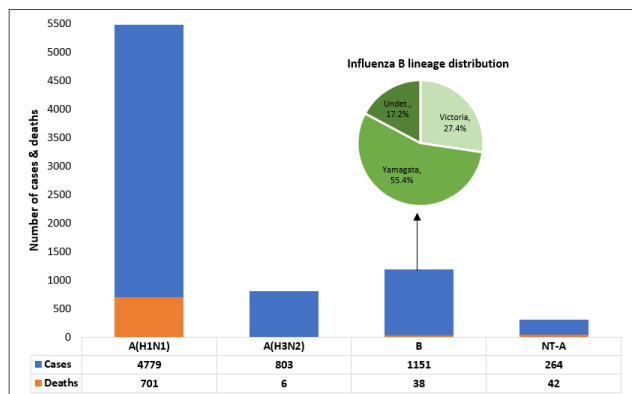


of deaths attributed to A/H1N1. FluNet's influenza B data show Yamagata (55%) and Victoria (27%) co-circulation (Figure 1).

Conclusion. The 2018–2019 seasonal co-circulation of influenza A and B viruses in Mexico showed significant nation-wide morbi-mortality burden, with A/H1N1 and B/Yamagata dominance. Stronger B lineage determination is needed in Mexico to understand associated burden and prevent vaccine mismatch, considering the trivalent vaccine does not contain both B strains. Given the circulation of both influenza B lineages and the recommendation of the WHO, Mexico could enhance quadrivalent vaccine use in coming seasons to optimize protection.

Figure 1. 2018-2019 influenza season cases, deaths, and viral distribution of confirmed cases in Mexico



Note: The denominators are all lab-confirmed cases and deaths that are sent for typing, until epidemiological week 17. NT-A: Non-typeable Influenza A.

Figure 2. 2018-2019 influenza season cases epidemic curve and positivity rate of confirmed influenza among ILI/SARI in Mexico (until epidemiological week 17)

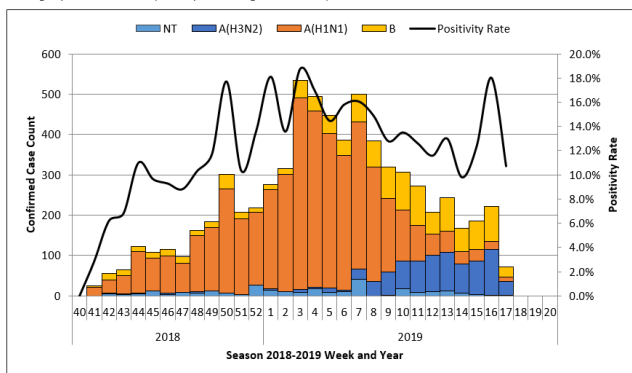


Figure 3. 2018-2019 influenza season case positivity rate of lab-confirmed influenza among ILI/SARI, per state in Mexico



Disclosures. All authors: No reported disclosures.

1668. No Impact of Nutritional Status on Oral Polio Vaccine shedding after Vaccination of Under 5 Children in Rural Mexico

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Session: 164. Stepping off your Doorstep - Global Health
Friday, October 4, 2019: 12:15 PM

Background. As wild poliovirus is nearing global eradication and countries switch from Oral Polio Vaccine (OPV) to Inactivated Polio Vaccine (IPV), preventing circulating vaccine-derived poliovirus is a top priority. However, the circulation of OPV serotypes remains a concern in undervaccinated communities. We sought to examine the relationship between pediatric nutritional status and OPV shedding based on length-for-age categorizations. Mexico provides a natural environment to study these patterns as it provides routine IPV immunization and bi-annual OPV campaigns.

Methods. We enrolled 466 households with children eligible for OPV before the February 2015 national health week from 3 semi-rural Indigenous communities near Orizaba, Mexico. In each community, a different proportion of eligible children received OPV (10%, 30%, 70%), with a total of 155 vaccinated children. OPV shedding was measured by RT-qPCR detection of OPV in samples collected serially over 10 weeks. Anthropometric measurements were collected and compared with the WHO Multicenter Growth Reference Study growth curves to assign stunting. Associations between stunting, OPV shedding, and shedding duration were tested by Fisher exact test and Wilcoxon-Mann-Whitney Test ($\alpha = 0.05$).

Results. Samples of fecal OPV isolates were collected over time and analyzed from 148 vaccinees. 25 (17%) of the vaccinees were stunted. There was no relationship between pediatric stunting and likelihood of ever shedding any serotype of OPV ($P = 0.82$). The mean duration of OPV shedding by stunted and non-stunted children differed, but not significantly (10.9 days vs. 9.3 days, respectively, $P = 0.32$). We did not find any statistically significant differences between stunting status and shedding of any individual OPV serotype.

Conclusion. Further understanding of factors related to OPV shedding is necessary to approach efficient worldwide poliovirus control. We found no relationship between stunting status and both OPV shedding and shedding duration post-vaccination, suggesting that nutritional status does not play a role in OPV shedding. The ongoing analysis includes longitudinal analysis of OPV shedding patterns by nutritional status, and the impact of stunting on viral load and reversion of OPV to vaccine-associated paralytic polio mutants.

Disclosures. All authors: No reported disclosures.

1669. Trends in Authorship for Infectious Disease Research Conducted in Low-Income Countries

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Background. Research capacity in low-income countries (LICs) plays an important role in strengthening national healthcare systems and addressing local health priorities. Research in infectious diseases is especially important as they comprise five of the top 10 causes of death in LICs. While academic collaborations between high-income countries (HICs) and LICs offer many benefits, they also risk structural and professional imbalances. This study explores research capacity as a function of first or last authorship and funding for research conducted in LICs that is published in high-impact infectious disease journals.

Methods. A literature search using the abstract database Scopus was completed for original research conducted within LICs or using samples collected from LIC subjects published between 1998 – 2017 in *Clinical Infectious Diseases*, *Journal of Infectious Diseases*, and *Open Forum Infectious Diseases*. Primary outcomes included the number of LIC first and last authors compared with HIC authors over time. Secondary outcomes included the geographic distribution of research and the proportion of research funded by LICs.

Results. A total of 1380 articles were identified of which 20% had LIC first authors and 21% had first authors with dual LIC/HIC affiliations. For last authors, 13% were affiliated with a LIC and 15% had dual LIC/HIC affiliation. HIC researchers compiled the majority of first and last authors regardless of geography (Figure 1). The number of studies conducted in LICs increased over the 20-year timeframe (Figure 2) but is attributed to an increase in articles with HIC authors. The number of LIC authors remained unchanged resulting in a decreasing proportion of LIC authors. Only 4% of articles received funding from a LIC; however, 79% of these studies were authored by LIC researchers vs. 39% of studies funded by HIC sources.

Conclusion. There is a growing appreciation for international HIC/LIC research collaborations with the objective to reduce the burden of infectious diseases that disproportionately affect low-income settings. However, with this increased attention comes the responsibility to improve LIC research capacity. This includes promoting LIC researchers via authorship and supporting sustainability with funding that highlights LIC priorities.

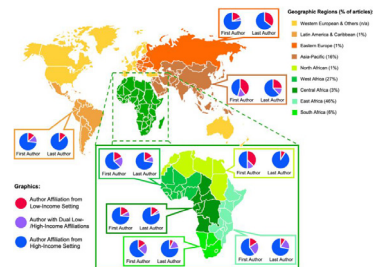


Figure 4. Geographic distribution of LIC research authorship. Regions colored by United Nations Regional Groups. There is higher proportion of the continent of Africa due to the high proportion of research conducted in these countries.