

OA-240 **DETERMINING WHETHER MASS VACCINATION CAMPAIGNS WITH FRACTIONAL-DOSE PCV10 (PNEUMOSIL) COULD ACCELERATE GROUP PROTECTION AGAINST PNEUMOCOCCAL TRANSMISSION IN SUB-SAHARAN AFRICA**

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**Background** In settings with low routine coverage of pneumococcal conjugate vaccines (PCVs), mass campaigns targeting multi-age cohorts (MAC) might accelerate herd protection but would be costly. Mass campaigns using fractional dose PCV would decrease cost and increase access, but their effect on pneumococcal carriage is unknown.

**Methods** We conducted a cluster-randomized trial in Niger to evaluate the effect of mass campaigns on pneumococcal carriage. 63 villages were randomized in a 3:3:1 ratio to receive mass campaigns targeting children aged 1–9 years with a single full dose of Pneumasil, a single 1/5 fractional dose, or no campaign. We conducted surveys among 2268 households before and 6 months after vaccination. Data were collected about household composition and sociodemographics; a nasopharyngeal swab (NPS) was collected from a child aged 1–9 years. NPS were collected in STGG media and stored at -80°C within 8 hours of collection. Culture and Quellung reactions were performed in Kilifi, Kenya, in accordance with WHO-recommended procedures.

**Results** Pre-vaccination results are currently available; post-vaccination results will be available in September 2023. In the baseline survey, 2223 children were included, with median age of 4 years (IQR 2–6). Median household size was 7 (IQR 5–10), and a median of 4 people (IQR 2–5) slept in the same room as the child. 41% of children received 3 recorded doses of PCV in EPI, which increased to 80% when considering self-report. Baseline pneumococcal carriage prevalence was 87%, and the prevalence of vaccine-type (VT) carriage was 17%. Serotypes 19A, 19F, 23F, and 6A accounted for 74% of VT carriage. The most common non-VT serotypes isolated were 34, 11A, 23B and 16F.

**Conclusion** Eight years after PCV13 introduction, residual VT carriage was 17%, which is lower than expected. The effect of MAC mass campaigns on VT carriage will be known in September 2023.

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OA-252 **EAST AND SOUTHERN AFRICAN CONSORTIUM FOR OUTBREAK EPIDEMIOLOGY TRAINING (ENTRANT)**

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**Background** East and Southern African countries are susceptible to disease outbreaks, and vulnerable to public health emergencies due to constrained health systems. We aim to promote

the development of a critical mass of epidemiologists to work with National Public Health Institutes and Ministries of Health to strengthen response capacity.

**Methods** The East and Southern Africa Consortium for Outbreak Epidemiology Training (ENTRANT) programme was established with funding from EDCTP and Africa CDC, to provide epidemiological training and mentorship to early- to mid-career public health professionals working in the region. ENTRANT is coordinated by a consortium of institutional partners relevant to outbreak response in the region, and supported by an independent Advisory Committee comprising experts in capacity strengthening in sub-Saharan Africa. A competitive application process was implemented to identify high-calibre public health professionals for entry into the programme. Fellows undertake MSc Epidemiology at London School of Hygiene and Tropical Medicine (LSHTM) followed by further focussed short course multidisciplinary training on the emergence, spread and response to pandemics. Fellows receive mentorship from experienced epidemiologists in their home country, and take part in regular transferable skills training and networking activities.

**Results** From a total of 324 applications, 15 public health professionals (eight female, seven male) from Botswana, Ethiopia, Kenya, Tanzania, Uganda and Zambia have been awarded Fellowships. To date, six have completed their MSc Epidemiology training, with the remaining Fellows due to complete in October 2023. Fellows who have completed formal training have gone on to work for Ministries of Health and public health research institutions. Fellows at all stages of the programme have formed a strong network through regular meetings and networking events.

**Conclusion** The ENTRANT programme has been successfully established. Further funding will be sought to further expand the programme and promote a long-term mutually-supporting network of outbreak and pandemic control practitioners.

OA-270 **SKIN DISEASES AND THEIR FREQUENCY PATTERNS IN SKIN CAMPS IN PEP4LEP IMPLEMENTING DISTRICTS IN TANZANIA, PRELIMINARY RESULTS**

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**Background** Skin diseases are common human illnesses globally. Improved diagnostic skills of health staff working in underserved communities may uncover a wide range of diseases, including skin Neglected Tropical Diseases (NTDs). Integrated skin screening is an approach used in PEP4LEP, a research project in Ethiopia, Mozambique, and Tanzania that is aimed at identifying the most effective and feasible method for screening people at risk of developing leprosy and administering chemoprophylaxis. We present preliminary results on the skin diseases and their frequency patterns as found during integrated skin screening in communities in three Tanzanian districts.

**Methods** Data on the skin diseases identified and the frequency of diagnosis were collected in the skin camps that