Practicum Abstracts 2023

Degree: MPH-65

Field of Study: Nutrition

Project Title	Project Summary or Abstract
A pilot study on the high prevalence of food swamps in Kolkata, India.	A pilot study was conducted to study the high prevalence of food swamps in 3 Muslim neighborhoods in Kolkata, India. A survey was conducted to measure the count of food retail outlets in a range of 1.4-2.4 kms in residential areas complemented with an observational study to identify the kinds of unhealthy and healthy foods sold in the locality. The Retail Food Environment Index (RFEI) was also calculated which ranged from 816.9, which is condidered very high and gives us information that it is 8-16 times more likely for the neighborhood to have unhealthy food outlets compared to healthy food outlet. Our findings show that there is a very high prevalence of food swamps in all 3 neighborhoods studied which can have profound effect on the risk of contracting hypertension, stroke, diabetes and heart disease. We also saw that social factors were the main drivers of health inequities in the population living in these neighborhoods.
Explorations in Sports and Rehabilitation Clinical, Decision Making, and Epidemiological Perspectives	This practicum project aims to investigate the comparative effectiveness and cost-effectiveness of two common treatment approaches for shoulder rotator cuff tear: surgical intervention and a comprehensive physical therapy plan. By evaluating clinical outcomes and conducting cost-effectiveness analyses, we seek to provide evidence-based insights for clinical decision-making and epidemiological perspectives. Our objectives include assessing the clinical effectiveness of both treatments, analyzing cost-effectiveness, contributing to evidence-based guidelines, and informing insurance companies about treatment coverage decisions. Through rigorous methodology and data analysis, this research aims to significantly impact patient care, offering valuable guidance to healthcare practitioners and policymakers, and ultimately improving the management of shoulder rotation issues.
Food Service and Corporate Nutrition	As a summer healthcare consultant, I utilized a blend of consulting, leadership, and management proficiencies. During my practicum, I devised and executed a Food Service and Corporate Nutrition Initiative that proactively addresses how food service is utilized in corporations and how corporations view employee health in the workplace. Harnessing my consulting, leadership, and management proficiencies, I contributed to cultivating a healthier work environment and rethinking the way corporations utilize food service.

Accelerating Nutrition results in Nigeria	Support the acceleration of progress on ANRIN innovations implemented across 3 states to ensure they are scientifically rigorous and align with global best practices for research
	For my practicum, I worked with Dr. Allison Wu, a pediatric gastroenterologist at Boston Children's Hospital, on the InFoRM clinical pilot intervention for children facing childhood obesity and food insecurity. InFoRM's primary aim is to pilot feasibility of a medically-tailored meal kit (MTMK) delivery program for children with obesity, defined as Body Mass Index (BMI) at or above 95th percentile, in households facing food insecurity. Additionally, all InFoRM participant families were provided with physician-referrals to Boston Children's Hospital food pantry at Martha Eliot Health Center, as well as bilingual informational pamphlets detailing locally available food assistance resources.
	For each study participant, we collected baseline anthropometric and cardiometabolic measurements and conducted three in-person clinical study visits throughout the intervention. All study visits occurred at Martha Eliot Health Center and included additional child anthropometric measurements, child cardiometabolic data collection, and parent completion of diet and lifestyle questionnaires.
Clinical Pilot Intervention: Addressing Childhood Obesity and Food Insecurity in Boston	As InFoRM is a hypothesis-generating pilot intervention, the results are intended to guide a larger-scale trial to test efficacy of MTMK delivery. After study completion, we conducted virtual qualitative interviews with participants' caregivers and pediatricians to evaluate intervention implementation, as well as identify areas of improvement for a larger-scale study design. Furthermore, we have analyzed our study findings and are currently preparing to disseminate these findings to participant families, the local community, and the scientific community via patient newsletters, the Martha Eliot Health Fair, medical conferences, and scientific journal publications.
Evaluting Food Security and Subsistence Practices in Rural Hawai'i	This project aims to work with the community to generate actionable data on subsistence and food security. Together with my community partner, we administered 350 surveys evaluating the role of subsistence in food security on Molokai and documenting how subsistence practices may have changed in response to social, ecological, or cultural shifts. This project contributes to our understanding of how subsistence relates to food security and how social and environmental changes have impacted and may continue to impact these practices. This will aid in designing tailored food security interventions that fit Molokai's unique subsistence lifestyle and inform measures to protect these practices from adverse social and environmental changes

The role of dietary	This research project aimed to investigate the prevalence of industry sponsorship in dietary weight-loss supplement research. The practicum role was to assist in the study design, data extraction, organization, and analysis, and manuscript writing of the project. The bulk of the role was centered on the data collection and amnagement from 76 studies investigating weight-loss supplements, including article sponsorship, funding sources, conflicts of interest, disclosures, author affiliations, and interest statements. Once this data was
supplement industry commercial sponsors in randomized controlled	collected, the team used statistical analysis to determine the level of industry involvement in weight-loss dietary supplements.
trials of weight-loss intervention research	Additionally, the project involved breaking down complex supplement nutritional information into one-pagers and presentations for dissemination to the public and to policymakers.
CDC Program Evaluation in Mississippi	The employers for this practicum are CDC (Centers for Disease Control and Prevention) and Harvard Chan. MPH students visit Jackson, Mississippi in-person for 4 weeks to work with the Healthy Moms and Healthy Babies Team (HMHB). The HMHB is a targeted case management program that provides care coordination and home visiting services to assist expectant women of all reproductive ages and infants up to one years of age who have identified health risks. MPH students assist the HMHB team with program evaluation and primarily focused on developing performance measures and the corresponding data collection requirement. The performance measures includes process measures (measure operational performance) and outcome measures (measure impact that the HMHB activities have). HMHB would then use these performance measures for the program evaluation process.
Deloitte Consulting	I was a Summer Healthcare Associate with Deloitte consulting. I was part of a cohort of 200+ MBA/MPH Students nationwide that worked at Deloitte, most of whom were hired on for a full-time position. I worked on a healthcare finance project involving management and revenue cycle management for a large healthcare system, and was able to participate in nutrition-focused "firm initiatives" which are like extracurriculars for the firm.
Nutritional Assessment of Children between 6 and 36 months old in Maras, Peru	The main goal of my practicum is to assess nutritional risk among children 6 to 36 months old in Maras, Cusco. A secondary goal in support of the first is to generate evidence to strengthen the nutritional components of CASITA and reduce nutritional gaps in the local population in this age group. Specific aims are: A) to characterize nutrition security, anemia prevalence, and caregiver-responsive feeding practices among Maras children enrolled in CASITA; B) to analyze the association between nutritional risk (i.e.

food insecurity, water insecurity, and child anemia) and developmental risk among participating children; C) to
analyze the association between nutrition insecurity and anemia among participating children.