



# EXPLORING GLOBAL PUBLIC HEALTH AND SOCIAL DETERMINANTS OF HEALTH THROUGH AN INTERDISCIPLINARY APPROACH

Julie Gleason-Comstock, PhD, MCHES<sup>1</sup>; Vijaya Arun Kumar, MD, MPH<sup>2</sup>; Tsveti Markova, MD, FAAP<sup>3</sup>; Juliann Binienda, PhD<sup>4</sup>

## INNOVATION

Global health is acknowledged as an interdisciplinary approach in which addressing social determinants of health (SDOH) is increasingly critical for addressing global health equity (Abeuelezam, *Amer J of Public Health*, 2020).

- The Wayne State University (WSU) Department of Family Medicine & Public Health Sciences (DFMPHS) offered a new didactic graduate course, FPH 7120: Global Public Health in SS2019.
- Students from public and allied health examined application of SDOH to global health interventions and World Health Organization (WHO) 2030 Sustainable Development Goals (SDG).

The class innovatively integrated exploration of SDOH with SDG. Mentored students from public and allied health expanded their global health perspectives by submitting abstracts on selected class topics and SDOH to a University peer-reviewed global research conference.

## FRAMEWORK

A 13 week hybrid elective graduate course was available to public health, medical and allied health students. Online didactic components and knowledge content quizzes were provided through an online textbook and WHO website components. Global health expert guests participated in an online panel, led class groups and facilitated interactive cultural competency exercises.

- Students were assigned a WHO global geographic area, with SDOH and SDG were chosen by mutual agreement with the Instructor.
- WSU faculty and students participated in the class to provide cultural context and guidance for potential research informed consent (Figure 1).
- Evaluation was conducted through the WSU Student Evaluation of Teaching and qualitative feedback from guest lecturers.
- The culminating student project was a Symposium in which the Instructor assigned students to WHO global geographic areas.

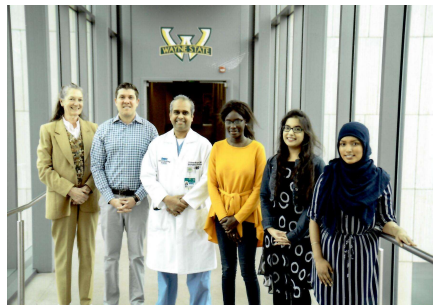


Figure 1. GLOBAL PUBLIC HEALTH LINGUISTS SHOWN:  
L to R: Dr. Gleason-Comstock; William Costello, MPH (English); Dr. Kumar (Hindi); Fatima Diop, BS (French/Canadien); Jacqueline Reji, BSN (Malayalam); Jabeda Begum, BS, MPH Candidate (Bengali)

## RESULTS

TABLE 1. SOCIAL DETERMINANTS OF HEALTH PARADIGM

Sustainable Development Goals	Social Determinants of Health				
	Economic Stability	Education Access & Quality	Social & Community Context	Healthcare Access & Quality	Neighborhood Built Environment
Maternal Health	X				
Communicable Diseases	X		X	XX*	
Substance Abuse		X	X		X*
Noncommunicable Disease			X	X*	XX
Traffic Accidents			X*		
Sexual & Reproductive Health			X*		
Pollution					X

\*WSU Global Health, Justice & the Environment (GHJE) Conference Poster Presentation

Table 1 illustrates the 15 student presentations in a SDOH – SDG paradigm. Each SDG was intersected at least one SDOH topic. Social and Community Context was the SDOH was most frequently intersected by SDG.

## CULTURAL COMPETENCY

Languages from twelve countries were introduced by WSU Students and Faculty to facilitate introduction of a prospective public health intervention, inclusive of the process of Informed Consent. Prior to presenting their poster in the Symposium, each student participated in a fifteen-minute scenario for their proposed intervention, with the student acting as a public health educator and explaining the project to a native speaker. Short Form Consents templates were available from the WSU IRB.

<https://www.research.wayne.edu/irb/informed-consent-short-form>

نموذج قصير للموافقة على المشاركة في بحث  
 研究知情同意书简表 Chinese  
 अनुसंधान में भाग लेने हेतु लघु रूप सहमतत Hindi and  
 Bengali, Portuguese/Brazilian, English, Farsi, French/Canadien,  
 German, Malayalam, Spanish/Mexican, Yoruba

## STUDENT ASSESSMENT OF TEACHING AND GUEST FEEDBACK

The 15 students generally reported satisfaction with class participation, relevance and group interaction, with an WSU SET diagnostics averaged score of 4.4 on a scale of (1) Strongly disagree to (5) Strongly agree.

- Qualitative feedback from students and guest lecturer included:
- More time to explore the overall content of global public health to address current situations and bring concepts together,
  - Enjoying the research approach and having multiple guests,
  - Symposium was a great idea.. wish more countries could be covered.

## CONCLUSION AND FUTURE DIRECTION

Five mentored students successfully submitted abstracts for peer-reviewed poster presentations at the inaugural WSU Division of Research 2019 *Global Health Justice and the Environment Conference* "ultimately bringing classroom learning into the real world."



GLOBAL PUBLIC HEALTH ASSIGNMENTS DISPLAYED AT CAMPUS CONFERENCE

- Grace Mahasi's poster "Substance Abuse Treatment Along the Northern Mexico Border: A Survey Prospectus" led her to reflect on the interdisciplinary nature of research and the growing globalization of transnational relationships.
- Saher Yunus addressed the topic of "Canada and Road Injury: Young and Distracted Drivers" because traffic deaths are a major contributor to unintentional deaths due to infrastructure issues.
- Alymamah Mashrah's topic "Women in Ethiopia: A Proposal to Use Mobile Phone Apps to Reduce HIV Infection" related to her strong interest in social determinants of women's health and health education.
- Sara Alosaimy approached "Improving Outcomes for Patients with Dual HIV and Neglected Tropical Diseases in Brazil by Enhancing Awareness of PreP" as an exploration of health platforms for reducing infectious disease.
- Priya Spencer explored "Promotion of a Patient-Centered Community-Driven Medical Model to Combat Multi-Drug Resistant TB in China" addressing barriers to elimination of TB because of drug toxicity and disease burden.

**MEDICAL EDUCATION TAKEAWAY:** We EXPLORED global public health and World Health Organization 2030 Sustainable Development Goals to DETERMINE how Social Determinants of Health could be integrated into an inaugural course. We FOUND that WSU SOM Faculty and Graduate Students were our major resource in providing global expertise and cultural competency.

This interdisciplinary problem-based approach holds potential for incorporation of Global Public Health and Social Determinants of Health components into medical and graduate curricula. FPH 7120 will again be offered in SS2021.

## Acknowledgements and Presentation

Wayne State University School of Medicine Authors:

<sup>1</sup> Assistant Professor, DFMPHS Contact: [jgleason@med.wayne.edu](mailto:jgleason@med.wayne.edu)

<sup>2</sup> Associate Professor, Emergency Medicine; Associate Chair, Global & Urban Health

<sup>3</sup> Professor & Chair, DFMPHS; Associate Dean Graduate Medical Education

<sup>4</sup> Professor, DFMPHS

Thank you:

- Ghadir Mohamed Mozeb, BS, Public Health Honors, Poster Development

Medical Education Research and Innovation Conference  
WSU SOM December 4-8, 2020