

Potential Integration of Neglected Tropical Disease Control Campaigns in Two Districts of Uttar Pradesh, India

International Institute of Health Management Research, New Delhi
Health Campaign Effectiveness Program at The Task Force for Global Health

Key Messages

The International Institute of Health Management Research (IIHMR) conducted a qualitative study to assess stakeholder perceptions and beneficiary satisfaction with integration of campaigns for neglected tropical diseases (NTDs) and other health interventions in Uttar Pradesh. The following lessons learned were uncovered in the course of this study:

1. Integration of campaigns must be planned and implemented according to local epidemiological needs and other locally relevant resources and health system characteristics.
2. Political and administrative support at all levels, from state officials to grassroots workers, is crucial to facilitate health campaign integration.
3. Previous or current integrated surveillance campaigns can provide valuable lessons for the integration of service delivery campaigns.
4. Community health workers are key to successful campaign integration; their training, supportive supervision, and incentivization should be priorities.
5. Community sensitization and mobilization is critical for the success of integrated campaigns.
6. Collaborating with local influencers and governing bodies facilitates local decision-making and instills confidence in campaigns within the community.
7. Adoption of technology, such as apps for fieldworkers to input campaign delivery data, is important for communication, monitoring, supervision, and reporting.
8. When feasible, the integrated campaign should be planned well in advance and piloted on a limited scale.

Abstract

In Uttar Pradesh, India, disease control campaigns are held routinely to achieve national health program targets. Integration of health campaigns with multiple interventions can potentially lead to improved coverage, service delivery, quality assurance, and time efficiencies. This study explored the potential scope of integration of campaigns by identifying facilitators and challenges to future integration on the basis of experiences with existing programs. The existing surveillance campaign, called DASTAK¹, which was launched in response to Japanese encephalitis (JE) but over time has integrated surveillance for tuberculosis, malaria, dengue, water-borne diseases, and COVID-19, provided valuable lessons for integrating campaigns with service delivery components.

The study team proposed lymphatic filariasis (LF), soil-transmitted helminthiasis (STH), screening for high blood pressure and blood sugar, monitoring of childhood immunization, and COVID-19 communication as campaigns for potential integration. The study involved stakeholders such as health system administrators, health practitioners, grassroots workers, partner agencies, and civil society. In depth interviews and focus group discussions were conducted to assess stakeholder perceptions, as well as a rapid community survey to assess beneficiary satisfaction.

Four areas surfaced as important for collaborative planning and integration of campaigns: local decision making; planning, training, supportive supervision and incentivisation of accredited social health activists (ASHAs, community volunteers who deliver services as part of the DASTAK campaign and other interventions) and grassroots workers; community sensitization and mobilization; and use of appropriate technology for monitoring.

Enablers to integration of the proposed interventions in this study included:

- The National Health Mission's creation of a collaborative planning platform for organizing health campaigns and developing guidelines
- Strong political will and administrative support from state officials to grassroots-level workers to facilitate collaborative planning for health campaign integration
- Motivation across stakeholders at all levels for integration of campaigns
- Involvement of ASHAs
- Community-level use of technology for real time monitoring, supportive supervision, and problem solving

This study determined that selection of campaigns for integration is dependent not only on the local epidemiological need but also on the capacity and training of implementing health workers. The DASTAK campaign was viewed as a suitable delivery platform for integration with interventions for STH and LF.

¹ DASTAK translates to 'a knock at the door'. The DASTAK campaign is the health component of a multisectoral effort by the Government of Uttar Pradesh to control communicable diseases. This campaign is held three times a year for two weeks, when ASHAs knock on the doors of every household in the village to monitor and refer febrile cases to health centers, as well as conduct information, education, and communication activities related to JE and other febrile diseases.

However, it was found that monitoring for childhood immunization and high blood pressure screening were not feasible for integration with services delivered by ASHAs due to discontinuation of the childhood immunization program identified as a potential platform for integration, and reliance on health facilities as the point of service, respectively.

Challenges observed included low financial incentivization for field-level workers, along with high dependence on them for campaign delivery. Non-acceptance of some interventions in communities, stemming from low awareness and sensitization, also posed a challenge to integration.

The following promising practices were identified as a result of this case study.

1. Engage community health workers such as ASHAs to serve as links between communities and the healthcare system.
2. Provide appropriate training, supportive supervision and incentives to community health workers.
3. Provide a single training manual for health workers in the local language for the integrated campaign.
4. Use technology for real-time monitoring and supportive supervision (e.g., Zoom or WhatsApp).
5. Involve local champions in social mobilization to instill confidence and motivate the population.
6. Leverage existing and familiar platforms or approaches (e.g., nutrition days, child health weeks).
7. Facilitate intersectoral collaboration, collaborative decision-making, and clear roles and responsibilities.

Background

India has a leading share of the global burden of neglected tropical diseases (NTDs) such as lymphatic filariasis (LF), visceral leishmaniasis (Kala-azar), soil-transmitted helminthiasis (STH), Japanese encephalitis (JE), rabies, and dengue fever. Uttar Pradesh has the greatest share of most communicable and non-communicable disease deaths in India, largely due to its concentration of rural and urban poverty. The state is also facing challenges such as a shortage of healthcare professionals, increasing cost of healthcare, growth of private healthcare, and a lack of planning.

Major outbreaks of JE occur in Uttar Pradesh during the rainy season. In 2019, 2,420 reported cases and 146 deaths from JE were recorded. NTDs such as JE, LF, STH, and scrub typhus are endemic in Uttar Pradesh, especially in the eastern regions, which include the districts of Gorakhpur and Deoria. In most of the districts, disease control campaigns (including those for JE, LF, and STH) proceed one after the other throughout the year.

Integrated disease control campaigns help to leverage the strengths of compatible programs, avoid duplication of efforts, increase coverage, encourage efficiency, and promote universal health care goals. India conducts numerous health campaigns annually, which if integrated would save time and resources throughout campaign planning, implementation, monitoring and reporting.

Factors that encourage integration are as follows.

- The personnel responsible for organizing and providing guidelines of various national health campaigns are all part of the National Health Mission.
- National health program divisions have recognized the need for integration and have previously conducted integration of campaigns. An example is DASTAK, an integrated surveillance campaign for JE, tuberculosis, malaria, dengue, flu-like illness, and water and sanitation education.
- The effects of the COVID-19 pandemic have negatively impacted coverage of childhood immunization and vitamin A supplementation (VAS). Integration presents an opportunity to increase coverage for several interventions simultaneously.

In this study, several health interventions were considered for integration. These were:

- Preventive chemotherapy for LF and STH
- Monitoring of childhood vaccination, including poliovirus
- VAS
- Monitoring of blood pressure and blood glucose levels
- Distribution of information about COVID-19

The selected interventions are compatible in terms of target population, type of service (e.g., mass drug administration for LF and STH), place of delivery (health centers for blood pressure and sugar monitoring), and frequency.

Objectives and Methods

The goal of this study was to explore the scope of integration of campaigns for locally prevalent NTDs with other disease control campaigns in the districts of Gorakhpur and Deoria in Uttar Pradesh, India, to inform recommendations for potential integration of campaigns.

Specific objectives were to:

- Gain insight into the planning and delivery of the existing disease control campaigns in Gorakhpur and Deoria, from the experiences of the key stakeholders.
- Identify the main facilitators and barriers for integrating NTD and other health campaigns from the perspective of the various stakeholders (administrators, program officials, grassroot level workers, international developmental agencies, community) involved in planning, operationalizing, and monitoring of a campaign.
- Propose the way forward in a collaborative manner for integration of locally relevant health campaigns.

Secondary objectives were to review the need for campaigns as a mode of service delivery, and to describe the major components of a collaborative plan for the integration of campaigns. Officials in the Directorate of Health Services (DHS) of the Government of Lucknow provided formal approval for the study.

Methods

This was a cross-sectional, descriptive, mixed-methods study. Primary data collection included qualitative methods such as in-depth interviews and focus group discussions to collect perspectives of administrators and health functionaries in the government system, partners from international agencies and civil society. Secondary data was examined by reviewing documents and government circulars related to the concerned national programs and existing campaigns in the country and Uttar Pradesh. The study team reviewed literature to compare the experiences of international and national teams with regard to integrating campaigns.

National and state-level data collection

At the national level, two initial meetings were held with the focal point for NTDs in the DHS of the Ministry of Health and Family Welfare to gain perspective into the priority given to campaign integration.

At the state level, meetings were held with key partners of the Government of Uttar Pradesh, staff from the Bill & Melinda Gates Foundation, UNICEF, PATH, and State Innovations in Family Planning Services Project Agency to get their perspectives on collaborative campaign planning and integration.

District-level data collection and analysis

The study districts, Gorakhpur and Deoria, are in the Gorakhpur region. From each district, two blocks were selected on the basis of their distance from the district headquarters (>25km, <25km) through consultation with the district officials.

The study team visited the community health center (government health facility) in each block. Detailed consultations were held with medical officers in-charge, block program managers, block community and program managers, and facility staff such as nurses about operational aspects of the campaigns, such as training, monitoring and supportive supervision, logistics, and community participation. These teams facilitated meetings with auxiliary nurse midwives (ANM) who are placed in community health sub-centers, which serve populations of approximately 5,000, and accredited social health activists (ASHA), who work at the village level, serving populations of approximately 1,000.

Interviews and focus groups were conducted in Hindi for most of the respondents, as per their preference, and interview notes were later transcribed and translated into English. Transcripts were analyzed to identify themes and sub-themes. The main themes were: (1) existing campaigns and integration of campaigns; (2) facilitating factors for collaborative planning for integration; and (3) challenges to collaborative planning for integration. Quotations were also extracted to support various sub-themes. Data entry for the questionnaires was made in IBM Statistical Package for Social Sciences (SPSS) 21, and descriptive analysis was carried out. District-level interviews and focus groups are quantified in Table 1.

The study team collected quantitative data from beneficiaries of the campaigns via a questionnaire to assess knowledge, attitude, and practice regarding health campaigns, rated using the Likert scale. This questionnaire was completed by 356 beneficiaries across both districts (247 from Gorakhpur, and 109 from Deoria, respectively.)

Table 1: District-level stakeholders engaged for in-depth interviews and focus groups at various levels.

Gorakhpur	Deoria
<p>District level</p> <p>In-depth interviews (N=5)</p> <ul style="list-style-type: none"> ● Chief medical officer (n=1) ● Assistant chief medical officers for National Vector-borne Disease Control Program (n=1) ● District immunization officer (n=1) ● District program manager (n=1) ● Assistant research officer (n=1) 	<p>District Level</p> <p>In-depth interviews (N=6)</p> <ul style="list-style-type: none"> ● Senior additional chief medical officer (n=1) ● Additional chief medical officer for reproductive and child health (n=1) ● Additional chief medical officer for non-communicable disease and store manager (n=1) ● District community program manager (n=1) ● District program manager (n=1) ● District data manager (n=1)
<p>Block Campianganj</p> <p>In-depth interviews (N=3)</p> <ul style="list-style-type: none"> ● Medical officer in charge (n=1) ● Block program manager (n=1) ● Block community and program manager (n=1) <p>Focus group discussions (N=2)</p> <ul style="list-style-type: none"> ● Auxiliary nurse midwives (ANMs) and ASHAs of two subcenters (n= approx. 5-6) 	<p>Block Lar</p> <p>In-depth interviews (N=2)</p> <ul style="list-style-type: none"> ● Medical officer in charge (n=1) ● Block community and program manager (n=1) <p>Focus group discussions (N=2)</p> <ul style="list-style-type: none"> ● ANMs and ASHAs of two subcenters (n= approx. 5-6)
<p>Block Bhathat</p> <p>In-depth interviews (N=3)</p> <ul style="list-style-type: none"> ● Medical officer in charge (n=1) ● Block program manager (n=1) ● Block community and program manager (n=1) <p>Focus group discussions (N=1)</p> <ul style="list-style-type: none"> ● ANMs and ASHAs of two subcenters (n= approx. 5-6) 	<p>Block Baitalpur</p> <p>In-depth interviews (N=2)</p> <ul style="list-style-type: none"> ● ASHA and ANM (n=4) <p>Focus group discussions (N=2)</p> <ul style="list-style-type: none"> ● Beneficiaries/community members (n= at least 5)
<p>Grassroots Level</p>	<p>Grassroots Level</p>

Focus group discussions (N=3) <ul style="list-style-type: none"> • ANMs and ASHAs (n= approx. 5-6) 	Focus group discussions (N=2) <ul style="list-style-type: none"> • Beneficiaries/community members (n= at least 5)
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Results

The collaborative planning process with multiple stakeholders yielded the following results.

There is openness and motivation for collaborative planning and integration of campaigns across stakeholders. They expressed approval of integration based on need and feasibility, and because vertical campaigns required extensive and repetitive preparation activities. Political and administrative support for collaborative planning of campaigns was apparent, demonstrated by prompt guidance and assistance from the state and district administration. ASHAs, the implementers of campaign interventions, were also inclined towards integration.

Selection of campaigns for integration is dependent on both local epidemiological contexts and human resources. For example, stakeholders noted that screening for high blood pressure and blood sugar is conducted at health facilities and was not feasible for integration with door-to-door campaigns as ASHAs are not trained to conduct these services in the field. It was also learned that the Mission Indradhanush child immunization campaign has been discontinued in both districts, leading to its exclusion from the proposed plan for integration. However, the proposal to integrate COVID-19 education into ASHA activities received support from the respondents, since it was practical and was already being done as part of DASTAK.

The DASTAK campaign has the potential to serve as a platform for integration, but further alignment is needed across stakeholders, including ASHAs. DASTAK was described by all the stakeholders as singularly responsible for bringing down the incidence of JE tremendously in both districts. During DASTAK, ASHAs monitor and report febrile illnesses, distribute antipyretics and vitamins, and conduct febrile disease education (including for COVID-19); these activities indicate that integration with other drug distribution activities and services may be possible. However, additional drug distribution by ASHAs for NTDs emerged as a point that requires further discussion with stakeholders. Furthermore, ASHAs were concerned whether their incentives for individual campaigns would be decreased as a result of integration.

The following **facilitators** for collaborative planning and campaign integration were identified.

- *Coordination and teamwork:* Uttar Pradesh state, district, and block teams work closely in planning, capacity building, implementing, monitoring, supervision, and reporting of health campaigns.
- *Adequacy of infrastructure for service delivery and capacity building:* Both districts have a network of community health centers that are accredited through the Government of India’s

National Quality Assessment Standards program to improve quality standards. Both districts have adequate numbers of ANMs and ASHAs for service delivery based on population.

- *Well-functioning system for campaign delivery by ASHAs for existing campaigns:* The efforts of ASHAs to deliver current campaigns have been lauded extensively by district and block officials and communities. As a senior district official stated, “The ASHA model [of campaign delivery] is working very well and ASHAs have earned our trust. They are our connection to the community, [they] are aware about the community and make the community aware about all the programs.”
- *Seamless flow of funds and logistics:* Most of the respondents, especially those at the block level who are responsible for operational aspects, commented that funds and logistics would not be a problem for integrating campaigns. Budgeting for integrated campaigns is performed at the state level, and coordinated from individual program funds; district budgets are then released, and subsequently, procurements are completed by districts and released to blocks for distribution. Stakeholders felt confident that procurements such as drugs for MDA would be received well in advance of an integrated campaign.
- *Strong working partnerships across the state government with international organizations and NGOs:* These partnerships ensure seamless coordination for different functions (i.e., technical support, training, communication, community mobilization, and media advocacy) with the responsibility for each resting with pre-defined partners. Frequent meetings and division of areas for overlapping responsibilities ensure an efficient and effective working relationship.
- *Increasing adoption of technology for communication, monitoring, supervision, and reporting:* Use of technology such as an Open Data Kit mobile app has helped improve reporting by ASHAs in the DASTAK campaign. ASHAs enter campaign delivery data in this app, which can be monitored by supervisors, government officials, and partners in real time. Technology-savvy ASHAs provide support to other ASHAs to help them learn and incorporate the technology into their work.
- *Involvement of Panchayati Raj Institutions (local self-government mechanism) for collaborative planning:* Panchayati Raj Institutions consist of elected members of the community (panch) and headed by a leader or village head (sarpanch or gram pradhan) who hold significant influence over their communities. According to block officials and community members, the village sarpanch is key to the success of collaborative campaigns by facilitating microplanning and supporting implementation by motivating the community to accept services.

Challenges and Mitigation During the Case Study

- *Different concepts of campaign integration as perceived by stakeholders:* Understanding of the concepts of campaign integration were not entirely consistent across some stakeholders in the government system, who described integration in the context of routine service delivery and the convergence of different health programs.

- *Dependence on ASHAs as points of service delivery:* There is not consensus on the capacity of ASHAs to integrate drug delivery services into DASTAK, and ASHAs also expressed some concern about reduced financial incentives and additional work.
- *Weak training of ASHAs for integrated campaign components:* A significant problem identified in the DASTAK campaign was poor integration of different/new services into ASHA training, and confusion around different guidelines that accompany various interventions. One respondent remarked, “There is a bit of a risk we are taking [by] assuming that a half-day training of the frontline workers will help them in knowing what to do both in DASTAK and both in MDA.”
- *Pockets of community resistance to select campaign components:* Some community members had strong reservations about consuming ‘strong medicines’ (their term for antifilarial drugs), which they felt could cause harm to them, and/or concerns about the safety of taking more than one medication at a time. A community member remarked, “Yes, there will be hesitation for that, how can we take two medicines together [if] we do not know the possible side effects of that? If a doctor is giving us any medicine for one problem, then he needs to tell us about that problem...and about the dosage and timings of the medicine. Only then one will be able to take the medicine.”
- *COVID-19 and natural disasters:* Delivery of campaign components during home visits as well as during weekly village health and nutrition days were sometimes delayed by the pandemic and floods.

Promising Practices

The study team identified the following promising practices that should be consistently applied to collaborative approaches to campaign integration:

1. **Engage community health workers to serve as links between their communities and the health care delivery system.** In Uttar Pradesh, ASHAs played a key role in the success of health campaigns.
2. **Provide appropriate training, supportive supervision and incentives to community health workers.** In Uttar Pradesh, a day of recognition for community health workers, called ‘ASHA Day,’ is celebrated every year, when the best workers are recognized and given awards.
3. **Provide a single training manual in the local language** to spell out the details of the integrated campaign activities. The training manual should be provided to all community health workers engaged in campaign delivery to promote a systematic and unified process of campaign delivery.
4. **Use Zoom or similar platforms to conduct virtual monitoring and review meetings** to increase stakeholder engagement, supervisory support and real-time course correction. In Uttar Pradesh, local officials used technology to conduct real-time monitoring and promptly shared information with ASHAs to support problem solving.
5. **Involve community leaders and local government** in implementation and ‘social modeling’ of campaigns to instill confidence and motivate the population. In Uttar Pradesh, leaders and

government officials consumed antifilarial drugs in full public view during the MDA campaign to dispel some concerns regarding the drugs.

6. **Leverage existing platforms or programs** to educate the population about campaigns (e.g., DASTAK or Village Health Nutrition Days) as an opportunity to discuss MDA.
7. **Facilitate intersectoral collaboration** to discuss and agree upon roles and responsibilities of personnel staffed in different government departments or agencies. When persons responsible for organizing and guiding integrated campaigns are spread across several divisions or agencies (e.g., Department of Health, Department of Sanitation, Department of Education), it is especially important to promote engagement and collaborative decision-making across all persons, divisions and/or agencies involved in the campaign.

Lessons Learned

The following lessons learned were developed as a result of unexpected findings and/or challenges encountered during this study.

1. **Integration of campaigns must be planned and implemented according to local epidemiological needs and other locally relevant resources and health system characteristics.** The integration process can vary within the same state and should follow and allow for local variation across districts.
2. **Political and administrative support at all levels, from state officials to grassroots workers,** is crucial to facilitate health campaign integration.
3. **Previous or current integrated surveillance campaigns can provide valuable lessons** for the integration of service delivery campaigns. In Uttar Pradesh, the surveillance campaign used for JE was expanded to include other diseases and this provided valuable lessons for integrating campaigns in general.
4. **The role of the community health worker (ASHA) in Uttar Pradesh is key** to achieving the outcomes of campaign integration. Therefore, their training, supportive supervision, and incentivization should be priorities.
5. **Community sensitization and mobilization is critical** for the success of integrated campaigns.
6. **Collaborating with local influencers** including the village head (Sarpanch or Pradhan) and local governing bodies (Panchayati Raj Institutions) facilitates local decision-making and instills confidence in campaigns within the community.
7. **Adoption of technology,** such as apps for fieldworkers to input campaign delivery data, is important for communication, monitoring, supervision, and reporting.
8. **When feasible, the integrated campaign should be planned well in advance** and piloted on a limited scale.

Conclusion and Recommendations

This case study explored the scope of collaborating between national health programs to address implementation gaps and maximize benefits to the health system, including providers and beneficiaries, by implementing a collaborative, multi-sectoral plan of integration in Gorakhpur and Deoria districts in

Uttar Pradesh. The advantages of integration of vertical campaigns were appreciated by stakeholders in the health system and the majority of civil society members who were consulted.

Collaborative planning and integration should adopt a 'bottom-up approach' in Uttar Pradesh. The districts must lead these processes, given the significant inter-district variations in epidemiological context and health system characteristics across the state. Within districts, integration should develop strategies to cover hard-to-reach populations.

Logistics management and training of grassroots workers for implementation and monitoring of campaigns requires focused attention when campaigns are integrated. Integrated campaign delivery involves extensive field work which merits not only close supportive supervision but also motivational measures, such as timely incentivization and rewards.

Inter-sectoral coordination involving civil society is key to achieving outcomes. This includes collaborating with Panchayati Raj Institutions, village elders, youth influencers, and local NGOs. Partnerships with international agencies and NGOs for technical and operational support as well as advocacy have proved successful for existing campaigns. The deep local experience of these partners can be leveraged in piloting the integrated campaigns in different settings across districts.

Last but not least, the community has to be taken into confidence and their concerns addressed, such as fears of adverse reactions when consuming multiple drugs at once.

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