

**Interpretation:** KCMC sees an approximately identical volume of surgical orthopaedic trauma as a Level 1 Trauma Center in the United States, but has significantly fewer material and intellectual resources to meet this surgical burden. These data give a more complete picture of the patient demographics, mechanisms of injury, types of injury and patient outcomes for similar resource-limited locations.

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### The relationship between social and institutional gender inequality and suicide rates of young women across the globe

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**Background:** This study seeks to analyze the relationship between suicide rates of young women around the world. The Social Index and Gender Index, or SIGI, offers a measure of the upstream social and structural inequalities in world countries. We seek to discover the areas of discrimination against women that are significantly correlated to the prevalence of female suicide.

**Methods:** We investigated the relationship between suicide rates of women 15–29 around the world and the relative gender discrimination experienced in their country as rated by the SIGI. This is an ecological study at the country-level using publicly available data from the WHO on suicide rates and the OECD's SIGI data from 2012. We examined the bivariate correlations of between suicide and SIGI composite and sub-component measures using robust regression models and used Spearman rank correlation coefficient.

**Findings:** The female suicide ratio (to males) was positively correlated with the SIGI (0.72 (0.21–1.24)  $p=0.006$ ) and all of its sub-components except physical integrity. Sub-component correlations included family code (0.67 (0.24–1.11) 0.003), physical integrity (0.01 (-0.23–0.24) 0.958), son bias (0.92 (0.38–1.46) 0.001), access to resources (0.29 (0.05–0.53) 0.019) and civil liberties (0.22 (0.03–0.42) 0.024). Secondly, we found a significant negative correlation with SIGI and male suicide rate (-12.19 (-23.93–0.44) 0.04), but no correlation for female suicide rates.

**Interpretation:** It's important to consider the role of gender inequalities and suicide in order to understand the effect that gender discrimination may have on women's mental health and how severe that impact can be. The findings do not show direct causation but do offer findings that merit further study and a deeper depth of understanding. These findings may explain the negative impact that discrimination in family code and son bias can have on women's health. Asia may have a high ratio of female to male suicide in part because of their problems with son bias and family discrimination.

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### A needs-based perspective to improve medical care and education in Cono Sur, Lima, Peru

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**Purpose:** In the realm of global health, providing care and education is crucial. With a widening spectrum of health issues but a narrow pool of resources, it is important to ensure that the

resources provided are relevant to the population and time-period. This requires consistent assessment of the population's needs. This study aims to identify and help refine the kind of care and health education needed in Cono Sur, Lima, Peru through a needs-based assessment. Data were obtained from mobile clinics in the Cono Sur. An orally administered survey was compared against nurse reported diagnosis rates for each diagnostic category.

**Outcome & Evaluation:** Clinic staff diagnosed 311 patients in a 6 month period. In total, 68 patients (22M, 46F) participated in the survey. Thirty-six percent of participants did not feel they had access to healthcare, and 74% of participants reported difficulty in paying for healthcare. Sixty-three percent of participants said they have difficulty paying for medications.

A one-way between-groups ANOVA was conducted, and showed that our results were significant ( $F(9,11)=8.5, p=0.001$ ) for a difference between the number of people diagnosed with a disease and the number of people that reported that disease as their primary health concern in a list of disease categories. Patient concerns were often directed towards life-ending medical problems, such as cancer and family history (27% and 13%, respectively), which were overrepresented compared to clinic diagnoses (5%). Chronic medical conditions and other silent diseases, on the other hand, were an underreported concern (chronic: 23% diagnosed, 8% concerned; other: 40% diagnosed, 5% concerned). These results, in combination with only 42% of patients taking medications for their chronic illnesses, and the majority of patients who lacked knowledge or wanted to learn more about their illnesses, prompts the need for increased education in these areas. In addition, the community's main concerns need to be addressed to decrease fear of rare fatal conditions.

**Going Forward:** Based on these findings we would advise medical educators to improve access to information to both conditions that are highly diagnosed as well as conditions that cause high levels of concern in this region.

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### Screening for depression in Andean Latin America: Factor structure and reliability of the CES-D short form and the PHQ-8 among Bolivian public hospital patients

Abstract Opted Out of Publication

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### Awareness and attitudes of prescribing pre-exposure prophylaxis for HIV prevention among medical providers in Guatemala: Implications for country-wide implementation

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**Background:** HIV continues to be a major health issue with approximately 2.2 million new infections worldwide in 2014. Over 2,900 of these occurred in Guatemala, which was the highest number of infections in Central America. Pre-exposure prophylaxis (PrEP) is a newly recommended HIV prevention intervention by the World Health Organization (WHO) and has the potential to curb new infections in this region. Successful PrEP implementation