CHALLENGES AND BEST PRACTICES IN SOCIAL AND BEHAVIOURAL CHANGE COMMUNICATION TO ACHIEVE MALARIA ELIMINATION IN INDIA

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APLMA Programmatic Brief
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About APLMA-APMEN

Asia Pacific Leaders Malaria Alliance (APLMA) is an alliance of heads of government committed to achieving a region free from malaria by 2030. APLMA is a distinctive platform facilitating collective regional leadership for malaria elimination and health security.

Asia Pacific Malaria Elimination Network (APMEN) is a network of 22 countries and 54 partner institutions. APMEN facilitates regional and multi-sectoral collaboration around evidence-based practices and fosters innovation. Jointly, APMEN and APLMA act as an ‘evidence-to policy’ vehicle that links directly to leadership levels across the region.
Introduction

Malaria remains a significant public health challenge in India and globally, with the latest data indicating a substantial journey still ahead to achieve the 2030 malaria elimination target ¹.

India, which bears a significant portion of the regional malaria burden, has made remarkable strides in reducing the disease burden. The efforts undertaken have seen considerable success with a 85.1% reduction in malaria cases during the period 2015 to 2022, despite the challenges posed by the COVID-19 pandemic. Approximately 75% of all cases are concentrated in tribal areas, which constitute around 8% of the total population -- making these areas the “heartlands of malaria”. Accessing these communities is typically challenging due to geographical, social, or economic barriers. The significant residual malaria burden in these areas makes the last mile of elimination a steep hill to climb.

The country’s malaria elimination plan outlines surveillance and case management, integrated vector management (IVM), entomological surveillance, advocacy, social and behavioural change communication (SBCC), multisectoral partnerships, and cross border collaboration as key intervention strategies to achieve the 2030 goal ⁴. Amongst these, SBCC emerges as a vital strategy, promising to foster community participation and rectify misconceptions, thereby mitigating the prevalence of the disease.
SBCC goes beyond mere dissemination of information. It involves training communities and enhancing health-seeking behaviours, equipping individuals to protect themselves against malaria by fostering a deeper understanding and creating platforms for engagement.

As India edges closer to elimination, SBCC will play an instrumental role in ensuring sustainability and preventing reintroduction by empowering communities to take ownership of initiatives. This forward-thinking strategy becomes particularly vital in a scenario where dedicated malaria funding might taper off post-elimination, placing the onus on communities to uphold preventative measures.

This programmatic brief delineates the crucial gaps and challenges hindering the optimal utilization of SBCC in India's fight against malaria, alongside identifying effective best practices that show promise. We delve deep to provide a structured analysis of the existing landscape with the goal of furnishing policymakers, stakeholders, and changemakers with information and evidence to draft informed and robust strategies.

The information sources used in this brief consist of primary findings from the Asia Pacific Leaders Malaria Alliance (APLMA) during the Malaria Programme Review conducted jointly by National Center for Vector Borne Diseases Control (NCVBDC) and World Health Organization (WHO) India Office in 2022. Additionally, a secondary literature review included various peer-reviewed publications and a rapid assessment of Swasth Nagrik Abhiyan (Healthy Citizens Movement or SNA), which was undertaken by the Indian Institute of Public Administration (IIPA) and funded by National Institution for Transforming India (NITI) Aayog in 2020 ².
The SNA assessment revealed the following major gaps in existing national SBCC efforts:

**MONITORING AND EVALUATION (M&E)**

The SNA assessment revealed that there was no robust mechanism to monitor and evaluate the progress of information education communication (IEC) activities across all disease groups. Greater reliance on outcome indicators instead of process indicators could have provided insights into behaviour change. Similar gaps have been identified for malaria, with lack of impact evaluation indicators for regular IEC behaviour change communication (BCC) activities performed as per the National Strategic Plan 2017-2022 and the Operational Manual for Implementation of Malaria Programme 2009 4,5.

**RESEARCH**

There is an absence of baseline or formative studies to guide the existing IEC plans. Most of such studies have been conducted by the Indian Council of Medical Research in a project-mode 6,7, but there is little to no replication of similar studies in the routine programme.

The above gaps have led to many challenges which inhibit the optimal utilization of SBCC strategies towards malaria elimination in India.
Challenges

LACK OF LOCALIZATION OF IEC MATERIAL

The SNA assessment revealed that materials were often not utilized appropriately at several health facilities, resulting in disinterest within the community. In a diverse country like India, the local language and dialects change every few kilometres, sometimes even after 15-20 kms. This is a challenge as the IEC material sent to states by the central government is often simply translated in the local language without contextualising the messaging according to the local context. This leads to limited absorption of key messaging by the communities because the content seems ‘foreign’ to them. To tackle this issue, MEDP Mandla developed context-specific IEC material at district-level in consultation with the local communities with the idea of ‘for the people, by the people’. The open source files of the IEC materials were uploaded on the project website and given to the state authorities with no copyrights to ensure maximal dissemination and customizations.

LACK OF KNOWLEDGE AMONGST PERSONNEL

Many SBCC officers were not aware of their roles and responsibilities beyond routine tasks, indicating a significant gap in the training and orientation of personnel. The lack of knowledge and training regarding SBCC amongst officers has been studied in the state of Madhya Pradesh as well, where it was noted that most officers restrict the IEC messaging to mass media, posters, and handbills. While all districts do not have a presence of dedicated SBCC personnel, it has been observed that basic trainings in inter-personal communication (IPC) at the level of fieldworkers can have lasting impact.
In an example from MEDP Mandla, all the village malaria workers of the project were trained in IPC and all Accredited Social Health Activists (ASHAs) of the district were given a ‘job-aid’, which captured all basics of malaria elimination at field-level and key IEC messaging in a pocket-size book to serve as a ready reference during field visits 3,9.

SUB-OPTIMAL UTILIZATION OF VECTOR CONTROL INTERVENTIONS

Inadequate SBCC messaging has a direct impact on various malaria elimination interventions, specifically vector control. Indoor residual spray (IRS), a bi-annual preventive application of insecticide inside the walls of households, often faces reluctance and unacceptability by local communities -- especially in rooms of worship, cooking, and food storage 12,13. Additionally, mud-plastering or lime-stone coating, which is a common pre-festival ritual in many communities, risks rendering the IRS ineffective as the insecticide is covered with other materials 14. Another tool are the long-lasting insecticidal nets (LLINs), which is a primary vector control tool in many parts of India. LLINs are medicated bed nets coated with insecticides, which are distributed free-of-cost by the Government of India in malaria-endemic areas 4. Successful SBCC strategies have helped in increasing the acceptance of IRS and LLINs in malaria endemic areas of Koraput, Odisha and Mandla, Madhya Pradesh 14,15.

LIMITED RESOURCE CAPACITY

The SNA assessment revealed that Ministry of Health and Family Welfare lacked the necessary capacity to produce content due to shortages in skilled manpower, financial resources, and research base 2. This is consistent with the findings of the Malaria Programme Review 2023 16. To address this challenge, APLMA has been supporting a Senior SBCC Consultant at the national level to strengthen the malaria programme capacity.

Furthermore, the assessment report also revealed that there was a discrepancy between allocated and actual expenditures, pointing to a need for a more streamlined budgeting process. These financial constraints and management issues underscored
the necessity for fortifying the fiscal backbone of IEC BCC initiatives to ensure a sustained and impactful strategy against malaria \(^2\).

“In the national malaria programme, we have got Rs. 45000 for IEC activities, it has not just fixed the amount……… it also is written we have to spend this money on giving advertisements on cable TV scrolls. Now, in our district, most of the time in the evenings the electricity is a major problem when people are at home, most of the rural population is illiterate in the community where malaria and dengue cases are happening, people prefer to listen to announcements by miking which is much cheaper and effective………what should we do, ……………just doing tick mark work.”

– Chief Medical Officer, Northern Region \(^2\)
Best practices

KARNATAKA STATE PROGRAMME

In Karnataka, a multifaceted BCC campaign was instrumental in enhancing malaria prevention awareness. The initiative spearheaded by the state health department utilized diverse platforms to disseminate critical information to a wide demographic. Prominent strategies included branding Karnataka State Road Transport Corporation (KSRTC) buses, trains, and autos in key districts to serve as moving billboards promoting malaria awareness. The campaign also leveraged the reach of social media platforms, with notable figures including the Chief Minister and the Health & Family Welfare Minister, urging the public to adhere to protection guidelines through video messages.

Traditional media was not left behind, with awareness programmes tapping into the grassroots through folk media and utilizing mainstream newspapers for informative opinion articles. The campaign also involved interactive sessions on Doordarshan and All India Radio, effectively extending its reach to a broader audience.

Ground activities reinforced these efforts, with advocacy sessions fostering community engagement and inter-departmental coordination meetings encouraging a synergized approach to disease control. By amalgamating modern and traditional media outreach with on-ground mobilization, Karnataka’s BCC activities have showcased a promising blueprint in health communication for malaria prevention (Figure 1) \(^\text{16}\). However, as we move towards malaria elimination in the state, it is necessary to assess the impact of
this campaign guided by a M&E framework, which would be beneficial for optimal utilization of the tools and strategy.

**Figure 1**

IEC BCC activities by Karnataka – Messages on trains, buses, and autorickshaws; folk shows and talk shows on national television.
**MALARIA ELIMINATION DEMONSTRATION PROJECT (MEDP), MANDLA**

The model project utilized comprehensive IEC and BCC strategies to significantly enhance community awareness and encourage behaviour change regarding malaria prevention and treatment. Rooted in a deep understanding of local community knowledge, attitudes, and practices (KAP), the project developed a range of IEC/BCC materials including calendars, flipbooks, job-aids, posters, and booths, based on continuous feedback from the community. The materials, which were not copyrighted to encourage widespread use, were strategically distributed in middle schools and community markets (*haat bazaars*) as well as employed in regular door-to-door fever surveillance initiatives.

To bolster its reach, MEDP established portable IEC booths, labelled T4 (Track Fever, Test Fever, Treat Malaria, and Track Patient) booths, utilizing them to host a variety of engaging awareness programmes such as puppet shows and storytelling sessions. Through its meticulous strategies, over 80% of the respondents acknowledged government health posts as their preferred destination for malaria diagnosis, showcasing a substantial increase in trust in government health initiatives. Moreover, 87% were familiar with MEDP village workers, out of which 86% praised the anti-malarial services provided.\(^7\)\(^9\)
“MEDP has been provided printed literature in local language ‘Hindi’ and images related to malaria etiology, preventive measures, diagnostic methods, treatment dose chart according to the malaria species. MEDP also provided intensive training on malaria diagnosis and treatment to the ASHAs of the district.”

– ASHA of Mandla district

**Figure 3**

*Puppet shows training sessions as part of MEDP Mandla*
“MEDP staff repeatedly provided knowledge on mosquitoes and malaria, therefore, our community is now considerably awakened and taking care for their health and hygiene. The villagers now seek treatment as early as possible from ASHA or auxiliary nurse midwife or by visiting a primary/ community health centre.”

– Community Member from Mandla district

MODEL COMMUNICATION STRATEGIES IN TRIBES OF INDIA

In the Dindori district of Madhya Pradesh, which is a tribal-dominated district, the Indian Council of Medical Research – National Institute of Research in Tribal Health (ICMR NIRTH) piloted a communication strategy for the prevention of malaria in the Baiga tribal villages. The study used various mass media tools, including a folk theatre-based approach, to deliver health messages to the Baiga tribal community. The approach involved training local school-going children and unemployed youths as IEC activists/agents of change to disseminate health messages through folk theatre performances, street plays, and community meetings. The study also used posters, banners, and leaflets to reinforce the messages delivered through the folk theatre performances.

During the initial survey, 52% preferred traditional healers for fever. The IEC strategy aimed to shift preferences towards government health services. Post-intervention, preference for government facilities in the intervention area rose by 50%, with a 35% net effect, showing a significant shift in treatment choices, including increased preference for malaria/ASHA workers and local private doctors. In the intervention area, understanding of mosquito breeding in stagnant water increased significantly to 81% from 33%, with a 57% net intervention effect. The initiative positively altered perceptions on preventive measures, influencing the proper use of bed nets, mosquito repellent coils, and insecticides, notably indoor residual sprays by malaria workers.

It should be noted that IEC strategies should be customized based on the findings of baseline surveys in the district. The level of knowledge about a particular domain of malaria prevention will help guide the appropriate messaging in the target population.
For example, in the tribal district of Mandla, Madhya Pradesh, 80% of respondents linked malaria transmission to mosquitoes, but misconceptions were still present. Not all were familiar with malaria types. Only 39% knew about IRS, 41% recognized the importance of LLINs, and 71% were aware of proper malaria tests. Meanwhile, 87% knew about the MEDP staff in their villages. These findings helped in customizing the existing IEC strategy and focus on the identified knowledge gaps.

SWASTH NAGRIK ABHIYAN

The SNA programme, despite facing several challenges, initiated critical steps towards improving the SBCC strategies across the nation. By bringing gaps to light through national consultation workshops and studies, it paved the way for evidence-based policy formulation like dedicated SBCC guidelines as part of the upcoming National Strategic Plan for Malaria Elimination 2023-2027. There are concerted efforts to foster coordination between the national, state, and district levels through regular meetings and discussions, aiming for a more collaborative approach to health communication.

“In our community health centre, we have seen on the TV screen some of these advertisements and health promotion messages, while waiting for our turn to meet the doctor for a checkup of my baby, we get information about many other things...... this is a good initiative by the doctor Sahib........ For example, I get to know about the use of contraceptives for child distancing from the advertisement......”

– Rural focus group discussion participant, Western Region
Recommendations

We propose a series of forward-thinking recommendations to address the identified gaps and challenges while building upon the proven strategies in the best practices. These recommendations are grounded in the belief of fostering a evidence-based approach to SBCC.

HOLISTIC UTILIZATION AND STRENGTHENING OF RESOURCES

Leveraging existing government databases and outreach schemes like the SNA for dissemination of SBCC messages. This approach will showcase a readiness to pool various resources together, ensuring a comprehensive and structured communication strategy that touches every corner of society. It will also emphasize addressing identified gaps in human resources. A systematic recruitment and training process will ensure that newly inducted personnel are nurtured to understand their roles and responsibilities clearly, fostering proactive participation in the mission.

LOCALIZATION OF IEC MATERIAL

Similar to the ‘for the people, by the people’ IEC strategy of MEDP Mandla, involve local expertise in designing IEC materials to ensure crafted messages truly resonate with the specific target audiences. This can showcase a paradigm shift towards a more participatory and inclusive communication strategy, which could be achieved by workshops and training sessions where local talents are nurtured to produce community-centric content.
RESEARCH AND DEVELOPMENT

Establish a dedicated wing at the national level and leverage existing regional expertise of ICMR institutions for the research and development of SBCC strategies, similar to the work of ICMR National Institute of Research in Tribal Health in Madhya Pradesh. This wing should conduct baseline studies to form a substantial IEC strategy, undertake impact assessments, and provide insights into behaviour change through detailed analysis. In addition, area-specific SBCC strategies should be assessed rapidly and efficiently by local project staff. Their approach would be more hands-on and streamlined, allowing for quicker evaluations and adjustments.

ROBUST FINANCIAL MANAGEMENT AND RESEARCH BACKBONE

Work towards strengthening the financial backbone of IEC initiatives, ensuring optimal usage of allocated funds and minimizing gaps between planned and actual expenditures. This should be paralleled by the development of a robust research and evaluation mechanism, promoting an accountable and efficient system predicated on continual learning and improvement.
Conclusion

As India progresses towards its objective of malaria elimination by 2030, the success depends on the optimal utilization of social and behavioural change communication strategies. A shift from mere information dissemination to fostering community engagement and ownership becomes imperative in this phase of malaria elimination and prevention of re-establishment.

Leveraging existing government databases and systems and the development of locally relevant messages will ensure a more rooted and empathetic approach. Furthermore, strengthening the financial and research foundations of IEC efforts will help in efficient human resource management, crafting of evidence-based tools, and impact evaluation of interventions.

As we venture deeper into this decisive phase, communities must be equipped with information and the tools and an understanding to actively shape their health narratives.
REFERENCES

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