Comment

The role of humanitarian actors in global governance for AMR (

Antimicrobial resistance (AMR) is reshaping how humanitarian medical organisations deliver lifesaving aid. Within Médecins Sans Frontières (MSF), we see a concerning rise in the prevalence of multidrugresistant (MDR) organisms across contexts where we work, such as natural disasters, armed conflicts, and populations living in acute poverty.¹ As such, there are fewer antimicrobial treatment options for vulnerable patients and those remaining are prohibitively expensive.² But adequately addressing AMR involves decades of preventive planning and action, ranging from vaccination campaigns to local capacity building for microbiology.³ Consequently, MSF faces the difficult but surmountable challenge of integrating longitudinal AMR planning into our emergency responses. To curb AMR, humanitarian organisations must include AMR transversally and systematically and define their role in AMR. Yet, global funding for humanitarian organisations to include AMR programming is scarce.⁴ Looking ahead to the September, 2024, UN High-Level Meetings on AMR, UN member states must include humanitarian perspectives to efficiently allocate AMR funding going forward and address this existential challenge adequately and comprehensively.

Although AMR is an institutional priority for MSF, implementing relevant programming across our missions is a work in progress. In 2023, only 32% of our hospitals had stewardship initiatives and only 20% had access to quality microbiology, highlighting how far we have to go in prioritising AMR.⁵ In settings in which microbiology is deemed essential to patient care, MSF had to build and run 70% of the microbiology laboratories instead of using existing facilities as they were either unavailable, inaccessible, or of poor quality.⁵ Besides accessibility challenges in low-resource settings, we often do not have baseline resistance data, which are necessary to inform local clinical protocols and avoid inappropriate treatment. Recognising this potential issue in Gaza, MSF staff working in trauma hospitals collected surveillance data, showing a 60-70% resistance rate to first-line antibiotics for infections caused by Staphylococcus aureus, in addition to other Gramnegative MDR organisms in injured patients, even before the most recent war began.1 In response, and knowing that prevalent AMR would impair our delivery

of medical aid in violent trauma wounds, MSF drafted updated protocols to be used during and after the war based on local epidemiology, involving broad-spectrum antibiotics to prioritise a patient-centred approach while abiding by antibiotic stewardship guidelines.¹ Based on this experience, humanitarian actors are advised to integrate AMR measures (infection prevention and control [IPC], stewardship, and microbiology) into programming from the outset to enable the optimal delivery of aid under the worst conditions.

AMR will require a reimagining of the humanitarian health mandate and its unique role in global health. In the 21st century, overlapping crises such as climate change, non-communicable diseases (NCDs), and AMR require a nimble and immediate response coupled with a long-term strategic vision. Although preventive efforts like vaccinations and IPC programmes must be maintained and reinforced across humanitarian contexts, we would like to see humanitarian medical organisations commit to expanding antimicrobial stewardship, surveillance, and IPC programming across all medical interventions. Notwithstanding the ostensible novelty of this request, the integration of systemic health problems into the humanitarian mandate is not without precedent. The publication of the 2015 WHO Package of Essential Noncommunicable (PEN) Disease Interventions guidance, specifically for treating diabetes during emergencies, was one such moment. The PEN guidance provided a framework that underscored the essential need to include insulin treatment by humanitarian actors as part of national response plans to public health emergencies, something that was previously well beyond the humanitarian mandate. In 2012, ahead of when the guidelines were released, nearly three-quarters of all NCD deaths (28 million) were occurring in low-income and middleincome countries.6 The PEN framework accompanied a normative shift in global health governance that recognised humanitarians as key stakeholders in conflict-affected settings in relation to diabetes care. Similarly, humanitarian actors are including, albeit incrementally, AMR in emergency preparedness plansfor example, the International Rescue Committee's 2027 goal of 80% of their supported health facilities receiving an 80% IPC score.7 In consideration of the





Lancet Glob Health 2024 Published Online July 26, 2024 https://doi.org/10.1016/ S2214-109X(24)00319-X 2015 PEN guidance, we call for future AMR political declarations and medical humanitarians' own mission statements to be strategically informed by this history. Decision makers must encourage humanitarian work in mitigating and adapting to the mounting problem of AMR in vulnerable communities.

Lastlv. countries must allocate funding for humanitarian actors to enable a paradigm shift in how medical humanitarian organisations respond to AMR. Accessing funding for AMR is opaque and insufficient to meet the needs of countries, much less for humanitarian actors.⁴ Approximately 20-24% of MSF's annual international drug supply expenditure is being spent on antibiotics. Increasing MDR organism infections are likely to impact the cost and quality of humanitarian spending going forward.⁸ Since multiple low-resource countries do not have visibility over the prevalence of AMR, they cannot budget and apply for funding for AMR programmes in the first place.³ The emergency response in Ukraine shows how the global community could combat AMR, if adequate finance and proper microbial surveillance are in place. The WHO Ukrainian AMR Office donated equipment and consumables for 21 microbiology laboratories, largely on the war's frontline.9 However, unlike in Ukraine, many conflict zones lack baseline surveillance data and do not receive adequate investment. We must ask: what actions will UN member states take during the UN High-Level Meetings to ensure that financing mechanisms are equitable and reach the most vulnerable people through actors embedded within their communities?

Microbial resistance is chipping away at modern medicine, especially in overwhelmed and underfunded health-care facilities. In contexts with poor governance and weakened health-care systems, humanitarian organisations play a vital role: first, for people who need basic medical assistance and, second, for the international community as the first responders on the frontline of AMR. Humanitarian organisations must reflect on their collective and individual roles in preventing, managing, and perpetuating AMR. Global governance initiatives, like the UN High-Level Meetings, should place special attention on how AMR manifests for the most disadvantaged communities in the declaration and build a framework for stronger involvement of humanitarian responses to AMR. Countries must also recognise that conflict settings increase the prevalence and transmission of AMR infections. Each actor has a role to play, but with a varying level of responsibility, to mitigate the damage caused by AMR to our global health-care system.

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- Moussally K, Abu-Sittah G, Gomez FG, Fayad AA, Farra A. Antimicrobial resistance in the ongoing Gaza war: a silent threat. *Lancet* 2023; **402:** 1972–73.
- 2 Yahav D, Shepshelovich D, Tau N. Cost analysis of new antibiotics to treat multidrug-resistant bacterial infections: mind the gap. *Infect Dis Ther* 2021; 10: 621–30.
- 3 WHO. Global antimicrobial resistance and use surveillance system (GLASS) report 2022. Geneva: World Health Organization, 2022.
- 4 World Health Organization. Global results of tracking AMR country selfassessment survey (TrACSS) 2023: one health and human health indicators. 2023. https://app.box.com/s/u3s74b4a86q6zw4di90r xjeu3q9uhyl1/file/1367746616806 (accessed May 25, 2024).
- 5 Médecins Sans Frontières. Doctors Without Borders releases 2023 activity report on antimicrobial resistance. May 23, 2024. https://www. doctorswithoutborders.org/latest/doctors-without-borders-releases-2023-activity-report-antimicrobial-resistance (accessed May 25, 2024).
- 6 WHO. Global status report on noncommunicable diseases 2014. Geneva: World Health Organization, 2014.
- International Rescue Committee. IRC Health Strategy 2023–2027.
 Oct 25, 2023. https://www.rescue.org/report/irc-healthstrategy-2023-2027 (accessed May 25, 2024).
- Médecins Sans Frontières Access Campaign. The PASTEUR Act is not the way for the US Government to address antimicrobial resistance. February, 2024. https://www.msfaccess.org/pasteur-act-not-way-usgovernment-address-antimicrobial-resistance (accessed May 25, 2024).
- WHO. Strengthening Ukraine's AMR surveillance with WHO support. Aug 22, 2023. https://www.who.int/europe/news/item/22-08-2023strengthening-ukraine-s-amr-surveillance-with-who-support (accessed May 25, 2024).