cases with invalid codes on row or column variable	6,457
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2

Bivariate Output, cont.

5.

Bivariate Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:36 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**health(Recoded)**	condition of health	1-3		1
Column	**sex(Recoded)**	respondents sex	0-1		1
Weight	**compwt**	Composite Weight	.0761-17.0027		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1

Frequency Distribution

Cells contain: -Column percent -N of cases -Weighted N		sex 0 male	1 female	*ROW TOTAL*
health	1: excellent	**20.8** 711 752.8	**18.4** 797 699.3	**19.6** *1,508* *1,452.0*
	2: good	**53.0** 1,787 1,920.2	**55.8** 2,251 2,118.3	**54.5** *4,038* *4,038.4*
	3: not good	**26.2** 862 948.8	**25.7** 1,050 976.7	**26.0** *1,912* *1,925.5*
	COL TOTAL	***100.0*** *3,360* *3,621.7*	***100.0*** *4,098* *3,794.2*	***100.0*** *7,458* *7,415.9*
Means		2.05	2.07	2.06
Std Devs		.68	.66	.67
Unweighted N		3,360	4,098	7,458

Color coding:	<-2.0	<-1.0	<0.0	>0.0	>1.0	>2.0	Z
N in each cell:	Smaller than expected			Larger than expected			

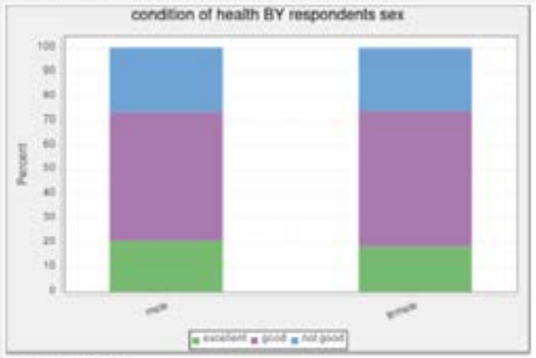
Summary Statistics

Eta* = .01 Gamma = .02 Rao-Scott-P: F(2,146) = 2.59 (p= 0.08)
R = .01 Tau-b = .01 Rao-Scott-LR: F(2,146) = 2.59 (p= 0.08)

6.

Somers' d* = .01 Tau-c = .01 Chisq-P(2) = 8.13
Chisq-LR(2) = 8.13

*Row variable treated as the dependent variable.



Recode for 'health'
1 = 1 "excellent"; 2 = 2 "good"; 3 = 3-4 "not good"

Recode for 'sex'
0 = 1 "male"; 1 = 2 "female"

Standard error calculations

Sample design: stratified cluster sample

Stratum variable = sdastrata
Cluster variable = sdaclusters

Method: Taylor series approximation

Allocation of cases (unweighted)

Valid cases	7,458
Cases excluded by filter or weight	64,814
Cases with invalid codes on row or column variable	118
Total cases	72,390

Datasets	
1	/sda/data/gss22rel2
2	/data/gss22rel2/NEWVARS

Trivariate Output

1.

Trivariate Output

SDA 4.1.5: Tables

GSS 1972-2022 Cumulative Datafile - Release 2

Dec 10, 2024 (Tue 07:39 AM PST)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**hlthinf(Recoded)**	health care system in us inefficient	1-3		1
Column	**sex(Recoded)**	respondents sex	0-1		1
Control	**health(Recoded)**	condition of health	1-3		1
Weight	**compwt**	Composite Weight	.0761-17.0027		1
Filter	**year(2021-2022)**	gss year for this respondent	1972-2022	.d,.i,.j,.m,.n,.p,.q,.r,.s,.u,.x,.y,.z	1

Statistics for health = 1(excellent)

Cells contain: -Column percent -N of cases -Weighted N		sex 0 male	1 female	*ROW TOTAL*
hlthinf	1: Agree	**63.0** 64 62.6	**39.3** 62 46.8	**50.1** 126 109.4
	2: Neither agree or disagree	**17.6** 22 17.5	**31.1** 37 37.0	**24.9** 59 54.5
	3: Disagree	**19.4** 14 19.3	**29.6** 26 35.3	**25.0** 40 54.6
	COL TOTAL	***100.0*** *100* *99.4*	***100.0*** *125* *119.2*	***100.0*** *225* *218.6*
Means		1.56	1.90	1.75
Std Devs		.80	.83	.83
Unweighted N		100	125	225

Color coding:	<-2.0	<-1.0	<0.0	>0.0	>1.0	>2.0	Z
N in each cell:	Smaller than expected			Larger than expected			

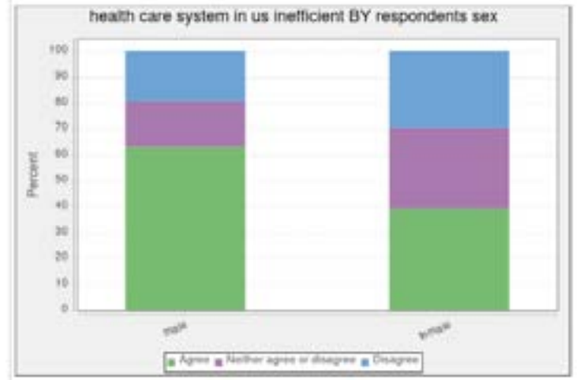
2.

Summary Statistics for health = 1(excellent)

Eta* = .20 Gamma = .36 Rao-Scott-P: F(2,68) = 2.97 (p= 0.06)
R = .20 Tau-b = .20 Rao-Scott-LR: F(2,68) = 3.00 (p= 0.06)
Somers' d* = .23 Tau-c = .23 Chisq-P(2) = 12.63
Chisq-LR(2) = 12.76

*Row variable treated as the dependent variable.

Chart for health = 1(excellent)



Statistics for health = 2(good)

Cells contain: -Column percent -N of cases -Weighted N		sex 0 male	1 female	*ROW TOTAL*
hlthinf	1: Agree	**58.9** 166 166.2	**63.2** 195 204.1	**61.2** *361* *370.4*
	2: Neither agree or disagree	**23.5** 53 66.4	**23.0** 73 74.3	**23.3** *126* *140.8*
	3: Disagree	**17.6** 45 49.6	**13.7** 58 44.3	**15.5** *103* *93.9*
	COL TOTAL	***100.0*** *264* *282.2*	***100.0*** *326* *322.8*	***100.0*** *590* *605.0*
Means		1.59	1.51	1.54

Trivariate Output, cont.

3.

	Std Devs	.77	.73	.75
	Unweighted N	264	326	590

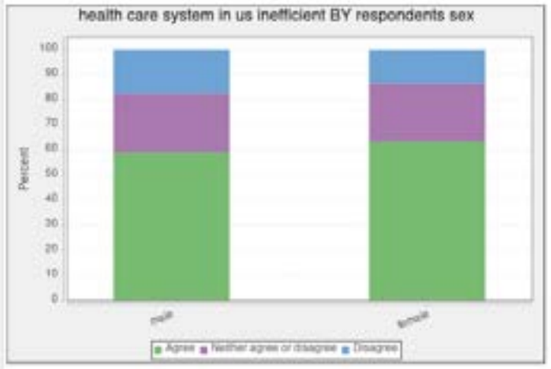
Color coding: <-2.0 | <-1.0 | <0.0 | >0.0 | >1.0 | >2.0 | Z
N in each cell: Smaller than expected | Larger than expected

Summary Statistics for health = 2(good)

Eta² =	.05	Gamma = -.09	Rao-Scott-P: F(2,68) =	.35 (p= 0.70)	
R =	-.05	Tau-b =	-.05	Rao-Scott-LR: F(2,68) =	.35 (p= 0.70)
Somers' d* = -.05		Tau-c =	-.05	Chisq-P(2) =	1.85
				Chisq-LR(2) =	1.84

*Row variable treated as the dependent variable.

Chart for health = 2(good)



Statistics for health = 3(not good)

Cells contain: -**Column percent** -N of cases -Weighted N		sex: 0 male	1 female	*ROW TOTAL*
hlthinf	1: Agree	**54.2** 78 76.4	**68.3** 105 93.6	***61.2*** *183* *170.0*
	2: Neither agree or disagree	**23.2** 29 32.7	**12.8** 32 17.5	***18.1*** *61* *50.2*
	3: Disagree	**22.5** 30	**18.9** 28	***20.7*** *58*

4.

		31.7	25.9	57.7
	COL TOTAL	***100.0*** *137* *140.8*	***100.0*** *165* *137.0*	***100.0*** *302* *277.9*
	Means	1.68	1.51	1.60
	Std Devs	.82	.80	.81
	Unweighted N	137	165	302

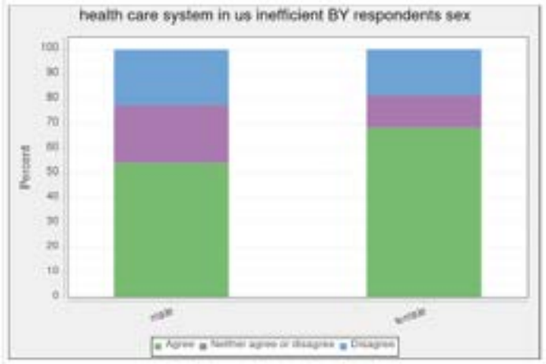
Color coding: <-2.0 | <-1.0 | <0.0 | >0.0 | >1.0 | >2.0 | Z
N in each cell: Smaller than expected | Larger than expected

Summary Statistics for health = 3(not good)

Eta² =	.11	Gamma = -.23	Rao-Scott-P: F(2,68) =	2.18 (p= 0.12)	
R =	-.11	Tau-b =	-.12	Rao-Scott-LR: F(2,68) =	2.20 (p= 0.12)
Somers' d* = -.13		Tau-c =	-.13	Chisq-P(2) =	7.45
				Chisq-LR(2) =	7.53

*Row variable treated as the dependent variable.

Chart for health = 3(not good)



Statistics for all valid cases

Cells contain: -**Column percent** -N of cases -Weighted N	sex: 0 male	1 female	*ROW TOTAL*

Trivariate Output, cont.

5.

hlthinf	1: Agree	**58.4** 308 305.2	**59.5** 362 344.5	***59.0*** *670* *649.8*
	2: Neither agree or disagree	**22.3** 104 116.6	**22.3** 142 128.9	***22.3*** *246* *245.5*
	3: Disagree	**19.3** 89 100.6	**18.2** 112 105.6	***18.7*** *201* *206.2*
	COL TOTAL	***100.0*** *501* *522.4*	***100.0*** *616* *579.0*	***100.0*** *1,117* *1,101.5*
	Means	1.61	1.59	1.60
	Std Devs	.79	.78	.78
	Unweighted N	501	616	1,117

Color coding: <-2.0 | <-1.0 | <0.0 | >0.0 | >1.0 | >2.0 | Z
N in each cell: Smaller than expected | Larger than expected

Summary Statistics for all valid cases

Eta² =	.01	Gamma = -.02	Rao-Scott-P: F(2,68) =	.04 (p= 0.96)	
R =	-.01	Tau-b =	-.01	Rao-Scott-LR: F(2,68) =	.04 (p= 0.96)
Somers' d* = -.01		Tau-c =	-.01	Chisq-P(2) =	.21
				Chisq-LR(2) =	.21

*Row variable treated as the dependent variable.

Chart for all valid cases