Résumés des communications

Presentation abstracts

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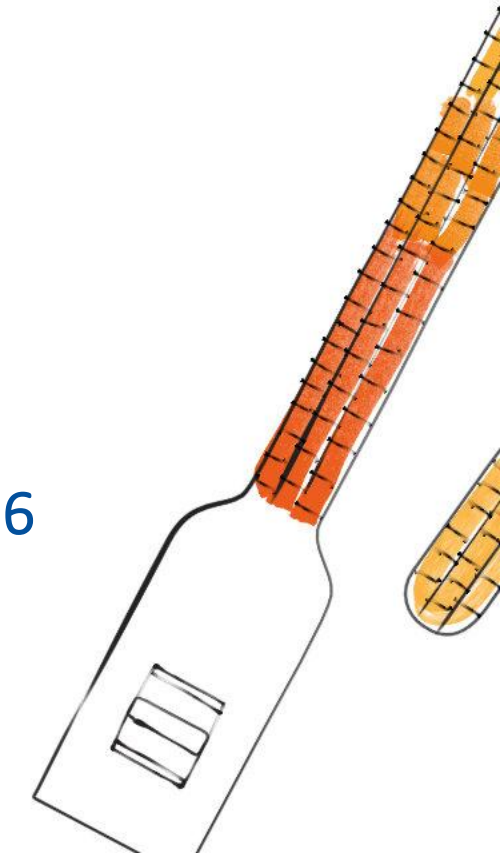

Session: Tuberculosis in children

Moderators: Emmanuel Baron, former Director of Epicentre & Cathy Hewison, MSF France

- Muhammad Bashir Abdullahi
- Juno Min
- Danica Galvan & Cecilia Akatukwasa

Finding tuberculosis in children with severe acute malnutrition: a multi-country observational study

Muhammad Bashir Abdullahi, MSF Nigeria

Background

Diagnosing tuberculosis (TB) in children is challenging, especially in children with severe acute malnutrition (SAM), as differentiating TB from other comorbidities is particularly complex. Laboratory results are usually negative and sputum samples difficult to obtain. Urine-based point-of-care Determine TB-LAM is WHO-recommended in children living with HIV, which along with the new Fuji-LAM, may be useful in children with SAM (also immunocompromised). WHO has recommended new treatment decision algorithms (TDAs) for TB in children, with and without Xray, emphasizing clinical diagnosis. We assessed the diagnostic accuracy of these TDAs and of TB-LAM tests in children with SAM.

Methods

The prospective diagnostic TB ALGO PED study included children under 10 years with signs or symptoms of TB in five sub-Saharan Africa countries. The TDA in SAM nested study included children with SAM from Niger, Nigeria and South Sudan. The TB-LAM in SAM included HIV-negative children with SAM from these three countries and Uganda. Each child was classified as confirmed/unconfirmed TB or unlikely TB using a composite reference standard.

Results

Among 1068 children included in the TDAs in SAM study, median age was 1.3 years (IQR: 0.8-2.0), 98.5% were hospitalized, and 245 (22.9%) initiated TB treatment (72% based on clinical symptoms). The TDAs had a sensitivity of 84.5% (95%CI: 79.0–88.8) and specificity of 85.7% (95%CI: 83.2-87.9). Among the 990 HIV-negative children enrolled in the TB-LAM in SAM study, Determine TB-LAM had a sensitivity of 38.8% (95%CI: 32.3-45.7) and specificity of 63.8% (95%CI: 60.3–67) and FujiLAM had a sensitivity of 11.0% (95%CI: 5.9-22.5) and specificity of 96.5% (95%CI: 94.1-98.0).

Conclusion

The new WHO algorithms for TB showed high sensitivity and acceptable specificity in children with SAM. In HIV-negative children with SAM, Determine TB-LAM test had low specificity that do not support its use. FujiLAM showed high specificity and may have potential as a rule-in test.

WHO treatment decision algorithms are an accurate tool to diagnose TB in children with SAM. Determine TB-LAM in HIV-negative children with SAM is not recommended.

Evaluation of AI-based computer-aided detection for chest X-ray interpretation for TB diagnosis in children

Juno Min, MSF International

Background

The diagnosis of tuberculosis (TB) is difficult in children. Chest X-ray (CXR) plays a critical role to support TB diagnosis, but countries with the highest TB prevalence often have the lowest availability of expert CXR readers, such as radiologists. AI-based computer-aided detection (CAD) technology is endorsed by WHO for CXR interpretation for TB in adults, but is not currently recommended in children. Because the CXR appearance of TB is different in children compared to adults, current CAD models that have been trained on adult datasets may not perform as well in children.

Methods

This diagnostic study was nested in the TB ALGO PED study. The study cohort included 665 children under 10 years with symptoms of TB from study sites in Guinea, Niger, Nigeria and Uganda. All children had a frontal CXR which was analysed by CAD software trained and optimized for paediatric TB (qXR version 4.2.1, Qure.ai). The CAD results were compared to a reference standard of a consensus of three expert radiologist interpretations. To evaluate CAD performance, receiver operating characteristic (ROC) curves were generated and the area under the curve (AUC) was calculated overall and for each site.

Results

The AUC of CAD for the entire study cohort was 0.76 (95% CI: 0.72-0.81), with AUC above 0.80 generally considered clinically useful. The AUC for Guinea, Niger, Nigeria and Uganda were 0.68 (0.42-0.94), 0.74 (0.68-0.80), 0.80 (0.70-0.90) and 0.87 (0.81-0.94), respectively. CAD performed better in sites with better image quality (technical factors and format).

Conclusion

CAD shows fair performance for TB detection on CXR in children, compared to expert radiologist interpretation, and is not yet ready for clinical use. Results are promising and CAD models will continue to improve with increasing access to paediatric CXR datasets. With improvements, CAD could have a significant role to increase TB diagnosis in children.

CAD can support TB diagnosis but currently does not perform well enough for clinical use in children. Improvements to paediatric CAD models are needed to address the challenges of CXR interpretation for TB.

Shortening the path to cure: Insights from implementing a 4 Month TB regimen for children in Uganda and the Philippines

Danica Galvan, MSF Philippines; Cecilia Akatukwasa, Epicentre Uganda

Background

Recommended by the World Health Organization in 2022, a 4 month regimen is an alternative to the standard 6 month treatment for children with non severe, drug susceptible tuberculosis. Despite potential patient and programmatic benefits, implementation remains limited, with little evidence on eligibility, feasibility and acceptability, particularly in routine settings where diagnostic resources are constrained.

Methods

A prospective observational and mixed-methods multi-site study included children with pulmonary tuberculosis in Tondo, Philippines (<16 years) and Mbarara, Uganda (<10 years). Eligibility was assessed at initiation with 6 month follow-up. Feasibility and acceptability were assessed using focus groups and in-depth interviews with healthcare workers before and during implementation.

Results

Among 214 children in the Philippines (n=142, 66.4%) and Uganda (n=72, 33.6%), 73.8% were initially eligible for the 4 month regimen: 85.9% in the Philippines and 50.0% in Uganda. Reasons for 6 month treatment included hospitalization (11.7%), severe malnutrition (10.7%), and severe CXR findings (8.2%). CXR was available in all cases in the Philippines and 55.6% in Uganda. CXR reclassified 3.3% as severe. Seven children (4.4%) were extended from 4 to 6 months, all in the Philippines. In the two countries, the implementation of the 4-month TB treatment guidance was documented across primary and referral facilities at differing stages of national adoption. Feasibility was supported by clear eligibility criteria, training, and structured case-report tools, alongside CXR availability in the Philippines. Constraints included unequal X-ray access, staff turnover, and in Uganda, limited CXR availability. Initial concerns focused on safety, severity assessment, and effectiveness. Confidence increased with experience, observed outcomes, and regimen flexibility. Providers perceived benefits including reduced caregiver and health system burden, and improved adherence and child quality of life.

Conclusion

The 4 month regimen for drug-susceptible TB in children is feasible, with high eligibility in primary health care settings. Implementation without chest X-ray is achievable. Broader adoption will improve patient and program outcomes and optimize resource use.

The 4 month regimen for drug-susceptible TB in children is feasible, with high eligibility in primary health care settings. Findings support broader adoption.

Session: Hemorrhagic fevers

Moderators: Rebecca Grais, former Director of Research at Epicentre & Christopher Mambula, MSF France

- Laura Cooper
- Hugo Soubrier

Incidence of Lassa fever disease in hotspot communities of West Africa: insights from the Enable programme

Laura Cooper, Epicentre, France

Background

Lassa fever (LF), a haemorrhagic illness caused by Lassa virus, is endemic in West Africa and has pandemic potential. Due to the absence of a licensed vaccine, LF has been placed on the WHO priority pathogen list. However, the design of successful vaccine efficacy trials depends on reliable estimates of LF disease incidence, severity, risk groups.

Methods

We conducted two prospective household-based cohort studies in LF-endemic countries, (ENABLE 1.0 and 1.5) through the ENABLE research programme, following approximately 25 000 participants in eight sites across five countries. Participants were contacted every two weeks to identify suspected LF disease and referred for RT-PCR testing. Baseline household surveys assessed potential risk factors for LF disease and knowledge and attitudes towards LF disease and vaccination.

Results

ENABLE 1.0 estimated LF disease incidence at 1.27 (95% CI 0.88–1.84) per 1 000 person-years, compared with 5.67 (95% CI 3.68–8.73) per 1 000 person-years in ENABLE 1.5. ENABLE 1.5 used more active case finding, broader testing criteria, age-stratified sampling and community selection informed by historical surveillance data. These results suggest that LF disease remains rare but may be underdetected in hotspot communities. Children appeared to be at similar risk to adults, with cases observed in children under two years of age. Among 71 confirmed cases, the crude case fatality rate was 7%, and 52% tested positive for malaria by rapid diagnostic test. The within-household attack rate in households with an index case was 2% at 100 days, although it was not possible to distinguish person-to-person transmission from repeated rodent spillover. Consuming rodent meat was the only statistically significant household risk factor identified (aOR 4.5, p=0.01).

Conclusion

ENABLE provides evidence to inform future LF vaccine trial design. The results suggest that trials will require large sample sizes, but careful community selection and active surveillance may improve feasibility. Children should be included in vaccine development, and household prevention should focus on reducing rodent exposure.

The ENABLE programme found that Lassa fever disease remains relatively rare in West African hotspot communities, but incidence may be underestimated without active surveillance and broader testing. Findings suggest that future vaccine trials will need large sample sizes, include children, and focus prevention efforts on reducing rodent exposure, especially rodent meat consumption.

Heterogeneity and Determinants of Ebola Transmission: insights from the 10th DRC outbreak

Hugo Soubrier, Epicentre, France

The 10th Ebola outbreak in the DRC (2018–2020) was one of the deadliest on record — and one of the most disrupted, plagued by violence, mistrust, and incomplete contact tracing. This presentation digs into its reconstructed chains of transmissions to see what they tell us on our response.

The data tell a striking story: a small minority of cases — around 18% — were responsible for 80% of all infections. Yet this superspreading pattern held steady even during the most violent periods, suggesting the outbreak wasn't driven by biology gone wrong, but by our inability to reach and isolate cases in time. Isolation, contact follow-up, and ring vaccination all demonstrably cut transmission when they could be applied.

As a new Ebola outbreak emerges, the lesson is clear: the tools work. The challenge — now as then — is protecting the people and systems needed to deploy them under pressure.

Session: Emerging health challenges

Moderators: Claire rieux, MSF France & Klaudia Porten, Epicentre

- Caoimhe O'Regan
- Silvia De Sanjosé
- Delphine Sauvageot & Fara Temessadouno
- Jasper Kim Wagan

Real-World evidence on uptake and persistent use of long-acting injectable Cabotegravir (CAB-LA) offered as HIV prevention alternative in female sex work hotspots, Malawi

Caoimhe O'Regan, Epicentre, Malawi

Background

CAB-LA, the first long-acting injectable HIV pre-exposure prophylaxis (PrEP), may improve prevention by overcoming adherence challenges of daily oral PrEP. Real-world evidence remains limited. We evaluated uptake, persistence, and factors influencing CAB-LA use in female sex work hotspots in Malawi.

Methods

We conducted an 18-month observational mixed-methods study in Dedza and Neno districts, Malawi. Since January 2025, Médecins Sans Frontières, Malawi Ministry of Health, and female sex worker-led community organizations have provided CAB-LA alongside oral PrEP through mobile clinics in sex work hotspots, with CAB-LA initially limited to 300 initiations. We report findings from the first 14 months using routine data analyzed descriptively and through multistate modelling, complemented by qualitative interviews and group discussions with clinic clients and stakeholders.

Results

Among 1,393 clients offered PrEP, 742 (53%) initiated PrEP; 59% started CAB-LA and 41% oral PrEP. Notably, 70% preferred CAB-LA, but could not receive it immediately due to limited availability. Continued use was mainly with CAB-LA, while most oral PrEP users switched to CAB-LA or disengaged early. Discontinuation occurred mainly after second or third visit, largely due to loss-to-follow-up. Estimated oral PrEP use declined from 41.4% (95% CI 37.9–45.1) at initiation to 2.9% (1.4–5.9) at 12 months, versus 58.6% (55.2–62.3) to 32.0% (27.4–37.2) for CAB-LA. Overall, 48.6% (44.4–53.3) were lost to follow-up by 12 months. Mobility, stigma, violence associated with oral PrEP use, injection site pain, and lack of peer support were identified as barriers for uptake and persistence.

Conclusion

CAB-LA has potential to improve PrEP uptake and persistence and was preferred over oral PrEP in mobile outreach clinics. However, overall PrEP uptake was moderate with substantial and early loss to follow-up, highlighting the need for strengthening of counselling, peer support and community sensitization. Continuous CAB-LA supply for marginalized populations remains a priority.

This mixed-methods study generated evidence on uptake, preferences, and persistence of long-acting injectable CAB-LA and oral HIV-pre-exposure-prophylaxis provided in sex work hotspots through mobile clinics.

Novel screening and triage approach to detect cervical precancer with HPV extended genotyping and AI-automated visual evaluation (PAVE)

Silvia De Sanjosé – On behalf of the PAVE Consortium

Background

Cervical cancer remains a leading cause of death among women in low- and middle-income countries. Limited access to cervical screening demands accurate, scalable strategies to impact the target population effectively. The PAVE Consortium validated a cervical screening approach to detect precancer CIN3 or worse (CIN3+) in resource-limited settings with varying HIV prevalence.

Methods

Participants aged 25–49 were enrolled before April 2025 from clinical sites across Brazil, the Dominican Republic, El Salvador, Honduras, Cambodia, Malawi, Nigeria, Tanzania, and Eswatini (N= 50,450). Self-collected vaginal samples (FLOQSwab) were tested using a low-cost HPV extended genotyping assay (ScreenFire), providing results in four risk-based channels: HPV16, HPV18/45, HPV31/33/35/52/58, HPV39/51/56/59/68. HPV channels were analyzed hierarchically by carcinogenicity. All HPV-positive participants were referred for cervical imaging using a mobile colposcope (IRIS) and biopsy. An earlier AI algorithm was trained and validated to classify images into three categories of Automated Visual Evaluation (AVE): Normal, Indeterminate, and Severe. The algorithm is tested on IRIS images for external validation. Among HPV-positive women, we assessed the performance of HPV extended genotyping combined with AVE, to estimate absolute risk for confirmed CIN3+.

Results

HPV prevalence was 27% among HIV negative/unknown status and 36.1% among women living with HIV (WLHIV). HPV-negative women were reassured. Among HPV-positive participants with complete data (N=7,535), 6,113 were HIV-negative/unknown and 1,422 WLHIV. CIN3+ background risk was 5.9% in HIV-negative and 12.2% in WLHIV. HPV genotype and AVE classification independently predicted CIN3+ risk and improved when combined. Risk of CIN3+ ranged from 1.8% (HPV39/51/56/59/68-positive with Normal AVE) to 42.6% (HPV16-positive WLHIV with Severe AVE).

Conclusion

The PAVE study showed feasibility of HPV screening across diverse settings. The PAVE strategy provided remarkable CIN3+ risk stratification. The combination of HPV extended genotyping and AVE enables targeted management for HPV-positive women at greatest risk of precancer, regardless of HIV status.

This multi-country study confirmed that combining HPV genotyping with AI-aided visual evaluation is an accurate, low-cost solution to expand screening while directing limited resources to women most at risk.

Feasibility and acceptability of hydroxyurea-based treatment for children with Sickle Cell Disease in remote rural areas of Niger, 2024–2026

Delphine Sauvageot, Epicentre, France; Fara Temessadouno, Epicentre, Senegal

Background

Sickle cell disease (SCD), characterized by recurrent pain episodes and premature mortality, is highly prevalent in sub-Saharan Africa. Hydroxyurea (HU) reduces complications and improves survival, but its high cost limits access in many countries. In Niger, Médecins Sans Frontières (MSF) follow-up approximatively 3,000 SCD children in rural district hospitals, including 70 receiving HU through pilot programs. We assessed HU feasibility and acceptability in rural settings.

Methods

In 2025, 30 children from MSF Diffa program completed the PedsQL™v3.0 quality of life (QoL) questionnaire at HU initiation and after 6 and 12 months of treatment (study 1). QoL scores were calculated globally and across nine domains. In 2026, 49 semi-structured interviews were conducted with children on HU, parents, health professionals, and health authorities involved in the MSF programs in Madarounfa and Diffa (study 2). Data were analyzed using thematic content.

Results

In study 1, the overall QoL score increased from 67 [95% CI: 63–70] at initiation to 90 [95% CI: 87–92] after 12 months, with major improvement in the pain impact domain (+39 points, $p < 0.001$). In study 2, participants reported improved pain control, reduced healthcare utilization, and increased socialization. Traditional medicine use and community influence were identified as barriers to healthcare access, while HU-related infertility affected treatment acceptability. Awareness-raising among fathers helped mitigate this concern. Prolonged caregiver absence from home, transportation costs and difficulties related to the 500mg/kg drug formulation were identified as barriers to adherence. The reference medical team perceived itself efficient, but laboratory tests were associated with long waiting times.

Conclusion

HU treatment showed good feasibility and acceptability in rural Niger and was associated with substantial QoL improvement. Strengthening community awareness, improving pediatric drug formulation, increasing laboratory capacity, and decentralizing care could support future scale-up efforts.

HU improved QoL. Acceptability barriers included economic, traditional, and social issues. Drug formulation and laboratory capacity influenced feasibility. Scale-up can be envisaged with tailored actions.

Interim Healthcare-associated infections: a new tool for surveillance and alerts under development

Jasper Kim Wagan, MSF

Background

Healthcare-associated infections (HAIs) are a recurring problem in low-resource settings, often aggravated by a high prevalence of multi-drug-resistant organisms (MDRO). In many MSF projects, clinical and laboratory data are fragmented across paper charts, lab reports, and logbooks. Because existing data are difficult to analyse operationally, localised clusters go unrecognised, and probable outbreaks are detected late. To address this, a project was launched to develop a tool that links clinical and laboratory data for earlier detection.

Project Design

To develop the Healthcare-associated Infections Surveillance and Alerts Tool (HAI-SAT), the project team is: 1) setting up clinical data fields based on standardised WHO HAI surveillance definitions; 2) deploying mobile data collection forms using KoboCollect so clinical teams can input data offline; 3) programming data pipeline scripts to routinely extract and merge clinical inputs with WHONET microbiology data ; and 4) creating a data-protected visualisation dashboard.

Current Status

The automated data pipeline and scripts are currently drafted to merge the different clinical and laboratory data sources into a single compiled line list. This line list will establish a baseline to help teams identify clusters, thus support to identifying probable outbreaks. The dashboard interface has been drafted to display time-series trends and automatically flag potential cases, while allowing clinical teams to manually validate flagged data. A 3-month field pilot is planned for an Operational Centre Paris (OCP) hospital project to evaluate the tool's utility.

Future Directions

HAI-SAT aims to link clinical data streams with laboratory results to turn fragmented information into actionable surveillance. While development is ongoing and the field pilot is planned, this tool is designed to help clinical teams establish baselines, recognise clusters early, and speed up operational responses to probable outbreaks. In the future, the compiled data can also be used to support broader operational research and infection prevention improvements.

This ongoing project introduces HAI-SAT, a tool utilising KoboCollect and WHONET. It aims to accelerate HAI detection, cluster recognition, and operational outbreak response.

Session: Cholera

Moderators: Dominique Legros, former Director of Epicentre & Carole Deglise, MSF Switzerland

- Eve Rahbe
- Fabienne Nackers

Cholera dynamics and impact of preventive vaccine in endemic zones of DRC, 2021-2026

Eve Rahbé, Epicentre, France

Context

In the context of cholera resurgence, the Oral Cholera Vaccine (OCV) constitutes an important control strategy. Preventive OCV campaigns are now deployed, especially in endemic areas such as in the Democratic Republic of the Congo (DRC). Impact of these campaigns should be assessed to better design future vaccination strategies.

Methods

Since 2021, a multi-study project was put in place in two sites in the DRC: Goma (urban) and Bukama (rural). Using various study designs, the project collects data at the patient (clinical surveillance within cholera treatment units) or community level (vaccine coverage surveys). This unique setting allows for the temporal and geographical comparison of cholera dynamics and vaccine campaigns.

Results

In Goma, OCV coverage level was estimated at 65% [61.7-68.2] in 2024 following a 1-dose campaign. In Bukama, a 2-doses campaign in 2022 reached 89.3% [88.3-90.3] coverage during the 1st round. Over 2021-2026, 28'630 and 2'684 suspected cholera cases were included in Goma and Bukama, respectively. At individual level, preliminary results show that vaccination status was significantly protective of laboratory-confirmed cholera in both contexts. In Goma, massive internal population displacements at the end of 2022 were followed by two epidemic peaks at the beginning of 2023 and 2024. Camps were identified as the main epidemic driver in the city, and OCV impact remains unclear at populational level. In Bukama, there was a strong seasonal pattern to cholera incidence; preventive vaccination was effective in preventing future outbreaks, but only under optimal conditions.

Conclusion

Early results in these two cholera endemic sites in the DRC provide elements to guide the implementation of future vaccination campaigns. For instance, targeting incoming displaced population might be relevant in contexts such as Goma. Additional analyses, such as the estimation of vaccine effectiveness, will help consolidate preliminary findings and further help design efficient control strategies.

This project evaluates the impact of preventive OCV campaigns in cholera endemic areas of the DRC and offers elements to guide vaccination strategies specific to urban or rural contexts.

Interim Immune Response to a Delayed Second Dose of Oral Cholera Vaccine: A randomized, controlled, non-inferiority and immunogenicity trial in Conakry, Guinea

Fabienne Nackers, Epicentre, Belgique

Background

Oral cholera vaccines (OCVs) are important tools in outbreak control. Manufacturers recommend a 7- to 14-day interval between two doses. Adherence to this schedule for mass vaccinations in emergency situations can be operationally challenging. Recent evidence suggests that longer intervals between doses may trigger robust immune responses. Demonstrating non-inferiority of extended intervals between doses could allow more flexibility of OCV delivery strategies.

Methods

We aimed to evaluate the non-inferiority of the humoral immune response of a second dose of Euvichol-Plus® administered 6 or 12 months after the initial dose, compared to the standard 2-week interval. From 2022 to 2024, we conducted an open-label, randomized, controlled, non-inferiority trial in Conakry, Guinea, enrolling 456 healthy participants aged 1 to 39 years. Participants were randomized into three groups receiving the second OCV dose after a 2-week (control), 6-month, or 12-month interval. The primary endpoint was the geometric mean titer (GMT) of the serum vibriocidal antibodies (O1 Inaba and O1 Ogawa) 14 days after the second dose, with a non-inferiority margin of 0.67 on the GMT ratio (GMT of the intervention arm/GMT of the control arm).

Results

Baseline serum vibriocidal GMTs were similar across study arms. In the modified intention-to-treat and per-protocol populations, 14 days after the administration of the second OCV dose, the lower limit of the two-sided 97.5% confidence interval of the serum vibriocidal antibody GMT ratio was greater than 0.67, for V. cholerae O1, Ogawa and Inaba serotypes. The prespecified non inferiority criterion was also met in children (1-4 years and 1-9 years).

Conclusion

The results demonstrate that two-dose OCV schedules with extended intervals of 6-month and 12-month are immunologically non-inferior to the standard 2-week interval against V. cholerae O1. This provides strong evidence in favor of more flexible two-dose OCV vaccination strategies, with extended intervals, without compromising longer-term immune protection.

Two-dose OCV schedules with 6-month and 12-month intervals are immunologically non-inferior to standard 2-week interval against V. cholerae O1, supporting flexible vaccination strategies without compromising longer-term immunity.

Session: Vaccine preventable disease

Moderators: Vincent Brown, former Director of Epicentre & Guyguy Manangama, MSF France

- Medard Djedanem
- Camille Fortas & Neema Musyenene

Evaluation of the Efficacy of the Nm5CV Vaccine in Niger

Médard Djedanem, Epicentre Niger

Background

Meningococcal meningitis remains a major public health concern across the African meningitis belt despite the successful elimination of serogroup A epidemics following the introduction of MenAfriVac. However, recurrent outbreaks due to serogroups C, W, and X continue to occur. Men5CV, a pentavalent conjugate vaccine targeting serogroups A, C, W, Y, and X, was prequalified by WHO in 2023 and introduced in Niger during reactive vaccination campaigns in 2024.

Methods

We conducted a matched case-control study in six health districts in Niger (Niamey I-V and Magaria) to assess the effectiveness of Men5CV against meningococcal meningitis. Cases were individuals aged 1-19 years with PCR-confirmed disease, residing in vaccination areas, and presenting symptom onset at least 10 days after the campaign. Recruitment occurred between May 2024 and July 2025. Four community controls matched by age, sex, and residence were enrolled for each case. Vaccination status was verified by vaccination card when available or self-reported. Logistic regression models were used to estimate crude and adjusted vaccine effectiveness.

Results

A total of 17 confirmed cases (14 serogroup C and 3 serogroup W) and 68 matched controls were included. Vaccination was reported in 41% of cases and 86% of controls, although documentation was limited. Crude vaccine effectiveness was 88% (95% CI: 62-96) against all meningococcal meningitis and 86% (95% CI: 50-96) against serogroup C. After adjustment for household crowding and recent respiratory infections, effectiveness increased to 92% (95% CI: 72-98) overall and 91% (95% CI: 63-98) for serogroup C.

Conclusion

Men5CV demonstrated high effectiveness under real-world outbreak conditions overall. Limitations reliance on self-reported vaccination, and absence of cases from other serogroups. Further studies are needed to evaluate long-term protection, carriage impact, and effectiveness against invasive disease across all vaccine-targeted serogroups.

The Men5CV vaccine was introduced during a reactive mass campaign in response to the meningitis outbreak in Niger in May 2024. This study provided an opportunity to assess its real-world individual effectiveness post-introduction.

Development of measles vaccination strategies tailored to the local context in the Democratic Republic of the Congo

Camille Fortas, Epicentre, France; Neema Musyenene, Epicentre RDC

Context

In collaboration with the Ministry of Health of the Democratic Republic of the Congo, MSF-OCP implements vaccination interventions through the Urgepi project to prevent and reduce recurrent measles outbreaks in the Katanga region. Achieving adequate vaccination coverage remains challenging and previous qualitative studies have shown that barriers to vaccination are specific to each health zone (HZ). This study explored how vaccination interventions could be adapted to achieve higher vaccination coverage.

Methods

Between 2024 and 2025, Urgepi conducted research projects in four HZ. Vaccination interventions were preceded by baseline vaccination coverage surveys (VCS) and mixed-methods studies, which informed health promotion and vaccination strategies. Post-vaccination VCS were conducted immediately after the campaigns to evaluate their impact. National surveillance data were also analysed to assess the long-term effects of the interventions.

Results

Baseline VCS revealed low vaccination coverage across the four HZ, with substantial heterogeneity within each HZ. Mixed-methods studies identified barriers to vaccination at the community, healthcare system, and structural levels. VCS enabled the identification of areas at highest risk for outbreaks, which were subsequently prioritized for vaccination activities, while qualitative findings informed the development of context-specific messages and community engagement strategies. Post-vaccination VCS demonstrated substantial increases in vaccination coverage after the campaigns. In the longer term, vaccination in response to an outbreak effectively halted the outbreak, while preventive vaccination resulted in a reduced number of cases but did not completely prevent outbreaks.

Conclusion

Pre-vaccination research enabled better adaptation of conventional vaccination strategies and strengthened health promotion and community engagement activities through the involvement of multiple stakeholders including parents, community leaders and healthcare workers. However, implementation remained challenging, particularly in moving beyond conventional vaccination practices. Simulation exercises and operationalizable research procedures could help improve implementation. Some of the barriers remains outside the scope of MSF interventions.

Pre-intervention research enabled context-specific vaccination and community engagement strategies, improving measles vaccination coverage in four health zones in Katanga. Preventive interventions reduced outbreaks despite persistent implementation challenges

Session: Documenting mortality and violence in conflict settings

Moderator: Alain Moren, former director of Epicentre

- Javid Abdelmoneim
- Etienne Gignoux
- Jooma Younis

Patterns of trauma and burn injuries and their management outcomes in the Gaza Strip: A retrospective cohort analysis, May 2024–June 2025

Jooma Younis, MSF France Gaza

Background

The October 7 war in the Gaza Strip has caused catastrophic civilian harm, with more than 72,000 fatalities and 172,000 injuries reported by the Ministry of Health since October 2023. Despite this scale of trauma, systematic data on injury patterns, clinical management, and outcomes remain limited, constraining an evidence-based humanitarian response.

Methods

We conducted a retrospective cohort study using routinely collected programmatic data from surgical inpatients admitted to the MSF Trauma, Orthopedic, and Burn Unit at Nasser Medical Complex between May 2024 and June 2025. We described patient demographics, mechanisms of injury, clinical management, and in-hospital outcomes for trauma and burn cohorts.

Results

Among 3,029 admissions, 77% had traumatic injuries, 12% had burn injuries, and 11% had non-traumatic conditions. Trauma predominantly affected adult males, and 5% of trauma patients were children under 5 years. The leading mechanisms of traumatic injury were explosives (40%), road traffic accidents (38%), stab wounds (11%), and gunshots (11%). Burn injuries disproportionately affected young children, with 39% aged under 5 years, and were mainly caused by domestic hot liquids (59%), explosive-related events (30%), and domestic flame injuries (11%). Overall, in-hospital mortality was 0.6%. Amputations represented 5% of combined burn and trauma admissions and were mostly major and proximal. The mean length of stay was 14 days for burn patients and 8 days for trauma patients, and the mean number of surgical procedures was 2.0 for both groups. Most patients were discharged home (90.4% of burns; 87.8% of trauma cases), with 5% transferred to the ICU. Most had no recorded inpatient complications.

Conclusion

This study highlights the severe burden of conflict-related trauma and burns treated, with most injuries caused by explosives and gunshots. There is an urgent need for sustained surgical capacity, rehabilitation services, and protection of healthcare infrastructure to improve care for trauma-affected populations.

This study describes trauma and burn inpatients managed by MSF in Gaza during the October 7 war, showing good short-term outcomes but significant long-term rehabilitation needs.

40 ans

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