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than those working in HIV prevention (12.12%) or orphan care (13.22%). CBOs are clustered in urban areas and the Southern region where HIV prevalence is highest. Data analysis is ongoing but initial findings suggest that foreign aid, population levels, and support for the ruling political party are positively associated with CBO placement. There is little relationship between a district's health status and CBO activity but CBOs seem to cluster in districts with fewer existing health facilities. After rapid growth in the 2000-2004 period, CBO numbers have recently stabilized.

Implications: We find that CBO formation in Malawi is a largely donor driven response to the HIV/AIDS epidemic that is weakly tied to community health need. However, CBOs operate in areas where few facilities exist and may, therefore, improve service coverage.

Funding: AidData Kickstarter Research Award.

Abstract #: *1.005_GOV*

Determinants of health among the border population in three neighborhoods of Tijuana, Mexico

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Background: The public health needs of the border neighborhoods in Tijuana, Mexico are poorly understood. In order to identify disease burden, inaccessible health services and areas for intervention, a needs-assessment was performed in three separate low-income neighborhoods in Tijuana.

Methods: Using an original survey based on basic needs-assessment models, bilingual volunteers interviewed household representatives who presented to a visiting free clinic in three separate low-income neighborhoods in Tijuana. These free clinics are run by a non-for-profit organization that provides primary and urgent care clinic in these neighborhoods every three months.

Findings: There were a total of 116 households captured by the survey (51 at Site A, 50 at Site B, and 15 at site C). There were common themes among the three sites as well as unique opportunities for intervention at Sites B and C. We found that education and employment were low in all sites, that the majority of residents (excepting Site C) have health insurance that may cover doctor visits but does not allow for medication purchases or purchasing of ancillary studies. Diabetes mellitus and hypertension accounts for the majority of health problems. Medical care during pregnancy and for childbirth is relatively accessible to all for low cost.[1] Finally, none of the sites had access to the hospital via EMS in the case of an emergency. In terms of unique needs, Site B had a high incidence of asthma, possibly due to toxic air pollution as the area was formerly a city dump.[2] Site C had the lowest rate of education and employment and had minimal access to doctors, medications, sufficient clean water, and basic medical care.

Interpretation: This needs assessment evaluated three separate neighborhoods in Tijuana, Mexico and has provided valuable information regarding determinants of health in these populations including health care access, prevalence of medical problems, and environmental exposures. This survey has also highlighted several areas for public health intervention in the future.

Funding: None.

1 Ramírez-Zetina, M., Richardson, V., Avila, H., et al. (2000). La atención prenatal en la ciudad fronteriza de Tijuana, México. Revista Panamericana de Salud Pública, 7(2), 97–101.
2 Al-Delaimy, W.K.; Larsen, C.W.; Pezzoli, K. Differences in Health Symptoms among Residents Living Near Illegal Dump Sites in Los Laureles Canyon, Tijuana, Mexico: A Cross Sectional Survey. Int. J. Environ. Res. Public Health **2014**, 11, 9532-9552.

Abstract #: *1.006_GOV*

Trends of comorbidities in taiwanese patients infected with multi-drug resistant tuberculosis in seeking favorable treatment outcomes

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Background: Multi-drug resistant tuberculosis (MDRTB) accounts for 3.5% of new tuberculosis (TB) cases globally and is a major public health problem with potential global threats. Patients with comorbidities further complicate the complex treatment of MDRTB. Studies have shown that MDRTB patients with comorbidities have poorer treatment outcomes. The aim of this study is to evaluate clinical characteristics in MDRTB patients at TIHTC Taipei Hospital, Taiwan and raise awareness to help establish effective treatment regimens among comorbid patients infected with MDRTB.

Methods: As a retrospective study, data for 26 patients with MDRTB from the years 2009 to 2014 was gathered from the TIHTC Taipei Hospital. The independent variables in the data included age, drug treatment regimen, drug sensitivities, and type as well as number of comorbidities. Trends were observed on the variables of age and the various comorbidities with the MDRTB patients.

Findings: The sample (N=26) consisted of 16 males (61.5%) and 10 females (38.5%) and the mean age (±SD) of the patients with MDRTB was 58.3 ± 19.4 years. Patients with at least one comorbidity was 50.0% (N=13) and at least two comorbidities was 25.9% (N=7). 68.8% (N=11) of the males and 20.0% (N=2) of the females had at least one comorbidity in addition to the MDRTB infection. There were higher percentages of MDRTB patients presenting with hypertension, 23.1% (N=6), and cancer, 15.4% (N=4). Other comorbidities included diabetes mellitus, 11.5% (N=3), hepatitis B, 7.7% (N=2), anemia, 7.7% (N=2), and miscellaneous-grouped diseases, 38.5% (N=10). Out of the 13 patients with comorbidities, hypertension counts 46.2% (N=6).

Interpretation: This study suggests that patients infected with MDRTB at Taipei Hospital tend to be male (68.8%) over female (20.0%) and altogether have a higher probability of having comorbidities (38.5%). Among the MDRTB patients with comorbidities, hypertension counts 46.2%, suggesting that hypertension is the most likely comorbidity in MDRTB patients received at Taipei Hospital. Because many anti-hypertension drugs are associated with serious toxicities, which can complicate the management of MDRTB, it

is thus necessary to establish favorable treatment regimens for MDRTB patients with hypertension to improve patient outcomes.

Funding: None.

Abstract #: *1.007_GOV*

Perceptions of political actors on sex-selective abortion in Northwestern India

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Background: Sex-selective abortion (SSA) describes the abortion of an undesired female fetus (solely because she is a girl). Demographic studies on SSA demonstrate that a combination of three factors – high son preference, access to sex-selection technology, and low fertility rates – catalyze skewed sex ratios. Although SSA has been illegal in India since 1994 with the passing of the Pre-Natal Diagnostic Testing (PNDT) Act, as of 2011 there were only 875 girls to 1000 boys in Northwestern India. Even though the United Nations highlights the need to engage with public authorities to curb SSA, thus far studies have not analyzed the opinion of political actors on SSA. Thus, this study aims to understand perspectives of political actors in Northwestern India on SSA policies.

Methods: I conducted lengthy unstructured interviews. Political actors were from Northwestern India (Gujarat, Maharashtra, New Delhi, and Rajasthan). Sixteen political actors were recruited - eight were experts on SSA, while the other eight were not specialists in the field (non-specialists). Using Critical Discourse Analysis and a Readiness (demand) and Able (supply) framework, my study analyzes how political actors discuss policies aimed at curbing the demand or supply of SSA. Participants provided verbal consent and ethics approval was received from the University of Cambridge.

Findings: (1) While Census data demonstrates that sex ratios are most skewed in urban, wealthy, and educated populations, non-specialists incorrectly believed the practice occurred primarily in rural, poor, and uneducated populations. (2) Non-specialist political actors do not perceive the PNDT Act as valuable for lowering SSA; they believe SSA must be curbed through cultural change, not legal measures.

Interpretation: There is a lack of knowledge amongst non-specialists may lead to policy mismatches (e.g. conditional cash transfers). Additionally, there are debates on the role of the law, demonstrating the potential decreased political will towards legal solutions for SSA. Future studies will include 100 standardized surveys of non-specialist political actors to gain insight on their level of knowledge has well as opinions on SSA policies.

Funding: The Gates-Cambridge Trust funded my graduate studies.
Abstract #: *1.008_GOV*

Morbidity pattern in individuals seeking treatment in primary medical care units in the division of the ampara regional director of health services, Sri Lanka and related costs

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Background: Sri Lankan government provides free health care. Ampara is one of the four health districts in the Eastern province of Sri Lanka. Morbidity pattern and associated cost of individuals attending Primary Medical Care Units (PMCUs) in Sri Lanka is scarce. Therefore, we conducted this study to describe the pattern of presenting symptoms and cost incurred by the government and the individual (out-of-pocket expenditure) attending PMCUs in the Ampara Regional Director of Health Services (RDHS) division.

Methods: The study was a descriptive cross sectional study. Of the fifteen PMCUs situated in the Ampara RDHS division, eight daily functioning PMCUs run by a qualified Medical Officer were randomly selected. All individuals attending them on a selected day in a week were included to the study. An interviewer administered structured questionnaire was used. Data was analysed using SPSS statistical software.

Findings: A total of 516 individuals were included in the study. The mean age was 34.8 years (SD=22.2 years). Respiratory symptoms were the commonest (28%), while 19% had musculoskeletal and 13% digestive symptoms. The pattern of presenting symptoms among children was different from adults. The mean cost incurred by the government was Rs.136.89 (1USD=40 SLR) per visit. Out of this cost 18% were for medicines and 82% for salaries of health care personnel. Antibiotics accounted for 45% of the total medicine cost incurred by the government and 44% were issued antibiotics. Issuing of antibiotics to children was statistically significantly higher than in adults ($p<0.05$). The mean cost incurred by the government for children (Age<=12years) was statistically significantly higher ($p<0.05$) than for adults. The mean out-of-pocket expenditure per visit was Rs.175.40. The main component of this consisted of loss of income (61%). The mean out-of-pocket expenditure (Rs.175.40) was statistically significantly higher than the mean cost incurred by the government (Rs.139.89) and the mean total cost for a PMCU visit was Rs.312.29.

Interpretation: As forty three million visits are recorded annually for PMCU care in Sri Lanka, Rs. (312.29x43) x10^6 is spent for these visits. Visits to a PMCU affect the income of the individual and indirectly the family and the society.

Funding: Education Training and Research Unit, Ministry of Health, Sri Lanka.

Abstract #: *1.009_GOV*

The West African Ebola outbreak: reforming international aid in emergency responses to promote universal coverage for comprehensive care of survivors

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Program/Project Purpose: The medical identities of Sierra Leone's 4,000+ Ebola survivors came at the cost of losing socioeconomic support networks. Ebola Virus Disease sequelae leads to pain in the joints, chest, fevers, difficulty sleeping and blindness. In 2014 Partners In Health established an Ebola Survivors Program to provide comprehensive care to EVDS. Here we summarize a process for establishing a program for Ebola survivors as a model for building comprehensive care services for vulnerable individuals receiving care for chronic morbidities in global health.