

obtaining written consent, they were randomized to no further intervention (NFI), or to receive a BI delivered by a nurse.

Findings: Of the 696 participants, 91% were male, the average age was 38yo, with the majority having completed only primary school. The average alcohol consumption at baseline was 400 gr in the BI group and 413gr in the NFI group, at one month it decreased respectively by 183gr, and 217 gr; T-test showed a statistically significant decrease in both groups overtime, while the difference between the groups was not significant.

Interpretation: CHW trained online to deliver feedback with the ASSIST can help those with moderate to high risk level of alcohol consumption to reduce their consumption as much as those who received a full brief intervention, and both groups decreased their consumption more than observed in the Cochrane Alcohol BI meta-analysis.

Funding: Grand Challenges Canada, Annenberg Physician Training Program in Addiction Medicine.

Abstract #: 1.005_PCF

A Cost analysis of multiple triage strategies for early detection of cervical cancer screening programs

E. Corona¹, Y.N. Flores^{2,3}, M.A. Rodriguez¹, J. Meneses León³, B. Rivera³, B. Cortes Paredes⁵, L. Rodriguez Ochoa⁵, J. Armando Sosa Palacios⁵, E. Lazcano-Ponce⁴, J. Salmerón³; ¹David Geffen School of Medicine, University of California Los Angeles, Los Angeles, California, U.S.A., ²UCLA Department of Health Policy and Management, Center for Cancer Prevention and Control Research, Fielding School of Public Health and Jonsson Comprehensive Cancer Center Los Angeles, CA, U.S.A., ³Unidad de Investigación Epidemiológica y en Servicios de Salud, Instituto Mexicano del Seguro Social, Cuernavaca, Morelos, México, ⁴Centro de Investigación en Salud Poblacional, Instituto Nacional de Salud Pública, Cuernavaca, Morelos, México, ⁵Maestría en Salud Pública con área de concentración en Administración en Salud, Instituto Nacional de Salud Pública, Cuernavaca, Morelos, México

Background: Although high-risk human papilloma virus (hrHPV) testing has been shown to be more sensitive than the conventional Pap smear (93.1% vs 59.4%, respectively) in preventing cervical cancer, the specificity of hrHPV testing is lower (91.8% vs. 98.3%, respectively). Due to the lower specificity of the hrHPV test more women who will ultimately not develop cervical cancer will undergo more invasive procedures such as colposcopy, which has a direct effect on patient anxiety levels, risk, and healthcare costs.

Methods: The Forwarding Research for Improved Detection and Access for Cervical Cancer Screening Project (FRIDA Study) in Tlaxcala, México is evaluating a variety of reflex testing—or triage—strategies to determine which option is the most efficient and effective in reducing the number of screening visits, number of follow-up procedures, and anxiety patients may feel due to additional screening. We determined the cost of the different screening and triage strategies that are being evaluated as part of the Forwarding Research for Improved Detection and Access for Cervical Cancer Screening Project (FRIDA Study) in Tlaxcala, México. We conducted a time and motion study to calculate personnel costs and identified the equipment, supply, capital, and overhead costs required to produce clinical results from bench to bedside.

Findings: We visited three types of clinics classified as small (n = 7), medium (n = 1), and large (n = 2), based on the volume of patients that are seen each day to determine if costs vary by clinic size. Personnel costs, physical area costs, and overhead costs per exam were \$3.01, \$1.91, and \$2.13 in small, medium, and large clinics, respectively. Personnel costs were lowest for the Papanicolaou liquid based cytology triage strategy (\$5.61 vs. 5.97 and \$6.06 for p16/Ki-67 and E6 oncoprotein detection, respectively). Supply and equipment costs have not been calculated.

Interpretation: Triage strategies using Liquid-Based Cytology Pap stain appear to be less expensive in personnel costs than triaging with the E6 oncoprotein assay or p16/ki-67 stain, but personnel costs for additional triage strategies are pending. This cost analysis will contribute to a cost-effectiveness analysis, which will determine the most cost-effective screening strategy to be implemented throughout Mexico.

Funding: This first author was provided with a travel grant from the UCLA Blum Center on Poverty and Health in Latin America.

Abstract #: 1.006_PCF

The industrial Nakba: A study of industrial dumping in Palestinian cities

L. Elmuti¹, D. Hryhorczuk¹, B. Amous², S. K'Aibni², I. Qasem³, N. Sehweil-Elmuti⁴; ¹University of Illinois at Chicago (UIC), Chicago, IL, USA, ²Birzeit University, Birzeit, West Bank, Palestine, ³Tulkarm Ministry of Environmental Affairs, ⁴Eastern Illinois University, Charleston, IL, USA

Background: Al-Nakba (“the catastrophe” in Arabic), in which the Palestinian people lost their sovereignty, began in 1948 and has continued to devastate the lives of millions of Palestinians. It has impacted the Palestinian narrative, freedom of movement, education, healthcare, and even clean water. Toxic dumping by Israeli industrial zones into Palestinian waterways has been detrimental to physical and psychosocial health. As a result of adverse health effects in Israeli cities, seven industrial zones have been relocated to Palestinian cities throughout the West Bank. This study focuses on two Palestinian cities, Salfit and Tulkarm, which house the Ariel Industrial Zone and Geshuri Industries, respectively. Palestinian lands are often located at foothills of industrial zones, making them particularly vulnerable to runoff from these complexes. Organizations like Friends of the Earth Middle East have documented unregulated dumping of agrochemical pesticides, batteries, gasoline byproducts, and heavy metals into drinking and groundwater of various West Bank cities. Several studies have raised concerns about industrial runoff contaminating crops, farmland, drinking water and the air. However, there are no previous studies with qualitative or quantitative evidence of these toxins. The lack of awareness, advocacy, and policies implemented to protect citizens of West Bank cities have exacerbated this issue.

Methods: In this study, two water samples from each category (ground, drinking, and wastewater runoff) were taken from Salfit and Tulkarm. Samples were collected in 1L mason jars, covered with aluminum foil and placed on ice to prevent contamination and chemical degradation. The samples were analyzed using gas chromatography-mass spectrometry at the Environmental Health and Toxicology Unit at Birzeit University.

Interpretation: Many chemicals found in analyzed water samples are known neurotoxins, teratogens, endocrine disruptors, and carcinogens. Of the 35 chemicals found: 4-nonyphenol and P-octylphenol are endocrine disruptors that have been shown to upregulate oncogenes that are linked to breast and ovarian cancer; several phthalates like di-n-octylphthalate may cause testicular atrophy and infertility; and N,N-diethylthiourea has been linked to follicular thyroid, hepatocellular, and lung adenocarcinomas. Future work will include using known standards to quantify exposure and determine the extent of potential health effects.

Funding: Center for Global Health at UIC.

Abstract #: 1.007_PCF

Investigating interventions for increasing uptake of prevention of mother-to-child HIV transmission services: A systematic review

V. Falabati¹, J. Liu²; ¹University of California, Davis, Sacramento, Ca, USA, ²University of California, San Francisco, Ca, USA

Background: Mother-to-child HIV transmission, which can occur during pregnancy, labor, or breastfeeding, is responsible for 90% of HIV infections in children under the age of 15 worldwide. Despite significant advancements in low-cost, effective clinical interventions for prevention of mother-to-child transmission (PMTCT), uptake of these services is limited in low income and lower-middle income countries with high HIV burden. New Incentives, a non-profit organization in Nigeria, has introduced a conditional cash transfer program to reduce demand-side barriers of PMTCT utilization. We conducted a literature review to explore how the New Incentives conditional cash transfer program compares to other interventions addressing use of PMTCT services by HIV-positive pregnant women.

Methods: We performed a systematic analysis of over 800 quantitative and qualitative studies of interventions and social and behavioral determinants relevant to demand and supply of PMTCT. We subsequently compared these interventions to the conditional cash transfers included in the New Incentives program for increasing utilization of PMTCT services.

Findings: Quality improvement and provider training, in addition to use of peer mentors and the traditional health sector, including traditional birth attendants, has been shown to eliminate supply-side barriers of PMTCT. Integration of antenatal care with HIV services and male involvement in antenatal care significantly reduce demand-side barriers to PMTCT uptake. New Incentives is the first program to use conditional cash transfers to increase demand for PMTCT services in low-income countries.

Interpretation: Although little evidence exists for the efficacy of conditional cash transfers, they present a novel, promising tool for reducing demand-side barriers of PMTCT use. Furthermore, more interventions addressing transportation, food insecurity, and other demand-side barriers should be investigated. As PMTCT services become more available globally, this data should be a call to policymakers to address barriers that inhibit uptake of these services.

Funding: None.

Abstract #: 1.008_PCF

A novel framework for evaluating the private profitability of investments in employee health in low-and middle-income countries

L. Wier¹, F. Federspiel²; ¹University of Copenhagen, Copenhagen, Denmark, ²Johns Hopkins University, Baltimore, MD, USA

Background: Health care sectors in most low- and middle-income countries (LMICs) are grossly underfunded. Novel drivers for investment in health are needed. We aimed to create a new driver for investments in health in LMICs by developing a novel framework for evaluating the productivity gain of health investments in a company setting and the resulting private profitability hereof.

Methods: A case factory setting in Northern Vietnam with 1700 adult textile workers was used for the development of our framework. 87% (N = 1305) were female and 13% were male (N = 195). All workers at the factory were included. A literature review of the most common diseases for this demographic group in this specific region was conducted to identify potential areas of impactful and sustainable health investment.

Findings: Iron-deficiency anemia was identified as a potentially relevant and sustainable area of intervention. The discounted effect of supplementing worker lunch meals with iron-fortified soy- and fish-sauce, corrected for delay of effect and worker exchange rate, was conservatively estimated to be at least 0.4% per year with a benefit-cost-ratio of the intervention of at least 2.0. These numbers were presented to the factory administration that decided to implement the suggested intervention. This further led to an unforeseen increased focus on worker nutrition at the factory, with the introduction of new nutritious food items in the factory kitchen and the establishment of teaching sessions on healthy nutrition for all employees.

Interpretation: The investment in worker nutrition at the factory illustrates the potential of this framework to act as a driver for private investment in worker health. It provides a unique contribution to the available literature in that it controls for the time-delay of effect and limited length of employment, and thus ignores productivity gains that do not directly benefit the company. While the applicability of our framework is limited to diseases where productivity effects have been studied the implementation of such economic frameworks for increasing private investments in employee health may prove an important component of health care financing in LMICs, in the absence of sufficient funding from other sources.

Funding: None.

Abstract #: 1.009_PCF

A One-Health approach to prioritizing zoonotic diseases in Sub-Saharan Africa, 2015

R. Gharpure^{1,2}, E. Pieracci², S.J. Salyer², R. Wallace², E. Belay², C. Barton Behravesh²; ¹University of California, Davis, School of Veterinary Medicine, Davis, CA, USA, ²United States Centers for Disease Control and Prevention, Atlanta, GA, USA

Program/Project Purpose: Zoonotic diseases threaten human and animal health with wide-reaching economic impact. These diseases are frequently neglected, concurrent with a lack of