

Brief 3: Using research and data to plan effective social and behaviour change communication

ADDITIONAL MATERIAL TO ACCOMPANY AMP TOOLKIT, CHAPTER 6

SEE ALSO CHAPTER 8: MONITORING AND EVALUATION (2018 VERSION) AND BRIEF: MINIMUM DATA REQUIREMENTS FOR MASS INSECTICIDE-TREATED NETS DISTRIBUTION CAMPAIGNS

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1. Using existing research and data

Existing research and data on access and use of insecticide-treated nets (ITNs) should be used to inform a distribution campaign's communication plan, resulting in appropriate net use, care, repurposing and disposal when the nets are no longer usable. Establishing a repository, preferably online, for programme data and research will ensure the NMCP and its partners have access to the necessary information needed to develop messages that will motivate target audiences during the campaign. There are several sources of information and data about ITN access and use every programme should review. These include national surveys, routine distribution data, ITN distribution and survey reports and published and grey literature.

One of the biggest challenges for planning for communication for ITN campaigns, as well as continuous distribution, is the lack in many countries of properly archived reports, research and evaluation results related to malaria. The NMCP should work to establish an accessible repository of all published and unpublished information related to the country's malaria efforts.

1.1 National surveys

The Malaria Indicator Survey (MIS) collects national and subnational data about malaria from a representative sample of household respondents, while the Demographic and Health Survey (DHS) and the Multiple Indicator Cluster Survey (MICS) collect data on a larger number of health indicators. These surveys are conducted every three to five years. Designed to produce comparable data over time and across countries, these surveys provide valuable information on household ownership of and access to ITNs and their use, especially by children under five years of age and pregnant women. The MIS also gives a percentage for overall population ITN use.

It is important to note the year in which these surveys were implemented. If much time has passed and if there have been mass campaigns or intensified continuous distribution efforts, particularly through schools, since the surveys, findings may be outdated.

DHS, MICS and MIS data also differ in that data are collected during different seasons. MIS data are collected during the rainy season, when transmission is highest, while DHS and MICS data tend to represent dry season behaviours. For this reason, these distinct data sets should be compared only with great caution, if at all. A decline in net use from an MIS survey to a subsequent DHS survey might not indicate an actual decline in use, but seasonal variation. It is more likely, however, that ITN access has decreased in the intervening period. Both are

important aspects for communication planning, the first indicating that more efforts may be required in the dry season to encourage nightly ITN use and the second that access should be increased, whether through a mass distribution campaign or more intense continuous distribution.

1.2 The ITN Access and Use report

The ITN Access and Use report is a valuable resource that uses DHS and MIS data sets to help campaign planners to determine when and where lower or non-use results from behavioural reasons, from lack of access, or from both over time. It presents “use:access ratios” obtained by dividing use by access. The ratio provides an estimate of the proportion of the population using ITNs among those that have access to one within their household. This indicator helps a campaign’s communication team to determine whether poor rates of ITN use are due to:

- Access (insufficient numbers of, or unusable ITNs)
- Geographic variation in perceived malaria risk
- Seasonal variation in perceived risk and/or sleeping patterns
- Preferences in colour, shape, size, etc. (evidence shows this is rarely the case)¹
- Lack of experience with ITNs
- Social norms (presence or lack of a culture of net use)

These findings have different programmatic implications. In areas with high ITN access and low use, social and behaviour change communication (SBCC) might be needed to address specific behavioural determinants (perceived risk, perceived efficacy of changed behaviour to reduce malaria, seasonal use). Where there is persistent low use among those with access despite communication efforts, focused research may be required to improve understanding of the causes of non-use in order to develop more appropriate SBCC strategies.

Where access is low and use is high, communication efforts should reinforce the use of the existing nets in households, but a more important objective should be to ensure more nets are available to households either through mass or continuous distribution channels.

Where campaigns limit the number of ITNs allocated to each household (“caps”), larger households are less likely to obtain all the ITNs they require during mass campaigns. If there are no other ways to obtain nets, such as school or community-based distribution, subsidized or private sector sales, these households will not reach universal coverage. In all settings, women of reproductive age and young children are the priority for ITN use when the household has insufficient nets. Communication planning should take into account messaging about who should use the nets available when there are not enough and the reasons why.

The ITN Access and Use report also provides sub-national data that can be used to determine where to direct SBCC activities, which is an important consideration in the face of insufficient resources.

Resources:

- Using household surveys to inform malaria SBCC (webinar recording), MIS and DHS surveys can be found at the demographic health survey website: <https://dhsprogram.com>.

1.3 Routine health system data

Data coming from the routine health system are often the first source to demonstrate where there are potential problems with uptake and use of malaria prevention, diagnosis and treatment interventions. This can be seen when, for example, malaria cases and deaths show a consistent rise over time, beyond what could be typically expected based on data and trends from previous years. Research to understand the increased malaria burden may show various issues – no access to

1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5455118/pdf/12936_2017_Article_1879.pdf.

ITNs, non-use of ITNs, late treatment-seeking behaviour – that can help with development and targeting of communication messages.

In the case that a malaria epidemic is declared based on number of cases and deaths, an investigation into the causes may show that part of the reason for the outbreak is non-use of available ITNs. NMCP communication staff can use this information to begin to understand the reasons behind non-use and to develop targeted communication messages for dissemination through appropriate and acceptable channels. Countries that experience regular malaria outbreaks where causes and risks are similar each year should work to have communication materials ready for deployment in advance of the normal period of increased malaria transmission.

Routine health system data may also provide a good idea of areas of a country that may have more “old” nets in households by looking at uptake of nets through continuous distribution channels over the years prior to the campaign. Where old nets exist in large quantities, communication activities and messages may need to focus more attention on replacement and repurposing.

1.4 ITN distribution and survey reports

ITN distribution and survey reports contain valuable existing data to inform a campaign’s communication messages. It is essential that communication planners review these documents, reflect upon challenges that have been previously identified and review and adopt recommendations for improvements aligned with best practices.

One category of such reports consists of post-distribution surveys looking at either mass distribution campaigns or continuous distribution. Some, but not all donors allow or recommend that these be carried out immediately after the distribution or during the next rainy season to record the performance of the campaign. The questionnaires and indicators should be standardized with the ITN module of the MIS

(see Resources) and are typically quantitative. By including some behavioural and attitude questions in the survey, results of post-distribution surveys can be used to identify gaps in knowledge and behaviour that affect communication planning to allow for follow-up on specific issues through qualitative research.

Process evaluations of ITN distribution, both during and following activities, allow for more focus on qualitative information. Information may be collected through in-depth interviews with key campaign actors, exit surveys, household visits or focus group discussions. Where countries have undertaken, either internally or through an independent body, process evaluations of their ITN distributions, rich information may be available about net hanging and use, as well as useful information concerning SBCC exposure, particularly the most effective communication channels and messages recalled by target groups.

Other sources of information to inform communication planning may come from supervision and monitoring reports for routine activities, where observations are made. Observations may include non-use or misuse of ITNs, such as ITNs being used for fishing. Observations about neutral or beneficial repurposing are also useful sources of information, for example if ITNs are visible in gardens being used to cover vegetables, or in homes to make window screens or curtains, etc.

Resources:

- [MIS questionnaire](#)
- [Measuring malaria through household surveys](#)

2. Review of published and grey literature

Reviewing published and grey literature can provide rich information on areas such as net preferences, net repurposing and potential misuse and can guide development of key messages to be used for communication. Research that breaks down ITN use by age and gender can also be valuable in allowing for much greater message

specificity, as well as an effective and efficient selection of channels, targeting those groups that are less likely to have access to an ITN or to use an ITN.

Different countries may have similar issues. A good example is the prevalence of fishing with mosquito nets where it can be helpful to review any research and publications about the work being done in neighbouring countries to better address this issue^{2,3,4}. Reviewing the results of research focused on changing behaviours among specific population groups, including the outcomes, conclusions and recommendations, may inspire different thinking about how to approach communication strategy and message development. Published literature is a good source for cross-country sharing of information and experience. National Malaria Control Programmes and their partners should consider publishing their research where they have had success in addressing difficult issues or have used approaches that are novel or that have a demonstrated effect on changing behaviour.

Research findings are often published in online peer-review journals like the Malaria Journal (<https://malariajournal.biomedcentral.com/>), PLOS (<https://www.plos.org/publications>) and Global Health: Science and Practice (<http://www.ghspjournal.org>). Research on different aspects of ITNs for vector control, including results from Knowledge, Attitude and Practice studies (KAPS), can also be found by searching PubMed.

Resources:

- [ITN access indicator snapshot](#) (YouTube video in English. [In French.](#))
- [Quantifying seasonal patterns of ITN use across climatic zones in Sub-Saharan Africa](#) (PDF).
- [ITN Access and Use-Mapping Net Culture in Sub-Saharan Africa presentation.](#)
- [World Malaria Report and Profiles.](#)

3. Conducting new research

National Malaria Control Programmes and their technical and financial partners should plan for research to support communication efforts in order to avoid stagnation in message development. Research may show, for example, that messages prepared for earlier campaigns or earlier phases of continuous distribution are no longer aligned with current perceptions and behaviours.

3.1 Understanding behaviour

Among populations that have benefited from several distribution campaigns and continuous distribution methods, knowledge of key messages on use and care may be high. Even so, usage goals may not be reached. Qualitative research may help inform how to better tailor messages to specific behaviours. A variety of behaviours may explain discrepancies between knowledge and use. For instance, research may indicate that populations in some areas stop sleeping under nets during the dry season when mosquito density decreases or when people sleep outdoors. In some cases, household members travel to attend religious events or participate in kinship activities and fail to use nets.

Investment in research will increase the value-for-money of communication efforts.

2. Short, RE, The use of mosquito nets in artisanal fisheries: The need for cross sectoral collaboration in resolving a wicked problem. Interdisciplinary Centre for Conservation Science.
3. Lehman A, Bed net use and misuse: a complex, cross-sectoral picture on Lake Tanganyika, Lake Tanganyika Floating Health Clinic/Wave/AMP Partners Meeting 2017.
4. VectorWorks Core (2017). Assessing the use of mosquito nets for fishing in Malawi.

COUNTRY CASE STUDY

In Ghana, March 2018, a study entitled *Understanding the gap between access and use: a qualitative study on barriers and facilitators to consistent use of ITNs*, was conducted to complement the national quantitative ITN studies. Working with 174 community members, health workers and community leaders, study implementers used qualitative methods such as focus group discussions, listing and ranking activities to understand the barriers and facilitators to consistent use of ITNs in Ghana. Barriers among those that did not use an ITN consistently related to low perceived benefit of using ITNs, negative side-effects like itchy skin and heat, as well as lack of education on how ITNs prevented malaria. Motivators of ITN use related to previous positive experience of using an ITN and previous experience of them or someone close to them getting severely ill with malaria.

Research efforts at sub-national or local levels provide insight into:

- Specific local behaviours and norms that may require adapted communication strategies and messages
- Attitudes, practices and behaviours that may need to be addressed to improve outcomes
- ITN use differentials by gender and age
- Culturally effective communication motifs for achieving behaviour change
- Relative effectiveness of channels for conveying messages and having an impact, such as the media, religious institutions, traditional leaders, town announcers, community health workers, health facility staff, members of one's social network, printed materials such as campaign flyers, and others
- Common practices for repurposing old nets

COUNTRY CASE STUDY

In 2016 in Uganda's Tororo district, a series of post-campaign focus groups studies were undertaken to:

- Assess the effectiveness of the various ITN communication approaches in reaching the campaign's target audiences
- Establish whether the various campaign messages were effective in creating awareness and demand for ITNs
- Evaluate the resonance of the campaign messages on target audiences' attitudes, knowledge and practices regarding ITNs
- Determine the current level of household ownership and use/non-use of ITNs
- Establish the community perception of the value of ITNs in mosquito control

Among the findings about radio spots that had been aired during the distribution campaign, individuals participating in the focus group discussion said they were influenced by the portrayal of characters to whom they could relate, such as an uncle character and a mother figure, named Mama Tito. Findings like this can help inform subsequent campaigns about appropriate cultural motifs to be considered during planning.