

Addendum 1: “Mercury, artisanal and small-scale gold mining and human rights”

The Subaltern Global Health Forum: A Student-Led, Multi-Institutional Community Focused on Indigenous Health Across Borders Based on Health Amongst Wayana-Speaking Groups

Georgia Johnson
University of Washington '22
Public Health - Global Health
School of Public Health
Seattle, WA USA
gjohns12@uw.edu

Isabelle Knowles
University of Washington '22
Public Health - Global Health
School of Public Health
Seattle, WA USA
bellaknowles@gmail.com

As two undergraduate seniors part of the Subaltern Global Health Forum (SHGF), current initiatives to encourage global health equity as a major academic cause forefront our beliefs as blooming professionals. The SHGF prioritizes critical advocacy for Indigenous populations in the Wayana Language Territory (WLT) of Suriname, South America, as well as areas of French Guiana and Brazil. Basic human rights have been revoked from these peoples through poorly designed and exploitative public policy as well as the negligence of international gold mining industries, stripping Indigenous communities of their land and exposing them to toxic levels of methylmercury. We assert that the events in Suriname are a collective atrocity; utilizing a health impact lens from public health training and logic models derived from social determinants of health allows for a holistic display of the situation.

The severe health impacts that policy has had on the Indigenous communities within the WLT are numerous. Initially, research directed by Dr. Peplow and the Suriname Indigenous Health Fund (SIHF) analyzed the high levels of mercury present in local communities (especially children), documenting the high prevalence of neurological disability through community-led risk assessment. (Peplow and Augustine, 2014 & Peplow and Augustine, 2012) This association mimics the symptoms of the methylmercury overexposure disaster in Minamata, Japan, which lends its name to Minamata disease. Heightened levels of mercury were also observed in local water sources and their respective fish populations. (Outboter et al., 2012) Communities were recommended not to consume these fish populations; due to this aversion-based health approach, these indigenous communities face the impending risk of Kwashiorkor. Other risks under monitoring as possible results of negligent policy and the gold mining industry include deforestation and natural water level inconsistency. Comorbidities amongst marginalized communities (like high rates of chronic stress, depression, and suicide, malnourishment, and chemical overexposure) compound quickly.

The government of Suriname has been informed of these disastrous outcomes, but following a previous inquiry made by the Special Rapporteur on the rights of Indigenous peoples in 2012, they have

made no response. The government has failed to adhere to recommendations made by the Committee on the Elimination of Racial Discrimination in 2015 that requested no mercury “is used or dispersed on Indigenous occupied territories.” Their silence and lack of action suggest complacency and responsibility for the ongoing public health tragedy. Multiple institutions, like the University of Oklahoma in their Human Rights Shadow Report, have expressed concern.

Atop the very significant and detrimental effects of industrialization listed above, we prescribe a serious intervention in order to reduce the ongoing encroachment of human rights occurring in the WLT. While it is true that the lands themselves are abused and are deteriorating as a result, the upstream infringement of Indigenous rights is to blame for the subsequent physical repercussions. Indigenous land is being sold by the national government to gold-mining organizations and other sister industries. Though land titles are held by many Indigenous individuals and their respective communities, companies are still seizing this land for their capital endeavors. Revoking land rights sacred to these already threatened communities severs the intimate tie that their cultures have to their forests and waters. Relationships between communities in the WLT and academic professionals (like Dr. Daniel Peplow) have thrived through the tenets of Community Based Participatory Action Research. Allowing communities to drive their own research initiatives and disseminate the results on their own accord allows for an autonomy not often afforded to Indigenous groups. Accountability between researchers and participants is paramount to maintaining good health.

The SHGF was conceptualized as an acknowledgement of the dire need for active involvement – especially by *young* professionals – in the current atrocities occurring in Suriname. There are some professionals, like Dr. Peplow, who have been invested in the maintenance of health throughout the WLT beginning in the early 2000s. We contend that in order to truly address the current events and provide the immediate interventions necessary to avoid mass death, many more must be informed of how catastrophic these kinds of mistreatments can be. The SHGF hopes to expand its reach to study and encourage similar events across the globe, ultimately attempting to prevent them from happening, and our current efforts have recruited interest from institutions and professionals in Russia, Liberia, and Finland.

As members of the student-led SGHF growing into a global health field shifting towards a focus on ethics and equity, we hope to contribute our own work to the disciplines of public health and policy. We are deeply concerned for the wellbeing of the aforementioned communities as they suffer from the unfathomable effects of the gold mining industry, and we call attention to the vast and varying number of effects (including forest degradation, water level recession, generational trauma, and food insecurities) currently developing across Brazil, French Guiana, and Suriname. Our narrow interests include the utilization of GIS to analyze forest trends over time in order to physically display the detrimental effects of mining on Indigenous land compared to unaffected forests as well as the reframing of this particular case of negligent government and policy as a “mass atrocity.” This report, written under the guidance of Dr. Daniel Peplow, confirms the investment of young public health professionals in the events occurring in the WLT. The rights of Indigenous groups, coupled with a broader understanding of public health’s prioritization of equity and the health of vulnerable groups, encourages our passion for the creation of a case for the Wayana Language Territory that is in dire need of addressing. The lives of thousands are at stake.

References:

American Psychological Association. (n.d.). *Fact sheet: Health disparities and stress*. American Psychological Association. Retrieved February 28, 2022, from <https://www.apa.org/topics/racism-bias-discrimination/health-disparities-stress>

Dolezsar, C. M., McGrath, J. J., Herzig, A. J., & Miller, S. B. (2014). Perceived racial discrimination and hypertension: A comprehensive systematic review. *Health Psychology, 33*(1), 20–34. <https://doi.org/10.1037/a0033718>

Kronenfeld, J. J., Lee, C., & Ayers, S. L. (2010). The Association between Perceived Provider Discrimination, Health Care Utilization, and Health Status in Racial and Ethnic Minorities. *Pub Med Central, 3*–10. <https://doi.org/10.1108/s0275-495920170000035001>

NIMOS. Greenstone Belt Gold Mining Regional Environmental Assessment; Ministry of Labour, Technological Development and Environment: Paramaribo, Suriname, 2003.

Ouboter, P. E., Landburg, G. A., Quik, J. H., Mol, J. H., & van der Lugt, F. (2012). Mercury levels in pristine and gold mining impacted aquatic ecosystems of Suriname, South America. *Ambio, 41*(8), 873–882. <https://doi.org/10.1007/s13280-012-0299-9>

Peplow, D.; Augustine, S. Community-led assessment of risk from exposure to mercury by native Amerindian Wayana in Southeast Suriname. *J. Environ. Public Health 2012, 2012, 674596*. [CrossRef] [PubMed]

Peplow, D.; Augustine, S. Neurological abnormalities in a mercury exposed population among Indigenous Wayana in Southeast Suriname. *Environ. Sci. Process Impacts 2015, 16, 2415–2422*. [CrossRef]

Watanabe, C.; Satoh, H. Evolution of Our Understanding of Methylmercury as a Health Threat. *Environ. Health Perspect. 1996, 104, 367–379*.