

**Type: Invited Presentation**

Final Abstract Number: 09.004

*Session: Childhood and Adult Pneumonia in the Era of Conjugate Vaccines**Date: Thursday, April 3, 2014**Time: 15:45-17:45**Room: Auditorium 2***Community-acquired pneumonia immunization trial in adults (CAPiTA)**

M. Bonten

*University of Utrecht, Utrecht, Netherlands*

Pneumococcal disease, including pneumonia, is a major global public health problem, and older people are at greater risk, particularly for severe disease and complications. Conjugate vaccines have shown efficacy against invasive pneumococcal disease (IPD) and otitis media in children, but have not been evaluated healthy elderly. The CAPiTA study was designed to demonstrate the efficacy of 13-valent pneumococcal conjugate vaccine (13vPnC) in prevention of a first episode of vaccine-type pneumococcal community-acquired pneumonia (CAP) (primary objective). The secondary objectives were to demonstrate efficacy in prevention of a first episode of nonbacteremic/noninvasive vaccine-type pneumococcal CAP and of vaccine-type invasive IPD. This was a randomized, double-blind clinical trial in 84,496 participants 65 and older in the Netherlands. Key eligibility criteria were no previous pneumococcal vaccination and immune competence. Participants were randomized 1:1 to receive 13vPnC or placebo. They were enrolled at community-based sites and home visits, and surveillance for CAP and IPD was conducted at hospitals in the areas of enrollment. A serotype-specific urinary antigen detection assay was used to identify episodes of vaccine-type CAP. Safety was also evaluated. The study started in September 2008, and reached the protocol defined 130 case accrual numbers of first episode of Vaccine Type CAP at the end of August 2013. The primary and secondary endpoints of this study will be presented. At the time abstract submission, the data were not yet available.

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**Type: Invited Presentation**

Final Abstract Number: 10.001

*Session: Infectious Diseases in Refugees and Migrants**Date: Thursday, April 3, 2014**Time: 15:45-17:45**Room: Room 1.40***Infectious diseases in refugees coming from Syria and Iraq to Lebanon**

I. Beldjebel

*St. Charles Foucauld Health Centre, St. Elisabeth University, Beirut, Lebanon*

During the last 3 years, roughly 600.000 Syrian refugees and 300.000 Iraqi refugees have been registered in Lebanon, and 400.000 and 250.000, respectively in Turkey as reported by United

Nations High Commissioner for Refugees (UNHCR). Here we report spectrum of infectious diseases (IDs) observed among Iraqi and Syrian refugees in SEU refugee camp. UNHCR camp in Beirut serves for 2 generations of refugees since 1990 and St. Charles Foucauld Health Centre treats patients in this camp, with 30–50 cases per day, both adults and children. In addition, mobile clinic operates to those families living in Beirut suburbs or outside the camp, with average of 8,5 visits daily. The prevalence of different non-communicable and infectious diseases was assessed in St. Charles Foucauld Health Centre from 2000–2013. Altogether, 28.343 patients, both refugees and migrants, have been reported in 2009–2013. More than 92% of them were Iraqi and Syrian asylum seekers. Among adults, hypertension, diabetes and coronary and/or vascular cerebral disease were predominant. IDs in adult represented only 28,5%, majority of them were respiratory tract infections (RTI), followed by skin and soft tissue infections (SSTI). Among children, the situation was more difficult – up to 90% of all paediatric patients presented with ID. Of these, 21,2% had gastrointestinal infections and 19,1% had SSTI (streptococcal, scabies, lice and other). Sporadic cases of measles were seen in 20012/2013. War conflicts in Middle East represent a major health issue in neighbouring countries, especially in Lebanon, Jordan and Turkey with respect to Syria war. Infrastructure of these countries is not prepared to serve for increasing number of IDs patients despite the efforts of UNHCR and non-governmental institutions.

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**Type: Invited Presentation**

Final Abstract Number: 10.002

*Session: Infectious Diseases in Refugees and Migrants**Date: Thursday, April 3, 2014**Time: 15:45-17:45**Room: Room 1.40***Spectrum of infectious diseases among internally displaced refugees in South Sudan and north Kenya**

M. Bartkovjak\*, V. Krčmery

*Mary Immaculate Clinic, St. Elisabeth University (SEU) Tropical Program Yirok County, Mapuordit, South Sudan*

Within last 25 years (1980–2005) about 1.1 million people in South Sudan has been either internally displaced (estimated 200 thousand) within different provinces in South Sudan or crossed the border to Uganda (200 000) and Kenya (360 000) or Ethiopia (140 000) or Democratic Republic of Congo (DRC; 110 000 estimated). The aim of this communication is to compare spectrum of infectious diseases (IDs) among internally displaced Sudanese people within Bahr el Ghazal in South versus to north Kenya. Spectrum and outcomes of IDs in Mary Immaculate SEU Tropic Hospital in Mapuordit, serving for about 12 000 internally displaced Sudanese patients, were compared with refugees crossing borders to north Kenya and being treated in United Nations High Commissioner for Refugees (UNHCR) Hospital and Médecins Sans Frontières (MSF) facilities in Kakuma, north Kenya (60–80 000 refugees). Most frequent ID among admissions of internally displaced in Mapuordit was malaria (9–48% admissions depending on season), followed by meningitis (2–10%), neonatal sepsis (5–15%), severe diarrhoea (2–5%), malnutrition (5–20%) with sepsis, leprosy (1–5%). Contrary, in Kakuma (north Kenya) malaria was less common (5–30%) as well as malnutrition (1–5%) complicated with diarrhoea, which is due

to better water supply, sanitation and hygiene provided by UNHCR as well as food supplies donated by World Food Programme. Internally displaced population can be even much severely threatened by IDs than refugees to third countries, because they do not receive humanitarian or health assistance, or food supplies.

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#### Type: Invited Presentation

Final Abstract Number: 10.003

Session: *Infectious Diseases in Refugees and Migrants*

Date: Thursday, April 3, 2014

Time: 15:45-17:45

Room: Room 1.40

#### Infectious diseases in asylum seekers crossing Schengen borders coming to European Union



V. Krcmery<sup>1,\*</sup>, N. Kulkova<sup>2</sup>

<sup>1</sup> St. Elizabeth University, Bratislava, Slovakia

<sup>2</sup> Trnava University in Trnava; School of Health Care and Social Work, Trnava, Slovakia

Yearly, approximately 200.000 illegal migrants cross Schengen border (SB) to EU and seek for asylum. Of them, 120.000 are coming from North and Sub-Saharan Africa, crossing Mediterranean Sea with substantial risk and direct travel-related morbidity. The aim of this communication is an overview of infectious diseases (IDs) reported by asylum centres among seekers crossing Slovakian-Ukraine border. Records of 12.435 illegal migrants and asylum seekers arriving asylum centres and refugee camps in East Slovakia, are analysed in period 2009-2013 and compared to similar centres and studies from Poland, Italy and Greece. Among 12.435 cases, 7.215 (58%) were children accompanied by 5.200 adults, coming from Middle East, central and South Asia (Iraq, Syria, Afghanistan, India, Sri Lanka, Bangladesh, Uzbekistan, Turkmenistan, Kazakhstan, Moldova, Ukraine) and North Africa (Eritrea, Ethiopia, Somalia, Sudan, etc.) Commonest acute IDs were upper respiratory infections (URTI)- 32% (pneumonia 12%), gastroenteritis - 7%, skin and soft tissue infections - (SSTI) 26% (impetigo, scabies, other ectoparasites). Intestinal parasites were found among 15% cases. Interestingly, tuberculosis (TB) was detected only in 118 patients (less than 1%), however 51% of TB cases were due to multiresistant (MDR) strains. Sporadic cases of morbili, diphtheria and pertussis were noticed (less than 1%) during the last 4 years. Increasing number of migrants/asylum seekers has been observed during the last 10 years, those crossing SB from Ukraine to Slovakia. However, only few severe IDs, without single death were observed in Slovakia. Also, TB was very infrequent; however most of the TB cases were MDR.

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Session: *Surveillance of Zoonotic Diseases*

Date: Thursday, April 3, 2014

Time: 15:45-17:45

Room: Room 1.60

#### Innovations in surveillance of zoonotic disease



L. Madoff

ProMED-mail & ISID, Boston, MA, USA

Over the past fifteen years, Internet technology has significantly changed the landscape of public health surveillance and epidemic intelligence gathering. Disease and outbreak data is disseminated not only through formal online announcements by government agencies, but also through informal channels such as social networking sites, blogs, chat rooms, Web searches, local news media and crowdsourcing platforms. These data streams have been credited with decreasing the time between an outbreak and formal recognition of an outbreak, allowing for an expedited response to the public health threat. Collectively, these online sources create an image of global public health that is fundamentally different from the one produced by traditional public health surveillance infrastructure. Importantly these new tools now represent an emerging platform for zoonotic disease surveillance. This capacity has been illustrated most recently in China, where a hospital employee uploaded an image of an H7N9 patient's medical record to Sina Weibo – a popular Chinese social network similar to Twitter. The post was promptly deleted, but appears to have accelerated government acknowledgement of four new cases. The emergence of H7N9 also represents an opportunity to promote the One Health narrative. Engagement of the Twitter community through the use of the #OneHealth hashtag during the most intense period of the outbreak would have been a highly visible way to raise awareness and potentially provide real-time surveillance information. Dr. Brownstein will discuss the current capabilities and future directions in the use of the non-traditional data sources for the purposes of public health surveillance and rapid detection of emerging zoonotic infectious diseases.

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#### Type: Invited Presentation

Final Abstract Number: 11.002

Session: *Surveillance of Zoonotic Diseases*

Date: Thursday, April 3, 2014

Time: 15:45-17:45

Room: Room 1.60

#### Participatory surveillance of zoonotic disease: Putting the public back in public health



E. Karimuribo

Sokoine University of Agriculture, Morogoro, Tanzania, United Republic of

The Southern African Centre for Disease Surveillance (SACIDS) in collaboration with the East African Integrated Disease Surveillance Network (EAIDSNet) has designed and piloted One Health (OH) disease surveillance system in East and Southern Africa. Initially,