Abstract #: 02ITIS014

Assessing health systems performance in low and middle income countries

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Background: Previous studies on health systems performance have struggled in creating better parameters to assess and compare performance, particularly in many low and middle income countries. If only we can create better parameters, we can then create more efficient health system reforms and optimize health interventions. It is therefore crucial to examine how health systems are performing through creating typologies and determining its influence on health outcomes. Typologies have been widely used as a similarity measure to explore mechanisms that lead to program's successes and failures. It also assists in allocating resources and prioritizing interventions that have most impact on key health targets. However, applying such innovations in health systems performance assessment are yet to be examined further. Until better parameters have been done, misallocation of health resources and poorer health outcomes persists.
Methods: This study involves comparative cross-country analysis of health systems performance in 143 low and middle income countries (LMICs) and also examines how each health system building block influence health outcomes, particularly life expectancies (LE). Using three waves of data averaged before the year 2000, 2001-2006 and 2007-2012, we used various statistical techniques such as multivariate regression analysis, factor analysis and cluster analysis to examine characteristics of health systems in LMICs. Data used is from the Health Systems database, which was an output of the USAID-funded Health Systems 2020 and the Health Financing and Governance Projects. Geographical information systems were also used to determine priority areas for health systems strengthening.
Findings: Findings provide visualizations of how health systems of LMICs are performing across the years. It examines how and why health systems performance remains weak in many LMICs and determines which areas for health systems strengthening have most significant influence on health outcomes. Our results show that three categories of performance: a) stagnant health systems or countries that have no significant improvement for each of the health system building block across the years and have an average life expectancy of only 55 years, b) transitioning health systems or countries that are performing well in terms of service delivery and health workforce but needs improved health financing and better governance and have an average LE of 68 years; and c) positive health systems or countries that are performing well in each of health system building blocks with average LE of 69 years. Our results also show which area of each health system building block have the most significant influence on LE such as stricter corruption controls (B=0.67, p=
Interpretation: Assessing health systems blocks allow identifying patterns of performance and priority areas for health systems strengthening. Increasing health financing alone is not enough to have a well performing health system.
Abstract #: 02ITIS015

Developing evidence of content validity and comprehensibility of a measure of HIV-related stigma for Maharashtra, India

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Background: A team of faculty (nursing, health sociology, public health and medicine) from colleges of nursing in Maharashtra, India, and the USA are collaborating to develop a program of research into aspects of HIV-related stigma, an important barrier to effective HIV/AIDS prevention and treatment. Cultural differences between and within countries require researchers to assess the validity of research instruments developed with different populations for use in their intended setting. Guided by classical test theory, the purpose of this initial study was to assess the content validity and comprehensibility of a measure of HIV-related stigma adapted for the general population of Chennai, South India, for use in Maharashtra State.
Methods: Following IRB approvals at both institutions, content validation was conducted of Zelaya and colleagues' HIV/AIDS Stigma Scale, a 24-item measure of stigma adapted from other scales for use in South India. The items for these analyses were presented in English, the language of instruction at the Indian institution. The content validation panel included 12 HIV content experts (faculty in India). Each item was rated individually for relevance to the construct HIV-related stigma, clarity and cultural appropriateness; the set of 24 items together was rated for completeness, redundancy, and appropriateness as a measure of HIV/AIDS-related stigma for the general population. Individual cognitive interviews were conducted with 39 nursing undergraduate students recruited from the Indian institution to ascertain comprehensibility of the item wording and to elicit suggested revisions to improve clarity and understandability.
Findings: The Content Validity Index was extremely high (> .95) for all items on relevance, clarity and cultural appropriateness; the Scale received the highest possible rating for completeness and appropriateness as a stigma measure. However, cognitive interviews revealed 6 items that were frequently misunderstood and required slight revisions to clarify their meaning. For example, in the item, "People with HIV are promiscuous" the word "promiscuous" was not understood by several respondents; the team decided to add "(meaning they have multiple sex partners)" to clarify the item's meaning.
Interpretation: Conducting content validation with experts and cognitive interviews with potential participants provided validation for the use of this measure with the population in Maharashtra. Next, items will be translated into Marathi using a committee approach and another set of cognitive interviews will be conducted with a Marathi-speaking sample. Assessing content validity and comprehensibility of an instrument are essential first steps to ensure valid measurement of any construct of interest to researchers in any setting. These steps lay the foundation for psychometric evaluation with a larger sample to strengthen evidence of the measure's usefulness in the particular setting. Small-scale studies such as this can also serve as exemplar studies in which faculty teaching research can engage their students as a learning exercise.
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Assessing the feasibility and value of a pilot project using mobile applications and mobile money to enhance a maternal health conditional cash transfer (CCT) program in Nigeria leading to the development of a costed business model for scale up

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