

underserved in Tijuana's Zona Norte in a respectful environment where students, health professionals, patients, and community members from the border region learn from one another. The HFIT clinic trains future clinicians about global health and health care for the underserved and at the same time brings essential clinical services to a large number of vulnerable individuals living in our border region. In an effort to improve patient care, data collection, and outcome management, the HFIT provider community began utilizing an electronic medical record (EMR) developed by NotesFirst. NotesFirst has developed an EHR platform specifically in support of doctors and healthcare providers in lower-middle income regions. This technology has specific application both for electronic patient documentation at the point-of-care, and also in settings where the patient population is in flux, such as following a public health emergency, natural disaster, or political turmoil.

## 499

### FIVE YEAR MORTALITY AMONG CHILDREN AGED 0 TO 14 YEARS IN UNIVERSITY COLLEGE HOSPITAL, SOUTHWEST NIGERIA

**Temidayo A. Fawole**

*University College Hospital, Ibadan, Nigeria*

Childhood mortality statistics is a crucial health index of a population, a reflection of the health system and health seeking behaviour of the population. Causes of childhood mortality are usually from preventable diseases, especially in low and middle-income countries like Nigeria. It understanding will enhance formulation and implementation of strategic policies to reduce childhood mortality. This study seeks to determine the causes of mortality among children aged 0 to 14 years admitted in University College Hospital, Southwest Nigeria from January 2012 to December 2016. It was a cross-sectional trend analysis of secondary data analysis of mortality statistics of children aged 0 to 14 years admitted in University College Hospital, Ibadan from January 2012 to December 2016 using extracted data from the department of Medical Records. The health data was extracted from the hospital's statistic register and patients case note. Annual number of children aged 0 to 14 years admitted along with recorded deaths during the five years period were extracted from the statistic register. Mortality rates was calculated for the five years. Cause of deaths were also extracted from the register and socio-demographics of the patients and parents were extracted from the patients case notes. The median age of participants was  $2.55 \pm 0.0$  years, with 56.7% being under-1 year. There was male preponderance of 55.1% with the majority being of Yoruba tribe (88.2%) and 80.9% living in urban areas. Mortality was highest among the under-1 with 60.4%, 66.0%, 57.6%, 59.6% and 64.6% for years 2012 through 2016. The overall mortality rate was highest in 2012 (12.1%) and lowest in 2015 (6.9%). Overall causes of childhood mortality show congenital diseases 41.4%, infectious diseases 29%, non-infectious diseases 17.4% and other causes of deaths 12.2%. Other causes of mortality include malnutrition, eye diseases, heart diseases, gun shot and kerosene ingestion. The major cause of childhood mortality in this study was congenital diseases, followed by infectious diseases. Sepsis, respiratory diseases and malaria rank highest among the infectious group for the five years.

## 500

### COST-EFFECTIVENESS OF PODOCONIOSIS LYMPHOEDEMA TREATMENT IN NORTHERN ETHIOPIA: RESULTS FROM THE GOLBET TRIAL

**Annabelle Clarke**<sup>1</sup>, Natalia Hounsborne<sup>1</sup>, Meseret Molla<sup>2</sup>, Henok Negussie<sup>1</sup>, Moses Ngari<sup>3</sup>, James A. Berkley<sup>3</sup>, Esther Kivaya<sup>3</sup>, Tsige Amberbir<sup>4</sup>, Fikre Enquoselassie<sup>3</sup>, Gail Davey<sup>1</sup>

<sup>1</sup>Brighton and Sussex Medical School, Brighton, United Kingdom, <sup>2</sup>Centre for Environment and Development Studies, Addis Ababa University, Addis Ababa, Ethiopia, <sup>3</sup>KEMRI/Wellcome Trust Research Programme, Kilifi, Kenya, <sup>4</sup>International Orthodox Christian Charities Podoconiosis Project,

*Debre Markos, Ethiopia, <sup>5</sup>School of Public Health, Addis Ababa University, Addis Ababa, Ethiopia*

Podoconiosis is a non-filarial geochemical lymphoedema that occurs in the tropical volcanic highlands and causes life-long disability and reduced labour productivity among subsistence farmers. We conducted a pragmatic, randomised controlled trial of a hygiene and foot-care intervention for people with podoconiosis in the East Gojjam zone, northern Ethiopia. Participants were allocated to the immediate intervention group or the delayed intervention group (control). The intervention included training in foot hygiene, skin care, bandaging, exercises, and use of socks and shoes, and was supported by lay community assistants. Cost-effectiveness analysis was conducted using the cost of productivity loss due to acute dermatolymphangioadenitis (ADLA), a complication characterised by fever, rigors, and a rapid increase in pain and swelling of the leg. The health outcome in the cost-effectiveness analysis was quality of life measured using the Dermatology Life Quality Index II (DLQI). The cost of the foot hygiene and lymphoedema management kit was 550 ETB (\$66) per person per year. The cost of delivery of the intervention, including transportation, storage, training of lay community assistants and administering the intervention was 1355 ETB (\$163) per person. Participants who received the intervention spent on average 42 (SD=30) days off economic activity due to ADLA, resulting in a productivity loss of 1704 ETB (SD=1232). Participants from the control group lost on average 55 (SD=31) days per year due to ADLA, costing 2237 ETB (SD=1253). Dermatological quality of life measured using DLQI was higher (scores were lower) in the intervention group (9.35, SD=4.23) compared to the control group (11.3, SD=3.7). Subgroup analyses demonstrated that participants with a monthly family income <1000 ETB (\$119) had lower productivity loss and higher dermatological quality of life as a result of the intervention, compared to participants with an income >1000 ETB. Results of our analyses suggest that the proposed lymphoedema management strategy is more effective and less costly for people from the poorest families.

## 501

### GUINEA-WORM DISEASE. A SYSTEMATIC REVIEW OF CASE REPORTS ABOUT THE FIRST NEGLECTED TROPICAL DISEASE TO BE ERADICATED

**Diego Abelardo Álvarez Hernández**<sup>1</sup>, Rodolfo García Díaz Arana<sup>2</sup>, Alberto Manuel González Chávez<sup>3</sup>, Alejandro Acuña Macouzet<sup>2</sup>, Rosalino Vázquez López<sup>2</sup>, Ana María Fernández Presas<sup>4</sup>

<sup>1</sup>Fundación Carlos Slim, Mexico City, Mexico, <sup>2</sup>Universidad Anáhuac México Campus Norte, Mexico State, Mexico, <sup>3</sup>Hospital Español de México, Mexico City, Mexico, <sup>4</sup>Universidad Nacional Autónoma de México, Mexico City, Mexico

Guinea-worm disease is a parasitic disease caused by *Dracunculus medinensis*. It affects people living in rural and isolated communities who depend mainly on open surface water sources for drinking water. Although its mortality is low, morbidity is considerably high and may cause huge disabilities which are devastating. Diagnosis is clinically performed, and no specific treatment nor vaccines are available. The objective of our review was to describe the epidemiology of Guinea-worm disease published cases. A systematic review was conducted following the "PRISMA" guideline. PubMed database was searched using the search terms "*Dracunculiasis*" or "*Guinea-worm disease*" and limited to case reports published in English or Spanish, but without time frame. Full text articles were assessed for relevance and data extraction was performed as an iterative process. During the initial search 26 articles were obtained, from which 19, containing 25 cases were included. Females were more affected than males (13 vs 12) and the median age of presentation was of 25 years (+/-SD 16.69). The 67% of the patients came from Africa and Nigeria was the country which reported the most (36%). Pain (60%), swelling (36%) and fever (16%) were the most common initial clinical manifestations, and the presence of an ulcer containing the Guinea-