

# **Sasakawa Nursing Fellow Final Report**

Kaori Suga, MPH, RN, PHN

Master of Health Science

Department of Health, Behavior and Society

Johns Hopkins University Bloomberg School of Public Health

April 10, 2026

I am pleased to report that I have completed the requirements for the Master of Health Science (MHS) program in the Department of Health, Behavior and Society at the Johns Hopkins Bloomberg School of Public Health (JHBSPH). My master's thesis was accepted on April 7, and I will graduate from the commencement ceremony on May 20. In this report, I would like to reflect on the progress I have made, the knowledge and skills I have gained, and the invaluable support provided by my advisors, peers, and the Sasakawa Health Foundation, to whom I am deeply grateful for making this possible.

## 1. Background and Objectives

My 15 years of nursing experience in Japan, especially caring for socioeconomically vulnerable patients, fueled my passion for addressing health disparities. I still remember caring for a father of two diagnosed with leukemia who initially refused treatment because it required substantial time and financial commitments; he feared it would jeopardize his family's standard of living. I explained that Japan's medical insurance system could reduce out-of-pocket costs and that public assistance programs could support his family's basic needs. He remained hesitant, worried that using public assistance\* might limit his children's educational opportunities and expose his family to social stigma. This case highlights how economic and social pressures can profoundly shape health-related decisions, even under Japan's universal coverage, and made me realize that gaps in the healthcare system for people facing socioeconomic hardship demand systemic reform. These experiences inspired me to study the impact of social factors on population health beyond clinical practice.

The COVID-19 pandemic and Japan's prolonged suspension of proactive HPV vaccine recommendations<sup>1,2</sup> further underscored the need for population-level strategies. I pursued a Master of Public Health (MPH) at Kyoto University School of Public Health, where I acquired foundational epidemiologic and quantitative research skills and analyzed financial hardship among 7,000 cancer patients nationwide; this work informed discussions about reforming the High-Cost Medical Expense System\*\*, a topic that remains controversial.<sup>3</sup> While valuable, my MPH training revealed gaps in my skills for promoting behavior change across diverse groups and for translating rigorous research findings into policy to address structural determinants of health. To advance approaches for reducing health disparities, I decided to study in the United States, where significant inequalities persist across socioeconomic and racial/ethnic groups. I therefore undertook an MHS at JHBSPH, focusing on behavior-change processes and dissemination strategies. **My objective in the MHS program is to examine how social environments contribute to disparities in incidence, prognosis, and quality of life among people with cancer and chronic diseases, and to translate findings into effective interventions and policy recommendations.**

\*public assistance: 生活保護制度, \*\* High-Cost Medical Expense System: 高額療養費制度

## 2. Academic Progress

In my program, 96 credits were required; I completed 148.5 credits (coursework: 132.5 credits, and research practicum: 16 credits equivalent 600 hours) with a Grade Point Average (GPA) of 3.87/4.00.

I took a wide range of coursework to broaden my understanding of public health and healthcare issues in the United States, where social challenges often differ from those in Japan. Additionally, BSPH offers certificate programs for specialized academic training. I completed four certificate programs across different departments which provided focused training and expertise in these subject areas.

- *Health Education*

I completed this certificate, through which I gained the knowledge and skills to assess, plan, implement, and evaluate health education programs addressing personal and environmental factors that influence health behaviors. In a required course, I collaborated with a peer to present message strategies for promoting cervical cancer screening among young women, focusing on effective dissemination approaches.

- *Health Disparities and Health Inequality*

This certificate provided advanced knowledge of current research on health disparities and the underlying causes of health inequalities. I developed skills to identify population-specific drivers of inequity and to design and evaluate interventions aimed at reducing those disparities through discussion-based classes (such as journal club) and comprehensive learning activities, including an independent literature review on racial disparities in diagnostic delay contributing to breast cancer mortality.

- *Epidemiology for Public Health Professionals*

This certificate trained me in applying epidemiologic concepts and methods to public health practice, focusing on detecting, investigating, and preventing disease at the population level. The program also covered surveillance, health situation analyses, and monitoring indicators of disease burden, enabling me to design, implement, and evaluate surveillance systems. Finally, I acquired skills to synthesize and communicate epidemiologic findings to policymakers, professionals, and lay audiences. It covered community-based practice using county-level indicators in Baltimore—racial composition, median household income, chronic disease prevalence, infant mortality, etc.—to identify high-need areas and consider implications for city budgeting and workforce allocation. It also addressed global issues, by evaluating the Ebola outbreak in Africa, making the experience highly meaningful.

- *Social Epidemiology*

This certificate provided comprehensive training in social epidemiology theory and methods, emphasizing how social factors shape the distribution of health and disease across populations. I learned analytic approaches to measure and assess the influence of social determinants on population health and to identify appropriate study designs and data sources. The program also taught practical skills to evaluate and design programs or policies that intervene on social determinants of health.

### 3. Four Research Activities

Over my two years at JHBSPH, I undertook four independent research activities. Beginning the summer after my first year, I completed two complementary research practicums totaling 600 hours. I also worked as a research assistant at JHBSPH and collaborated with Japanese scholars and a professor at the Harvard T.H. Chan School of Public Health. Each project broadened my quantitative research skills for studying health disparities, expanded my research network in the United States and Japan, and provided opportunities to present and disseminate findings to inform systems-level change.

1) *Role of Social Support in the Relationship Between Neighborhood Disorder and Mental Health Conditions Among Men Who Have Sex with Men, Stratified by HIV Status (main master's thesis)*

This primary research practicum served as the centerpiece of my master's thesis. Under the mentorship of Dr. Carl Latkin (JHBSPH) and Dr. Cui Yang (Rutgers School of Public Health), I conducted a secondary data analysis using the Belong Study dataset, which included nearly 500 sexual minority participants (men who have sex with men) in Baltimore. The research examined drivers of mental health conditions—such as homelessness, disadvantaged neighborhood environments, and HIV status—which are major health disparity issues in the United States. I was able to address my goals not only by enhancing my understanding of health disparities in the country, especially in Baltimore, but also by independently designing and conducting a research protocol using theoretical frameworks, honing my quantitative skills in data management and analysis, and developing manuscript writing expertise. I learned the importance of rigor, critical thinking, and clarity in communicating epidemiological research, especially when addressing structural inequality in marginalized populations.

2) *Evaluation of Learners' Understanding and Awareness Change in the Gender Foundations in Health Data Coursera Course (the second author)*

My second research practicum offered valuable experience in program evaluation and educational research, guided by Dr. Tahilin Karver (JHBSPH). I worked with pre- and post-survey data, aiming to assess learners' evolving awareness of gender perspectives in health data. A key lesson from this research, which was distinct from my primary placement, was the effort to collect as many survey responses as possible and obtain rigorous results by selecting appropriate statistical models for a small sample size in collaboration with biostatisticians.

3) *Community-Level Social Capital and Well-Being Among Older Adults in Japan: Effect Modification by Cancer and Chronic Diseases (the first author)*

This collaborative project strengthened my research network in Japan and the United States and focused on the role of community cohesion in older adults' well-being. I independently designed and conducted a secondary data analysis using the Japan Gerontological Evaluation Study (JAGES) panel

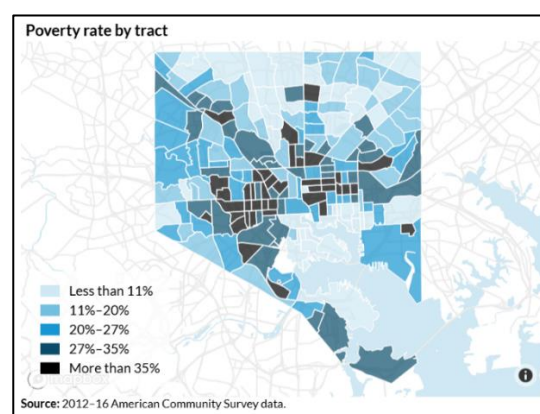
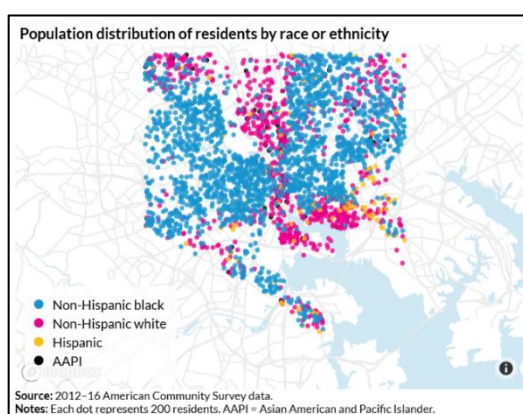
with over 30,000 participants, applying multilevel analytical methods to examine how community characteristics relate to health, happiness, and social isolation. Working with Dr. Naoki Kondo (Kyoto University School of Public Health) and Dr. Ichiro Kawachi (Harvard T.H. Chan School of Public Health), I enhanced my skills in managing large longitudinal datasets and in multilevel modeling, and I refined my manuscript-writing through an academic writing course at JHBSPPH. These efforts culminated in the presentation of our findings at the Society for Epidemiologic Research in June 2025

4) *What the COVID-19 Era Reveals About HIV Self-Testing: Moving Toward Culturally and Linguistically Congruent Interventions for Latine Populations (the second author)*

Under the mentorship of Dr. Tahilin Karver (JHBSPPH), I led an analysis of factors associated with interest in HIV self-testing among Latine adults residing in Maryland, a population vulnerable in both health and socioeconomic status in the United States. I conducted multivariable logistic regression analyses and identified key factors associated with willingness to use HIV self-tests, highlighting how the COVID-19 pandemic expanded the possibility of self-testing. Expanding access to self-test kits for communicable diseases such as HIV, HPV, and COVID-19 is crucial for marginalized populations who often face language barriers, financial hardship from limited insurance, and stigma or discrimination. I submitted an abstract of this work to the American Public Health Association (APHA) 2026 meeting to present the potential of self-testing approaches to address health disparities.

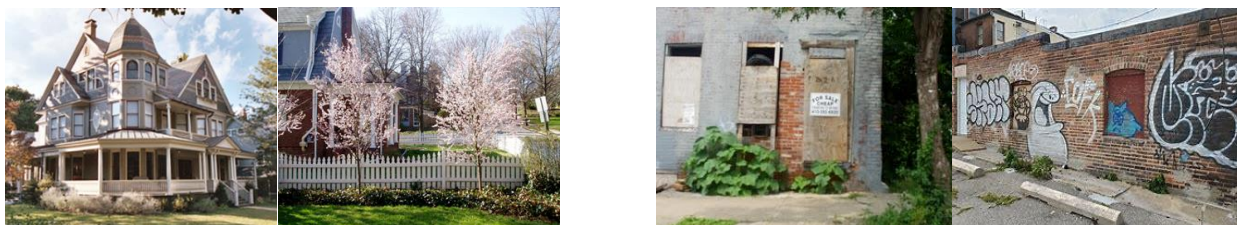
#### 4. Other Perspectives and Activities

While enjoying life in Baltimore, where JHBSPPH is located, I have also been learning about the city's challenges. As shown in the map below, racial segregation is striking: areas with a high percentage of Non-Hispanic black residents also face higher poverty rates and lower life expectancy. These areas form a pattern known as **"The Black Butterfly"**—a term often discussed in class, highlighting the repeated patterns of disinvestment and inequality across Baltimore's neighborhoods.



Baltimore is a place that really makes us think about social inequality. Within the same city, there are

wealthy neighborhoods—like the tidy, green-lined residential area shown in the left photo—where life expectancy, as in other high-income countries, exceeds 80 years. Just a short distance away, however, are blighted areas of deteriorating housing—like the right photo—where life expectancy is in the low 60s. In some parts of the city, only about 10 kilometers separate neighborhoods whose average life expectancy differ by as much as 20 years.



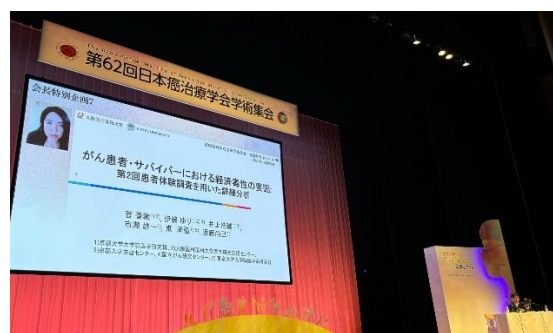
One neighborhood has a life expectancy of 83 years, while the other has 62.5 years in the same city.<sup>5</sup>

During the first year of my two-year program, my activities centered on coursework and interactions with classmates. Before my research at JHBSPPH fully ramped up, I had opportunities to present collaborative studies using Japanese data with Japanese researchers at conferences in October 2025 and June 2026.

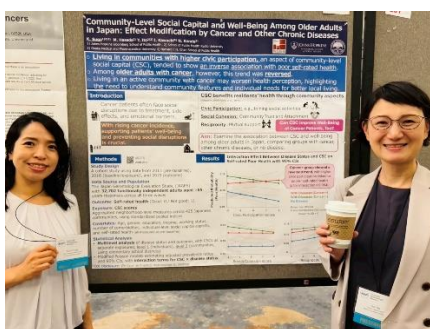
In the second year, as my research activities increased, my time was mainly devoted to communication and discussions with faculty, data analysis, presenting results at conferences and within research teams, and manuscript writing. At the same time, I also actively celebrated classmates who graduated early, supported peers pursuing similar careers, and engaged with visiting researchers from Japan—experiencing firsthand the importance of maintaining connections despite distance and time.



Department New Student Orientation (Center: K. Suga)



Online presentation at the 62nd Annual Meeting of the Japan Society of Clinical Oncology (JSCO), Oct. 2024. Selected for the JSCO President's Special Session



Poster presentation using Japanese data at the Society for Epidemiologic Research, June 2025 (Left: K. Suga)



Gathering of Japanese Researchers in Boston, June 2025

## 5. Acknowledgement

I am deeply grateful to the Sasakawa Health Foundation for its generous grant and to the fellowship community for their collegial support. The Foundation's financial, informational, and emotional support made it possible for me to study and conduct research at the Johns Hopkins Bloomberg School of Public Health, an institution at the forefront of global public health. I will continue to advance my public health research and translate the insights gained into contributions to Japanese society.

As a professional with a nursing background, I am committed to promoting the use of patient-reported outcomes—subjective patient assessments that require nurses' expertise—in research and practice, fostering collaborations between nursing research and public health research, and developing nursing leaders capable of guiding interdisciplinary teams and shaping policy.

## 6. References (All URLs were last accessed and verified on April 10, 2026.)

- 1) OECD. OECD Reviews of Public Health: Japan: A Healthier Tomorrow. Paris, France: OECD Publishing; 2019:49-50. <https://doi.org/10.1787/9789264311602-en>.
- 2) Haruyama R, Obara H, Fujita N. Japan resumes active recommendations of HPV vaccine after 8.5 years of suspension. *Lancet Oncol.* 2022 Feb;23(2):197-198.
- 3) Mainichi Japan. Editorial: Debate needed over planned hike in co-pay cap on high-cost medical fees in Japan. The Mainichi Japan's National daily since 1992. <https://mainichi.jp/english/articles/20250304/p2a/00m/0op/013000c>. Published March 4, 2025. Accessed October 25, 2025
- 4) Features, The Black Butterfly, available at: <https://apps.urban.org/features/baltimore-investment-flows/>
- 5) Cited from Dr. Danielle German (JHSPH), "Psychosocial Factors in Health and Illness" (adapted and partially modified)