

## The Global Health 'Interactive Curricula Experience (iCE) Platform & App'

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**Program/Project Purpose:** Content: The Global Health module in the "interactive Curricula Experience (iCE) Platform & App" is an innovative technology that is timely and important for medical educators. It is a content management system that facilitates the organization and delivery of Jefferson-developed content for faculty. The iCE Platform & App provides a mechanism to rapidly create new learning objects/course content that can be accessed, used as is, or duplicated and modified by instructors for use in different courses. The courseware is published and then made available to the students via iPad, as well as on laptop and desktop computers. In conjunction with iPad integration, the iCE Platform & App enables migration to new academic models with engaging content that encourages exploration. Program period: on-going Why: The global health iCE Platform & App provides a distribution mechanism for Global Health content that can be woven into any course at Jefferson. Aim: To facilitate inter-institutional learning across Schools and Learning Centers, encourage exploration and innovation, meet student expectations and provide the most up-to-date information on the broad field of global health.

**Structure/Method/Design:** Program Goals, Outcomes: To develop and maintain a courseware platform utilizing multiple methodologies of learning that enable faculty and students to explore. Participants: The Global Health modules in The iCE Platform & APP were developed by Jefferson's Global Health Interdisciplinary Committee, an inter-academic committee of instructors and students focused on global health. A volunteer team from GHIC produced the initial platform. Sustainability: Faculty self select training from four progressive segments, depending on their technical agility. The GHIC modules are integral to the institution-wide database available to all faculties.

**Outcomes & Evaluation:** To date: Six key modules were initially identified and built utilizing existing curricula, up-to-date evidence based research, and multiple methodologies to draw attention to key issues, terminology and information; these include: "watch and learn" animation, hot spots, meters, timelines, decision trees. M & E: Utilization is continuously monitored. Periodic quantitative and qualitative evaluations with instructors and students are planned.

**Going Forward:** Challenges? The ongoing challenge is the continuous update of information. Faculty monitor websites and review relevant articles, reports, conferences, webinars and post them to iCE. Future program activities: The iCE Platform & App is developed to fluidly adapt and incorporate the newest information, crises, global summits and events.

**Funding:** Funding for the development of the iCE Platform & App was provided by internal Information Technology and Academic departments at Thomas Jefferson University.

Abstract #: 02ITIS001

## What factors are associated with compliance of integrated management of childhood illness guidelines in Egypt? An analysis using the 2004 egypt service provision assessment survey

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**Background:** 6.6 million children under the age of five die annually from preventable diseases. The United Nations Children's Fund and WHO developed the Integrated Management of Childhood Illness (IMCI) strategy in 1992 to reduce mortality and morbidity largely due to preventable diseases. This study explores whether provider, facility, region, child, and caregiver characteristics are associated with compliance with IMCI clinical guidelines in Egypt to ultimately identify priority program and project area improvements.

**Methods:** The study uses child health service data from the 2004 Egypt Service Provision Assessment Survey (ESPA). The ESPA collects data about health facility service delivery, compliance with standards of care, and client and provider service delivery satisfaction. A nationally representative sample of 659 health facilities were surveyed, of which 479 provided child health services. The child health module consists of facility, provider, and caregiver surveys. The sample consists of 2,071 child observations (1,164 were male). Two multivariate regression models were developed to identify statistically significant predictors of observed care.

**Findings:** Full compliance was low. About 70% of physicians checked for fever, 36.3% weighed the child, and 17.6% checked for anemia (childhood anemia is a major public health concern in Egypt). In only 3% of child visits were caregivers asked about three key danger signs and three or more key symptoms as per IMCI guidelines. Compliance was higher for providers who had received IMCI training and for younger children. After controlling for the patient's and provider's demographics and background and facility characteristics, we found that providers with IMCI training had a significantly greater odds of asking two or more danger signs adjusted odds ratio (AOR)=6.7 (95%CI 3.8, 12.9) if the patient had diarrhea, AOR=6.2 (95%CI 3.5-10.9) for cough/respiratory, and AOR=6 (95%CI 3.7, 9.7) for fever. No evidence was found that compliance is associated with child sex, caregiver attributes (except in cases of diarrhea), or region. About half of health care facilities lacked handwashing equipment in the exam room, reliable electricity, and generators.

**Interpretation:** Two ESPAs have been conducted in Egypt. This study recommends a new one to be carried out. Following the 2011 revolution, Egypt experienced a severe economic downturn. Anecdotal evidence points to the deterioration of quality of care in government facilities serving low-income populations. IMCI is a promising strategy to improve quality of care and thereby reduce childhood morbidity and mortality, but compliance is low. The findings illustrate the potential for further analysis of the factors that influence compliance. The small sample size for private facilities, however, limited analysis for comparison with government facilities. Missing data reduced sample size significantly for some regressions and prevented others. Research to understand provider practices and motivations is needed.

**Funding:** None.

Abstract #: 02ITIS002

## Assessing community health: Innovation in anthropometric tool for measuring height and length

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**Background:** Anthropometric measurements, including height, are routinely needed for health research worldwide. Current best practices are to use a measuring board to obtain length and height