

INSIGHTS IN PUBLIC HEALTH

Interdisciplinary Student Team from University of Hawai‘i at Mānoa in the HI-EMA Community Care Unit: Identifying Needs in the Pandemic and Learning Together

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Introduction

The COVID-19 pandemic demands new, interdisciplinary collaborations to respond to the crisis and prepare for a transformed future.^{1,2} For students in health and social sciences, this presents not only high demands and new stressors, but also many learning opportunities.³⁻⁶ This article describes the experience of the Interdisciplinary Student Team from the University of Hawai‘i at Mānoa (UH Mānoa) who responded as part of the Hawai‘i Emergency Management Agency (HI-EMA) Community Care Team in summer 2020.

HI-EMA is the emergency management agency for the state of Hawai‘i.⁷ The HI-EMA Emergency Support Function 8 (ESF-8) focuses on public health and medical services in the response. To respond adequately to the breadth and scope of impacts related to the COVID-19 pandemic, the HI-EMA COVID-19 ESF 8 Team was expanded in April 2020. One unit established under ESF-8 was Community Care and Outreach (CCO), which has a key goal to identify vulnerable populations and articulate their social needs.

The ESF-8 CCO unit includes: a multidisciplinary team of faculty from UH Mānoa in nursing, medicine, social work and public health who are ESF-8 CCO unit members; a community advisory core representing key perspectives; and data analytics support. A total of 5 students from graduate programs in social work, public health and nursing volunteered to support the CCO unit as the Interdisciplinary Student Team during the 2020 summer. Specifically, the Interdisciplinary Student Team participants were Fary Maldonado (social work), Kira Oyama (nursing), Angel Lynn Talana (public health), Sydney Unciano (public health) and Chelsea Emma Apo (nursing). It is important to note that the Interdisciplinary Student Team does not claim to represent official views of HI-EMA.

These students share their insights, activities, and lessons from their urgent and important work to identify and understand community social needs arising from the COVID-19 pandemic. They describe key projects in which they were involved, provide their perspectives, including synthesized insights into the pandemic response, and finally consider how interdisciplinary learning may be contextualized in terms of the needs of communities in Hawai‘i now and in the future. There is hope that this work will provide inspiration, guidance, and information for other interdisciplinary student collaborations in Hawai‘i and beyond.

Activities

The Interdisciplinary Student Team accomplished 3 primary activities in summer 2020.

Organizational Survey

The ESF-8 CCO Unit was tasked with identifying capacity, needs, and threats to members of the community from the COVID-19 epidemic in Hawai‘i, as well as making recommendations to mitigate the situation. They first assessed the current capacity, needs, and threats to agencies that provide health and social services in support of the state’s vulnerable populations. Thus, a survey of community-based health and social service entities was conducted across the state in spring 2020.^{8,9} An executive summary was issued followed by a detailed report.^{9,10}

This survey included 26 questions, including agency/entity locations, services provided, and population served; the impact of COVID-19 on the population served; and organizational capacity and needs as a result of the COVID-19 outbreak in Hawai‘i. Several questions were open-ended, meaning respondents could type a detailed answer in text. The student team supported qualitative data analyses of these answers using

Dedoose (Version 8.0. 2018. Los Angeles, CA: SocioCultural Research Consultants, LLC),¹¹ a web-based application that can support thematic coding.

First, students looked for common themes across responses and flagged them with the software. Then, after a discussion to confirm unique themes and remove overlap, they performed a second round of refined thematic coding and identified illustrative quotes. They then used the software to quantify and categorize responses by theme. From this information, the students created the report draft, including describing data, giving perspectives, and finding quotes to illuminate identified themes. This supported the unit members, the advisory committee, and the data analysts in completing the final report. In this process, students were actively engaged in teamwork, exchanging experiences, opinions, and perspectives around social services from the perspective of the local entities in the time of COVID-19.

Public Engagement

After spending a great deal of time engaging with the qualitative analyses from the organizational survey, the student team had a strong sense of the diverse needs in Hawai'i communities in response to the health, social, and economic consequences of the pandemic, especially from the organizational perspective. They then looked more closely at the quickly growing literature

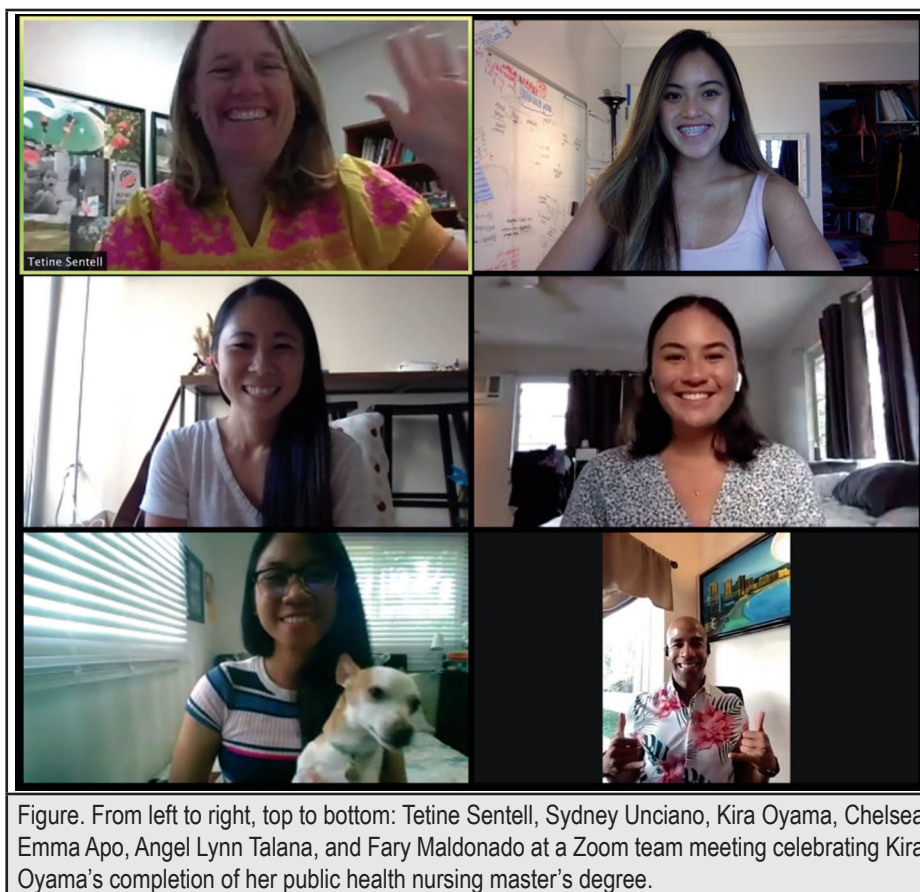
and media reports around the impact of COVID-19 on various groups, including veterans, health care providers, Filipino communities, airline employees, and those with mental health conditions. After considering these groups in some detail, they synthesized needs around topics of interest to them, culminating in 2 op-eds published in Civil Beat, a local nonprofit news website. One was about the impact of the pandemic on Filipino communities in the state and was written by 2 students from these communities.¹² The second was from the perspective of health care providers and was written by 2 students providing care.¹³

Other Support

The students also learned about the background of emergency responses, including the HI-EMA structure, attended virtual unit meetings on Zoom, and helped pilot test a community-focused survey that was administered in August 2020.¹³

Students Perspectives

In this section, we share the specific learning experiences of our Interdisciplinary Student Team members (shown in Figure; Dr. Tetine Sentell of the UH Office of Public Health Studies, who coordinated the student team engagement in summer 2020, is also pictured).



Fary Maldonado

I am a PhD student at the UH Mānoa Myron B. Thompson School of Social Work with an interest in development of interventions for transitioning veterans as well as community-based research and cross-cultural issues. By participating in the project to identify community needs and concerns in the times of the COVID-19 pandemic, I enhanced the scope of my skills in community work and research. Being part of a project team allowed me to practice collaboration, challenge myself with new tasks, and experience interdisciplinary cooperation. Apart from improving my analytical and data collection skills, I succeeded in integrating my communication skills when discussing the possible issues related to COVID-19 health concerns with the team. Also, the contemplation on the scope of needs in Hawai‘i in the face of the pandemic enriched my professional experience.

The project was a good collaborative learning opportunity. The high values, ethics, and professionalism shown by each member of the team helped me grow and continue to develop my academic skills. The fact that we all come from different backgrounds and yet managed to engage in a very productive manner speaks volumes about the knowledge obtained from our programs. Faculty offered valuable mentorship and expertise. I benefited from observing the way tasks were conceived and accomplished. The knowledge and skills obtained from working on this project will be a valuable contribution to my future accomplishments.

Angel Lynn Talana

I am a Master of Public Health (MPH) student at UH Mānoa specializing in social and behavioral health sciences (SBHS). During these past few months, I had the opportunity to work on this project as part of my practicum and understand Hawai‘i’s community needs in light of the COVID-19 pandemic. This experience allowed me to garner valuable public health skills such as interdisciplinary teamwork, project building, data analysis, and health advocacy – important skills that I will undoubtedly use in future public health practice. By working with different disciplines such as nursing and social work, the project brought forth multiple perspectives of the pandemic and provided opportunity for meaningful discussions of how we can better serve our communities.

As an MPH SBHS student, I found it meaningful to examine the socioeconomic impact of this pandemic on our communities because understanding the community needs allows for better advocacy for actions and policies that will protect Hawai‘i’s most vulnerable communities. I partnered with my fellow MPH colleague Sydney Unciano and we passionately advocated for Filipino health to be examined since Filipinos have been disproportionately impacted by this pandemic.¹² It was exciting to see our perspectives published in *Civil Beat*.

Public health plays such an important role in our community health and it has been brought to the forefront because of this pandemic. However, it is also important to know that public health efforts will not end when this pandemic subsides and everything is back to “normal.” Public health will continue to play an important role in the future and this project has made me become a better public health professional.

Sydney Unciano

I am also a MPH student specializing in SBHS at UH Mānoa. As a participant in the HI-EMA interdisciplinary project for my master’s practicum project, I had the opportunity to work with students from various educational backgrounds. Working in an interdisciplinary student team with nursing and social work students introduced me to different care model perspectives. This experience helped me develop effective communication skills and taught me how to critically think of different ways to approach these unprecedented community challenges. Some of the shared responsibilities we had included analyzing qualitative data, creating a formal report of the data analysis, and compiling a list of informative and helpful resources. Aside from collaborating with students from different backgrounds, one of my favorite parts about this opportunity was being able to work with my colleague, Angel, and to use my educational platform to help advocate for Filipino health in the community.¹²

From this project, I have observed the collaborative and diligent efforts of my colleagues and leaders from multiple organizations come together to provide support during this pandemic. I am appreciative of the support and help of my colleagues during this project, as well as the mentorship and guidance provided to direct this project and connect us to various community networks. As the COVID-19 pandemic continues, it is evident that this emergency will require the insights of various disciplines at many different levels. I am optimistic that the continuing efforts of HI-EMA and other associated organizations will be able to provide support during this time of need.

Kira Oyama

I am a graduate student who recently completed my degree in population health nursing at UH Mānoa. I am also currently working as a registered nurse at The Queen’s Medical Center in Honolulu, in the intensive care unit. As a frontline healthcare worker, I was provided the opportunity to be part of and witness the COVID-19 response in the acute care setting. This stirred up a lot of fear and anxiety among the hospital workers as there were many concerns about adequate staffing and supplies.¹³ This sparked my interests in the public health approach to the pandemic, and I was granted the opportunity to work with this interdisciplinary group of students on understanding community needs in Hawai‘i during this trying time.

Through this experience I developed my data collecting and analyzing skills and enhanced my communication abilities through writing and teamwork. I was given the opportunity to work with an amazing group of strong, independent, and passionate leaders in the community who are going to continue doing great work for the community. This experience increased my appreciation for the job done in the public health sector as well as highlighted the incredible challenges that come with it. In what felt like such a short summer session, we accomplished so much in sharing information with the public and highlighting community needs. I look forward to seeing the great work my teammates continue to accomplish particularly as we continue to deal with the short-term and long-term effects of this health care crisis.

Chelsea Emma Apo

I am a graduate student with the UH Mānoa School of Nursing and Dental Hygiene with a background in acute care nursing and a Bachelor of Science in Public Health. As a student, I found that the coronavirus pandemic of 2020 presented a unique situation through which I could apply both my nursing and public health backgrounds and begin to work with professionals of other disciplines in my community. I enjoyed having the opportunity to learn more about the effects of this novel outbreak and to help inform others of the intricacies of needs, responses, and public health considerations involved. I have always believed that health is the outcome of a multitude of factors, and it was interesting to see those factors and people working in the professions that affect those factors come together to fight COVID-19 in Hawai‘i.

Interdisciplinary Engagement and Student Learning

The direct participation in the work of an interdisciplinary team was a valuable experience that provided students with an opportunity to observe how emergencies like COVID-19 are managed on a community-level, including engagement with the academic community.¹⁴ Interdisciplinary training remains critical to health training for the academic, health care, and public health communities in the time of COVID-19 and beyond.¹⁵

Challenges noted in the COVID-19 pandemic are interdisciplinary in nature, and their solutions must be as well. For instance, population mental health needs have expanded due to the increased level of uncertainty and anxiety related to isolation. This was a top community organization concern, including access to behavioral health services. The shift to telemedicine services was also a concern, needing solutions that include providers, the health care system, funders, software, hardware, translation services, and instructions on the proper

use of telehealth technologies. Basic needs (eg, housing, food), financial concerns, and unemployment were all significant concerns, as were health disparities. Some populations were disproportionately impacted, including Pacific Islander and Filipino populations, elder populations, and those with chronic conditions. We completed our initial organizational survey in April and May when the scope and timing of the pandemic were not clear. Schooling and childcare, while ranked as important by organizations in the earlier survey, have since emerged as even more critical to discussions. This area needs multi-sector solutions to keep students, teachers, parents, and family members safe and healthy, and keep teachers employed.

The idea of interdisciplinary work and interdisciplinary education are not new but are growing in health care and public health. Even before this pandemic, a renewed focus on interdisciplinary education emerged when 6 national health profession education organizations came together in 2009 and committed to “advancing interprofessional learning experiences and promoting team-based care.”¹⁶ These 6 organizations formed the Interprofessional Education Collaborative (IPEC) which would later expand to include 21 associations of health professional schools in 2016.¹⁶

The interdisciplinary student team discussed in this paper aligns to World Health Organization’s definition of interprofessional education, which is “when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes.”¹⁷ The team furthermore demonstrated aspects of the 4 competencies that fall under the domain of Interprofessional Collaboration: interpersonal teamwork and team-based practice, interprofessional communication practices, values/ethics for interprofessional practice, and roles and responsibilities for collaborative practice.¹⁸ In its vision for the future, the Interprofessional Education Collaborative sees “Interprofessional collaborative practice drives, safe, high-quality, accessible, person-centered care and improved population health outcomes.”¹⁸ This vision is further supported in the literature that these teams can improve health care quality, including fewer medical errors, lower costs, and shorter hospital stays for patients.¹⁹

Conclusions

Coordinating a safe response to an international emergency is an unprecedented task that requires a vast array of support from the community and a rapid response to quickly adapt to changing policies. This Interdisciplinary Student Team provided valuable contributions to the urgent COVID-19 response, enhanced their own knowledge and learning, and also helped build a stronger future for our community with new networks and understanding of new perspectives from collaborative learning opportunities.

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