among NGOs, foundations, and corporate social responsibility arms of global pharmaceutical companies.

Interpretation: Given the recent surge of interest in global mental health, this research is timely and essential as it provides a baseline for future evaluation of the impact of the renewed attention to mental health.

Abstract #: *2.037_NCD*

Telepathology: Reducing Time from Biopsy to Treatment in Limited Resource Settings

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Program/Project Purpose: Innovating Health International (IHI) operates one of the few cancer treatment centers in Haiti and is setting up the first pathology lab at a public facility outside Port-au-Prince. Up until recently, histopathologic diagnosis of tumors required the use of private pathologists in Haiti or transporting samples to United States for evaluation. This resulted in a lag between initial consultation and diagnosis and ultimately delayed treatment onset. To address this, IHI established a telepathology program at Justinien University Hospital (HUJ) in Cap Haitien, Haiti. The center is now fully functional and is able to process biopsied tissue from grossing the specimen to slide creation. As there are a limited number of pathologists in Haiti, and none outside Port-au-Prince, created slide images are then scanned using Mikroscan hardware and software. Digital images are then uploaded to the Internet and thereby available to be analyzed by pathologists around the world through an online platform that allows manipulation of images, including 100x zoom capability. The online platform also allows pathologists to remotely make and record a diagnosis which the Haitian pathology technicians can then print out and report results to patients. Each pathology technician spent one month training in the pathology lab in Baptist Health South Florida in Miami. Then, volunteer histotechnologists from abroad rotated through the lab in Cap Haitien, establishing protocols, training the staff, and providing oversight through all phases of the process. IHI's pathology lab now has the ability of rapid histopathologic diagnosis in a setting with limited resources. We are validating the quality of the process by double reading the first 100 samples in Cap Haitien and the pathology lab at the University of Florida. We are working with the government to use the online platform to help establish an electronic cancer registry in Haiti. The process, however, has not been without obstacles. Road blocks that had to be overcome include issues with sample preservation as well as poor internet speed and connectivity which slows the speed at which we can upload images.

Abstract #: *2.038_NCD*

Expert Perspectives on Mesoamerican Nephropathy (MeN): Examining the Production of Biomedical Knowledge about a Contested Epidemic

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Background: A form of chronic kidney disease sometimes called Mesoamerican nephropathy (MeN) is killing thousands of impoverished young men, mostly sugarcane harvesters, throughout Central America. Despite growing research interest in this disease since it was first described in 2002, its characteristics, causes, and even existence as a distinct clinical entity remain uncertain and, at times, contested. Using extensive interviews with leading MeN researchers, this study explored how biomedical knowledge about MeN is produced in a research climate fraught with barriers and controversy.

Methods: We interviewed 39 researchers from clinical, laboratory, academic, and/or field settings in 14 countries based on their publications and participation in conferences about MeN. Twenty-seven (69.2%) were male, 33 (84.6%) had a doctoral or medical degree, and 29 (74.3%) had been involved in MeN research for ≥6 years. Interviews were semi-structured and conducted in English (n=29, 72%) or Spanish (n=11, 28%) by Skype/telephone or in person. They were verbatim transcribed, translated, de-identified, and analyzed using 35 themes developed iteratively by content analysis.

Findings: Informants expounded their often nuanced thoughts on MeN etiology and impressions of the research environment, enriching and sometimes diverging from what research processes and findings peer-reviewed MeN publications describe. Informants' support for different causal factors (e.g. heat stress/dehydration, pesticides, infection), confidence in existing evidence, and prioritization of interventions versus additional etiological studies depended on their expertise, funding source, and experience in MeN-affected communities. Informants described numerous factors that stymie research broadly, yet are rarely referenced in MeN literature, including limited funding, uncooperative state and private actors, and significant methodological and logistical challenges, as well as local obstacles such as gang interference, participant loss of livelihood, and deportation of researchers. Half of informants believed their work on MeN posed personal and/or professional risk to them. Informants' experiences working with marginalized affected communities often motivated them to address not only MeN, but also broader occupational, environmental, and social injustices in these communities.

Interpretation: These results contextualize the limited progress that has been made in understanding and addressing MeN and highlight sources of the contestation surrounding the epidemic. They also underscore the need to identify strategies for facilitating MeN science and addressing the community-wide suffering caused by MeN.

Abstract #: *2.039_NCD*

Taipei Hospital's Chronic Kidney Disease Education Program and eGFR Outcomes

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Background: Taiwan has the highest prevalence and incidence of end-stage renal disease (ESRD) in the world. Taipei Hospital established the Chronic Kidney Disease Education Program (CKDEP)

to decrease the progression of chronic kidney disease (CKD) to ESRD. Specific diets are assigned according to the patient's CKD stage and patients are given individualized consultations with a dietician. Analyzing the effectiveness of this program can lead to further funding and patient recruitment.

We hypothesize that the experimental cohort of stage 3b CKD patients in the program will have a slower rate of eGFR decline compared to a control cohort of stage 3b CKD patients.

Methods: This is a retrospective cohort study on stage 3b CKD patients who have completed CKDEP. Stage 3b CKD, defined as an eGFR of 30-44 (mL/min/1.73 m^2), was selected for analysis due to the higher likelihood of progressing to ESRD compared to other stages. For both study groups, the rate of change in eGFR over time was measured by calculating the slope of eGFR for each patient, with time elapsed (in days) as the x-axis and eGFR measurements as the y-axis. A Student's t-test was performed to analyze significant differences in eGFR rate of change.

Findings: There was no statistically significant difference (p-value = 0.27) between the experimental (n=91) and control cohorts' (n=75) rates of change in eGFR. The experimental cohort's average initial eGFR was 37.1 +/- 4.4 and the average final eGFR was 38.0 +/- 9.6. The control cohort's average initial eGFR was 38.2 +/- 9.2 and the average final eGFR was 39.2 +/- 13.7. The average rate of change in eGFR for the experimental was 0.0065 +/- 0.0437 and for the control was -0.0179 +/- 0.1811.

Interpretation: Although our analysis does not show a statistically significant difference, there was a positive average rate of change in eGFR for the experimental cohort compared to a negative average rate of change in eGFR for the control cohort. This suggests that Taipei Hospital's CKDEP may have a beneficial impact in slowing the progression of CKD. Future studies include stratification and analysis of patients based on comorbidities, age, and gender.

Abstract #: *2.040_NCD*

Mortality from Thermal Burns in Patients Using Emergency Medical Services in India: A Prospective Study

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Background: Globally, there were over 33.5 million thermal burn injuries in 2013, resulting in over one million years lost to disability, and approximately 237,500 deaths. The majority of burn deaths, an estimated 90%, occur in low- and middle-income countries (LMICs) with India alone accounting for 163,000 fire-related deaths annually. The goal of our study was to characterize the demographics, management, and outcomes of patients using emergency medical services (EMS) for thermal burns in India.

Methods: We conducted a prospective observational study of patients using emergency medical services (EMS) for thermal burns across five Indian states over four months in 2015. Any patient calling a toll-free, state-wide, centralized EMS system for a burn injury was eligible for inclusion. Exclusion criteria included calls for burns caused primarily by chemicals or electricity, interfacility transfers, patients who were absent upon ambulance arrival, and patients who refused care and transport. Follow-up phone calls were completed at 2, 7, and 30 days. Our primary outcome was mortality. Secondary outcomes included prehospital care and functional status. Multivariate regression was performed it identify preditors of mortality.

Findings: We enrolled 439 patients, 30-day follow-up rate 85.9%. The median age was 31 years; 50.3% (N = 221) lived in poverty; and 65.6% (N = 288) were women. EMS transported most patients within two hours (94.3%; N = 395). Overall 30-day mortality was 64.5%, but was 90.2% in women with self-inflicted burns. In total, 45.6% (N = 200) reported self-inflicted burns. Intentional burns involved a median total body surface area of 80%, versus 35% in accidental burns. Inhalation injury (OR 6.7), intentionality (OR 6.6), economic status (OR 2.6), and gender (OR 2.3) predicted mortality by multivariate regression.

Interpretation: EMS connects critically burned patients to needed care in India. Mortality from thermal burns remains exceedingly high, with women disproportionality suffering self-inflicted burns and higher mortality. It is critical that public health officials recognize that burn prevention in India requires integration with mental health and gender-based violence supportive services.

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