

Malawi MBS Brief

What Do the Data Mean?

INTRODUCTION

With funding from the U.S. President's Malaria Initiative, the Breakthrough ACTION project, managed by the Johns Hopkins Center for Communication Programs, collaborated with the Malawi National Malaria Control Program and other stakeholders to implement a Malaria Behavior Survey (MBS) on the psychosocial determinants of malaria-related behaviors from a representative sample of households. The behaviors examined included net use, net care, prompt and appropriate care-seeking, antenatal care, and receipt of IPTp. Data on respondents' media habits were also collected. The study, fielded nationally in three distinct geographic zones from May-July 2021, used a cross-sectional survey with structured questionnaires administered to a random sample of women (15-49 years old) and men (18-59 years old) of reproductive age. The analysis utilized bivariate and multiple logistic regression to test the associations between determinants and behaviors.

The study had two main objectives: to provide a better understanding of the sociodemographic and ideational characteristics (as described by [the Ideation model of behavior change](#)) associated with malaria-related behavioral outcomes in Malawi and to determine the appropriate focus of social and behavior change (SBC) programmatic activities.

WHAT DO THE DATA MEAN?

This MBS brief summarizes the proportion of the population practicing recommended malaria-related behaviors and the demographic and psychosocial factors associated with those behaviors. The brief uses these results to present corresponding recommendations for SBC activities. Statistically

significant correlations from multiple-regression analysis, when available and appropriate, form the basis of the recommendations. Regression results are reported only when statistically significant. A complete report is available on the [MBS website](#) and key data points are visualized on the interactive [MBS Dashboard](#).

Malawi MBS Study Zones



Breakthrough ACTION collected information from:



3,862
households



5,485 individual respondents
4,181 women | 1,304 men



Malaria Case Management

BEHAVIORS AT-A-GLANCE

Of the reported 913 children under five years of age with fever within the two weeks prior to the survey:



83%

of caregivers sought some form of care for the children



72%

of caregivers reported seeking care promptly

76% Northern Zone

66% Central Zone

74% Southern Zone



70%

of caregivers reported seeking **appropriate care** the same or next day for their febrile child under five



SBC RECOMMENDATIONS

1 CHALLENGE: Thirty percent of caregivers did not seek prompt and appropriate care for their febrile child under five, defined as seeking treatment the same day or next day following the onset of fever at a health facility or community health worker (CHW). To improve this, SBC activities should:

- **Improve knowledge of prompt and appropriate care-seeking.** Knowledge of all aspects of care-seeking was associated with **1.65 higher odds (p<0.01)** across all zones, but only **60%** of respondents had this knowledge. In particular, knowledge about the recommended malaria testing and treatment was low and can be boosted.
- **Encourage discussion about malaria with others.** Women who discussed malaria with their partner, family or friends were **35% (p<0.05) more likely** to bring their febrile child to a health care facility or CHW on the same or next day of onset of fever, across all zones. Only about **40%** of respondents stated that they had recently discussed malaria with others. SBC activities should consider using role models to express their detailed plans for how they will secure funds and travel to a health facility for prompt and appropriate care when a child develops a fever and encourage families to develop their own plans and intentions. Activities can also explicitly support caregivers with planning tools to help them identify situational cues that merit prompt care-seeking (such as fever onset) and where and how

they would achieve the goal of seeking care promptly and from appropriate sources. Encouraging caregivers to talk about these plans in a peer group setting and recognizing those who follow through will strengthen their commitment and normative perceptions.

2 CHALLENGE: Only 59% of respondents held favorable perceptions of health facility-based workers and 50% held favorable perceptions of community health workers (CHWs).

- **Improve perceptions of healthcare workers, particularly community health workers (CHWs) and malaria testing.** CHWs are an accessible health resource to communities and can test and treat for malaria quickly. However, participants' favorable perceptions of CHWs related to their ability to test (**54%**) and treat (**44%**) for malaria can be increased. SBC programs can promote the services provided by CHWs as capable and rapid sources of care, while also working closely with service delivery programs to ensure that malaria test and treatment stock-outs or other concerns are quickly reported and righted, and **15%** incorrectly stated paracetamol as the appropriate treatments.

Insecticide-Treated Nets

BEHAVIORS AT-A-GLANCE



Net access and use

Population ITN access is the proportion of the household population that could use an ITN, assuming that 1 ITN can be shared by up to 2 people. ITN access in Malawi was **low** at the time of the MBS.

43% All Zones **37%** Northern Zone
39% Central Zone **54%** Southern Zone

The **ITN use:access ratio** indicates the ratio of people who slept under an insecticide-treated net (ITN) the previous night (use) to people who could have slept under a net, assuming each net in the household provides access for up to two people (access). The ITN use:access ratio in Malawi was **high**.

ITN use:access ratio

0.95 All Zones
0.89 Northern Zone **0.89** Urban Areas
1.03 Central Zone **0.98** Rural Areas
0.94 Southern Zone



Consistent use of nets

55%
of respondents reportedly use a net every night of the week

47%
Northern

57%
Central

64%
Southern



Net care

57%
of respondents report rolling up or tying their net when not in use (*Recommended*)

18%
of respondents report handling nets with care (*Recommended*)

Of all ITNs found in households:

29%
were over-washed (reportedly washed more than twice in 6 months) (*NOT recommended*)

43%
were over-washed in urban areas (*NOT recommended*)

64%
were washed with powder/liquid soap (*NOT recommended*)

32%
were dried in the sun (*NOT recommended*)



SBC RECOMMENDATIONS

Regression results for consistent ITN use control for number of ITNs in the household.

1 CHALLENGE: While the ITN use:access ratio is high in Malawi (0.95), ITN access is low (43%). As a result, only 55% of respondents reported consistent net use (sleeping under a net every night of the week). To promote consistent net use every night and throughout the year, and maintain the existing strong culture of net use, programs in Malawi can:

- **Increase access to ITNs throughout the country.** Mass ITN distributions will raise access to ITNs nationwide and effective continuous distribution channels will help sustain access in between mass distributions.
- **Strengthen self-efficacy (the belief that one can perform a behavior).** Those reporting high levels of

self-efficacy to use mosquito nets had **4.65 higher odds (p<.001)** of using ITNs every night than those who did not. To increase self-efficacy, SBC activities can portray opinion leaders modeling ITN use in situations community members can identify. For example, the population's confidence to use ITNs every night can be increased by promoting options for ITN hanging and use in more logistically complex situations such as over mats.

- **Promote a positive attitude toward ITN use.** Those who reported a positive attitude toward the use of ITNs were **37% more likely (p<.01)** to sleep under a net every night than those who did not. SBC programs can promote non-malaria benefits such as a peaceful night's sleep, making a sleeping space look tidy, private, and attractive,

and protection from nuisance biting. Opinion leaders expressing positive statements toward ITNs can also increase positive attitudes among their community.

- **Position ITN use every night as a community norm.** The perception that sleeping under an ITN is the norm in the community was associated with **20% greater likelihood ($p < .05$)** to sleep under an ITN every night. SBC activities can make this social norm more visible to the community with testimonials from a wide range of community members attesting to their ITN use and net care behaviors and their benefits. On a broader scale, SBC programs can position net use as a positive cultural or national norm.

2 CHALLENGE: ITN care behaviors are only moderately practiced, potentially limiting their effective lifespan of nets ITN access. Just 57% of respondents stated that they fold or tie up their nets when not in use and as many as 64% of net were washed with harsh detergents. Recommended net care behaviors include keeping the net away from children, pests, and food, rolling or tying up nets when not in use, handling nets with care, not soiling the net with food, keeping it away from flame or fire, washing it gently with mild soap or water only, and washing only when dirty. To promote net care behaviors, SBC programs can:

- **Leverage and maintain people's belief that ITNs work to prevent malaria.** Respondents who perceive that ITNs are effective against malaria had **14% higher odds ($p < .05$)** of

reporting that they care for ITNs by folding or tying them up when not in use. More than half of respondents (**61%**) believed in the effectiveness of ITNs but was this was lower among those in the lowest wealth quintile (**56%**) and those who did not complete a primary education (**55%**). SBC programs can work with communities to understand reasons why ITNs may not be perceived effective to prevent malaria and address those concerns and doubts through community-based activities and opinion leaders. In addition, SBC activities that promote ITN care should make it clear that the benefit of caring for an ITN is precisely to maintain its effectiveness for as long as possible.

- **Sustain positive attitudes towards ITN care.** Respondents who held positive attitudes towards net care were **63% more likely ($p < 0.001$)** of reporting that they care for ITNs by folding or tying them up when not in use. SBC programs can maintain these positive attitudes by continuing to emphasize that caring for ITNs is an effective way to increase an ITN's longevity and that caring for ITNs takes only simple changes to current routines. Visuals that show the difference between an old but well-cared-for net and a newer, yet worn-out net can make the potential financial and health impact more tangible. Finally, testimonies from influencers and peers can boost the perception that net care is a desirable practice.

Antenatal Care (ANC) and Intermittent Preventive Treatment During Pregnancy (IPTp)

BEHAVIORS AT-A-GLANCE

Of the 1,474 women surveyed who reported a pregnancy during the previous two years:



99%

reported attending at least 1 antenatal care (ANC) visit

69%

reported 4 or more ANC visits (national recommendation)



99%

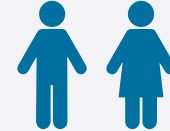
reported they received at least 1 dose of intermittent preventive treatment during pregnancy (IPTp)

60%

reported they received at least 3 doses of IPTp (national recommendation)

94%

intend to take IPTp in their next pregnancy*



Only **42%**

reported starting ANC in their first trimester of their last pregnancy

72%

intend to start ANC in the first trimester of their next pregnancy*

72%

were accompanied by their partner to at least 1 ANC visit, and this was lowest among women in urban areas at **54%**

53%

feel that they would not be allowed an ANC visit without their partner

*Among the 1,674 women who intended to have a future pregnancy



SBC RECOMMENDATIONS

1 CHALLENGE: Less than half (42%) of women with a live birth in the last 2 years initiated ANC during the first trimester of their last pregnancy. The sooner a pregnant woman begins ANC, the more opportunities she will have to take IPTp at least 3 times to protect against malaria. By contrast, 72% of women intend to start ANC early in their next pregnancy. SBC programs can leverage this intention by:

- **Build knowledge that preventive care should start as soon as a woman believes she may be pregnant.** The odds of intending to attend ANC early were **two times higher (p<0.001)** for women with correct knowledge related to ANC and preventing malaria in pregnancy than those without such knowledge. As many as 30% of women and 24% of men believe a pregnant woman must wait a few months before first consulting a health worker. Further, many women may not know that ANC is preventative care and that she should go to the clinic even if she is feeling well or normal. Knowledge can

be increased through interpersonal and mass media communication as well as targeted SMS.

- **Encourage positive attitudes towards IPTp.** Women with positive attitudes towards ANC and IPTp were **49% more likely (p<0.01)** to intending to seek ANC in the first trimester of their next pregnancy. To increase favorable attitudes, SBC activities can feature women sharing positive perceptions of ANC and IPTp, debunking common misconceptions, and discussing how they benefited from accessing these services early and often, not only for malaria prevention.

2 CHALLENGE: As many as 40% of the women who had a live birth in the last 2 years did not report taking at least 3 doses of IPTp during that pregnancy, although 94% intend to take some IPTp in a future pregnancy. In addition to ensuring there is adequate supply of SP at health facilities and for ANC providers to offer it to pregnancy women, SBC programs can:

- **Improve people’s perceptions of healthcare workers providing malaria in pregnancy services. Only about 50% of respondents** had favorable perceptions of facility-based health workers. When people feel positively about their interactions with healthcare workers, they are more likely to seek them out for advice or treatment. Provider behavior change interventions aimed at improving interactions with clients could improve community and individual perceptions of health providers.
- **Change perceptions that hinder women from initiating ANC in the first trimester.** As many as **30%** of women and **24%** of men believe a pregnant woman must wait a few months before first consulting a health worker instead of initiating ANC as soon as she suspects she is pregnant. Trusted community leaders and community outreach by CHWs and midwives can help debunk this belief. Initiating ANC as early as possible gives women the greatest opportunity to obtain the recommended at least 3 doses of IPTp.

Media Habits and Channels

AT-A-GLANCE



Exposure to Malaria Messages

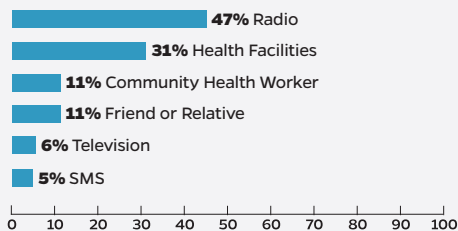
28%

had heard a malaria message in the 6 months before the survey, and was highest in central zone at **34%**

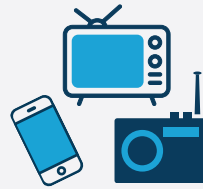
51% of women and **38%** of men were able to complete the Ministry of Health campaign slogan

68% heard this slogan on the radio and **26%** at health facilities

Sources of malaria messages, among those who had heard them in the past 6 months



Participants could select multiple options; social media usage was not measured



34%

of households own a radio

34% Northern Zone

31% Central Zone

38% Southern Zone



17%

listen to radio in the late morning (8 am to 12 pm)

33%

listen to radio in the afternoon (12 pm to 4 pm)

44%

listen to radio early in the evening (4 pm to 8 pm)



10%

watch TV at least once a week

42%

listen to the radio at least once a week, regardless of radio ownership

80%

of respondents who own a radio listen to radio programs regularly

46%

own a mobile phone



MEDIA RECOMMENDATIONS

1 CHALLENGE: Only 28% of respondents heard a message about malaria in the past six months. Exposure rates can be influenced by the timing and frequency of implementation, the choice of channels, and how well the design and content of the materials resonated with the audience. To increase exposure, SBC programs can:

- **Broadcast radio materials based on the specific media habits of the audience.** Ensure that young people (15-24) and people with limited educational levels or low socioeconomic status are priority groups for SBC on malaria, given their vulnerability, role in the household, and/or lower uptake of behaviors. Priority should be given to channels they are more likely to access, which includes radio. Additionally, early evening to late evening is the best time to reach the limited television audience, while early evening and afternoon are better times for radio.

- **Include mobile phones in SBC activities.** About half (**46%**) of respondents owned a mobile phone, whereas only **10%** of respondents watched TV at least once a week. Mobile phones are therefore a promising platform to engage people in malaria prevention discussions and can be part of a transmedia approach using storylines across TV, radio, and mobile platforms to strengthen exposure and recall.
- **Harness the power of health facilities to disseminate malaria related messaging.** About **31%** of respondents named health facilities as their source of messages on malaria. SBC programs can build on this to ensure that health providers are prepared to maximize the opportunity to discuss malaria prevention with clients and that health facilities have audience specific materials and tools for the high priority groups noted above.