

Editorial

Embedding implementation research to strengthen efforts towards improving primary health care in resource limited settings

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Immunization reaches more people than any other health service and it is a vital component of primary health care (PHC) (1,2). The Immunization Agenda 2030 emphasizes building strong national immunization programs integrated into primary health care services as the basis for achieving high vaccination coverage (2). In Ethiopia, immunization services are the backbone of PHC and are delivered in all public health facilities across the country (1). Even though the national EPI target is to reach a coverage of 90%(1), achieving and maintaining high immunization coverage is challenged by multifaceted demand and supply side implementation barriers (3–5). These barriers are related to community engagement, immunization service delivery, supply chain management, and surveillance and data management of the immunization program (5). Consequently, the national full vaccination coverage stalled at 43% (6).

Progress towards achieving the desired goals, requires health policies and systems informed by evidence which is in line with policymakers' priorities and is contextually relevant. Furthermore, implementation research can be used to find and test strategies to address programmatic constraints and to inform broader actions to mitigate system barriers. Through providing the intelligence needed to continuously respond, adapt and improve, implementation research can be instrumental in promoting cultures and practices of learning within local health systems (7). The embedded implementation research approach catalysis local researcher-policymaker collaborations (8) as a platform for prioritizing research on empirical questions of local relevance, generating feasible recommendations and integrating evidence into policy-making for health systems strengthening (9).

In 2018, the Alliance for Health Policy and Systems Research within the World Health Organization in partnership with the United Nations Children's Fund and with financial support from Gavi, the Vaccine Alliance, began collaborating with the University of Gondar and the Ethiopian Federal Ministry of Health on an embedded implementation research initiative to address concerns of real-world decision makers in the immunization program, and to support the attempt to mitigate implementation or system barriers. These barriers often reflect local contextual issues and have a direct impact on the performance of immunization policy and practice. In line with this, implementation

research has a crucial role in leveraging local, and context-specific knowledge, to identify and explain the reasons behind, and to find and test strategies to overcome them. Furthermore, taking implementation research to scale is essential to support the delivery of the immunization program and strengthen the efforts to accelerate PHC (10).

This joint initiative aimed to contribute to this overarching goal by providing catalytic support for locally produced research by strengthening the local capacity to undertake and use research findings. The initiative was embraced by its end users at different levels of the health system, cementing collaborative partnerships between health policy makers and researchers to address challenges to program or policy implementation, and to produce learning that can inform the transition to a new Health Sector Transformation Plan II that is underway (4). Immunization system decision makers and implementers were engaged throughout the research process, from defining the research agenda to co-producing the data with researchers, to discussing the applicability of research findings and recommendations, and their utilization for local decision making. Underpinning this process is the importance of strengthening the local capacity to conduct implementation research (11,12).

This supplement consists of 12 articles addressing specific, contextually determined challenges and bottlenecks through implementation research to ultimately improve the delivery of immunization services, and to contribute programmatic changes towards strengthening PHC.

The supplement explores a wide range of issues, such as the challenges posed by continuing urbanization which results in large, dense populations at high risk of infectious diseases, the challenges of displacement into temporary settlements, loss of health service infrastructure and the shortage of trained health workers following conflict, and subsequently the disruption of service delivery. It also addressed community engagement through participatory governance and accountability, to assist immunization services in being responsive to people's needs. Optimizing and maintaining supply and cold chain systems to ensure vaccines are available, stored and distributed under the right conditions (adequate, predictable supplies) and

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administered following the safety procedures, and behavioral change communication, to increase trust and confidence in vaccines. In addition, documentation and existing data verification mechanisms were assessed to strengthen the information system of the EPI program, and the direct and indirect barriers to accessing immunization services relating to gender, were explored through the perspective of women's participation in household decision making. The findings of all these studies will be used as input for the EPI program managers to address the existing implementation barriers of the EPI program and ultimately to improve primary health care service delivery processes in Ethiopia.

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