

Benin MBS Brief

What Do the Data Mean?

INTRODUCTION

With funding from the U.S. President's Malaria Initiative and the Global Fund, the Johns Hopkins Center for Communication Programs collaborated with the National Malaria Control Program in Benin 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 study, implemented as part of the Breakthrough ACTION project, was fielded during the 2021 rainy season (November - December 2021). It 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 goal of this study was twofold: to provide a better understanding of the sociodemographic and ideational characteristics associated with malaria-related behavioral outcomes in Benin and to determine the appropriate focus of social and behavior change (SBC) programmatic activities.

WHAT DO THE DATA MEAN?

For each intervention area, this MBS brief summarizes the key implications and recommendations for SBC activities informed by the psychosocial factors measured in the survey. Statistically significant correlations from multiple-regression analysis, when available and appropriate, form the basis of the recommendations. Regression results are reported across all zones when statistically significant, and when applicable, also at the lowest geographic zone for which they are statistically significant. The full and detailed results of the MBS can be found on the [MBS website](#).


Benin MBS Study Zones

- North
- Center
- South



Breakthrough ACTION collected information from:

 **3534 households**

 **6071 individual respondents**
(4535 women and 1536 men)



MINISTÈRE DE LA SANTÉ
RÉPUBLIQUE DU BÉNIN

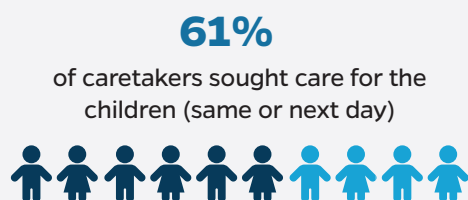


The Johns Hopkins Center for Communication Programs implemented this survey as part of the Breakthrough ACTION project. Breakthrough ACTION is funded by USAID and the U.S. President's Malaria Initiative under the terms of Cooperative Agreement No. AID-OAA-A-17-00017. The survey also received financial support from the Global Fund through the National Malaria Control Program of Benin.

Case Management

BEHAVIORS AT-A-GLANCE

Of the reported 24% of children under five years of age with fever within the two weeks prior to the survey:



53%

of reported febrile children under five were brought to a health facility or community health worker (CHW) first, and on the same day or the day after the fever began; this varied by zone:

63% North 52% Center 45% South



Timely care was similar in urban and rural areas but more prevalent among wealthier households



SBC RECOMMENDATIONS

1 Continue to promote prompt (same/next day) care seeking from qualified providers, including CHWs, for children with fever. There is room for improvement on this behavior, especially in the South zone (at 45%). To be effective, activities can:

- **Position immediate care seeking as a community norm.** Less than half of respondents in the South (46%) believed that most people in their community take their children to a health provider on the same day or the following day after children develop a fever. Among respondents who did believe that early care seeking was the norm, the odds of practicing that behavior increased more than **two-fold** (AOR: 2.40; $p < 0.001$).
- **Improve knowledge of early care seeking.** Fewer than one third of respondents overall (28%) correctly knew when or where to seek care, and low knowledge was most pronounced in the Central zone (18%). However, knowledge of appropriate care **increased odds of practicing the behavior eight times**, compared to people without knowledge of appropriate care (AOR: 8.11; $p < 0.001$).
- **Promote couple communication about malaria.** Respondents who said they discussed malaria with their spouse or partner in the preceding six months had **two-times increased odds** (AOR: 2.13; $p < 0.01$) of practicing appropriate care seeking, compared to people who had not discussed malaria.

2 Reinforce knowledge about malaria testing. Information in need of strengthening includes:

- **Perception that a blood draw is the best method to test for malaria in children with fever.** Overall, only **40%** of respondents believed that drawing blood for a malaria test was the best way to know if someone had malaria (only 26% in the Central zone). Moreover, less than half (46%) of caregivers of children who had a fever in the previous two weeks said these children were tested for malaria.

3 Reinforce knowledge about artemisinin combination therapy (ACTs) as the proper treatment for malaria. Information in need of strengthening includes:

- **Knowledge of ACTs.** While 72% of women knew ACT is an effective treatment for malaria, only 39% of women reported that a confirmed case of malaria was treated with ACT. Furthermore, up to **41%** of women agreed that if their child has a fever it is best to administer any malaria medicine they may have at home, and 48% said they prefer to buy medicine at a location other than a health facility.
- **Adherence to ACT dosage.** Almost two-thirds (**63%**) of female respondents agreed that it is appropriate to stop administering medicine once the child no longer appears sick, rather than completing the prescribed course.

Insecticide-Treated Nets

BEHAVIORS AT-A-GLANCE

The 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 use:access ratio for all zones combined was 0.89, with only slight differences between zones (0.85 in the North; 0.89 in the Center; 0.93 in the South).



82%

of the respondents reported consistent bed net use (every night in the previous week), and varied by zone:

75% North

84% Center

88% South

Of all ITNs found in the household:

18%

were suspended and tied up

68%

were suspended, not tied up, and vulnerable to damage



64%

were washed or dried in the sun



SBC RECOMMENDATIONS

1 Continue to promote consistent net use every night and throughout the year to maintain current users and encourage others with access to use ITNs every night. With only 82% of nets in the household being used every night, there is room for improvement. To be effective, in addition to increasing access to ITNs in households, activities can:

- **Promote a positive attitude toward ITN use.** Those who reported a positive attitude toward the use of ITNs were **2.9 times** ($p < 0.001$) more likely to sleep under a net every night than those who did not, across all zones. One way to support a positive attitude is to promote a good night's sleep under an ITN.
- **Promote efficacy of bed nets to prevent malaria.** Overall, only **59%** of respondents believed that bed nets were effective in preventing malaria, with the lowest proportion in the North (48%).
- **Promote actions to prolong the life of a bed net.** Those who reported a belief that there are actions one can take to help the mosquito net last longer were **1.4** ($p < 0.01$)

times more likely to sleep under a net every night than those who did not, across all zones. Indeed, 68% of nets were suspended but not tied, and 64% of nets were dried in the sun.

- **Position ITN use every night as a community norm.** Only 69% of respondents believed that others in their community consistently use bed nets. However, believing that others in one's community will approve of sleeping under an ITN was associated with **78% ($p < 0.001$) higher odds** of sleeping under a net every night compared to those who did not believe that others would approve.
- **Continue using mass media to communicate risk of malaria.** Exposure to messages about net use were associated with **32% ($p < 0.05$) higher odds** of sleeping under a net every night as compared to people who were not exposed, and people who perceived themselves to be susceptible to malaria had 48% ($p < 0.05$) higher odds of sleeping under a net every night as compared to those who did not perceive themselves to be susceptible to malaria. Furthermore, individuals in the North who listened to the radio regularly had 71% ($p < 0.05$) higher odds of sleeping under a net every night as compared to those who did not regularly listen to the radio.

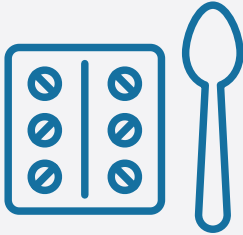
2 Promote net care behaviors to increase the useful lifespan of available nets; these behaviors are moderately practiced:

- **Increase knowledge about and promote net care practices.** Only one in five (18%) nets were observed to be hung, folded, and tied as recommended. **80%** were found suspended or stored in such a way that exposed them to significant damage. Additionally, 64% of washed ITNs were dried out in the sun after washing, which can deplete the insecticide at a faster rate.
- **Increase self-efficacy for net care.** Less than a third (**28%**) of respondents believed that there are actions one can take to prolong the life of a bed net, with the lowest proportion in the Center (18%).

Seasonal Malaria Chemoprevention (SMC)

BEHAVIORS AT-A-GLANCE

In the two departments in northern Benin that offer SMC, 95% of people knew of the program and 97% of people viewed it favorably.



88%

of people perceived SMC as effective in preventing malaria



97%

of eligible households reported that SMC distributors provided doses for their children



77%

of households knew how many days a child must take SMC medication during the rainy season

92%

said the distributor observed the child taking the first dose



SBC RECOMMENDATIONS

1 Future SMC campaigns should promote the fact that the medication is very safe, that side effects are rare, and that any side effects that occur are usually very minor:

- **Improve perceptions of the safety of SMC.** One in four (26%) of respondents believed their child would become sick if they took SMC medication.

2 Strengthening the interpersonal communication skills of distributors may alleviate caregivers' perceptions of coercion:

- **Promote the voluntary nature of SMC.** Two in five (38%) of respondents said they felt compelled to accept medicines offered by SMC distributors. Interviewing distributors and observing their work may shed light on how this aspect of the SMC program could be improved. Pressure to meet high targets, for example, may result in rushed interactions that do not allow caregivers to voice their concerns.

3 Perceived norms about SMC in the community are low. Increasing the perception that more people are accepting SMC and administering all doses of SMC may strengthen the program across several dimensions:

- **Publicize local distribution efforts from a community norms perspective.** Only 66% of respondents said they believed half of people in their community gave their children all the doses of SMC left by the distributor.
- **Reinforce messaging that SMC medication is for children under 5.** About 40% of households perceived families in their community to give SMC meds to other children in the household over 5-years of age.

Indoor Residual Spraying (IRS)

BEHAVIORS AT-A-GLANCE

In the three departments in northern Benin that offer IRS, 83% of people knew of the program and 85% of people thought favorably about it.



84%

of people who knew about IRS were willing to accept it

46%

of people who did not know about IRS were willing to accept it



88%

of respondents believed IRS was effective in preventing malaria

25%

reported IRS is an effective way to kill mosquitos



58%

of eligible households were approached for spraying in the past 12 months



SBC RECOMMENDATIONS

1 Systematize IRS spraying campaigns to achieve higher coverage in IRS zones:

- **Work with community leaders and trusted neighbors.** Only **58%** of eligible households were approached for spraying in the preceding 12 months. SBC efforts should encourage households to work with community leaders and trusted neighbors to participate in IRS plan for the event that someone is not home during spraying.

2 Promote IRS as an effective means to kill mosquitos:

- **Create more diverse SBC messaging.** While **88%** of respondents thought IRS could prevent malaria, only **25%** believed IRS would kill mosquitos. Similarly, SBC efforts should advise households to avoid washing, re-plastering, or repainting households after they have been sprayed. Consider advising households to do these before or at the beginning of spray season instead.

ANC and Intermittent Preventive Treatment During Pregnancy

BEHAVIORS AT-A-GLANCE

Of the 27% of women surveyed who reported a pregnancy during the two years preceding the survey:

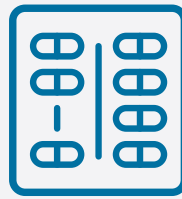


76%

reported attendance at four or more ANC visits (national recommendation)

94%

reported attending at least one antenatal care (ANC) visit



91%

reported receiving at least one dose of intermittent preventive treatment during pregnancy (IPTp)



56%

reported receiving three or more doses of IPTp, with the lowest rates among women in the South (47%)



SBC RECOMMENDATIONS

1 Increase knowledge about IPTp, particularly the number and timing of doses of sulfadoxine-pyrimethamine (SP) to be taken during pregnancy. Activities can:

- **Increase knowledge.** Only **18%** of the respondents knew that a woman should start ANC in the first trimester of pregnancy or as soon as she suspects she might be pregnant, the number of times a pregnant woman should receive ANC, and the number of times a woman should receive the SP during pregnancy.
- **Promote free cost of SP.** One in four (**29%**) of respondents believe that health workers make their clients pay for SP.
- **Promote recommended doses of SP and number of ANC visits.** While **91%** of women received at least one dose of SP, whether they received four ANC consultations or not, only **62%** of women who received four ANC consultations also received three or more doses of SP, and only **38%** of women who did not receive four ANC consultations received three doses of SP.

2 Emphasize the importance of starting ANC early in pregnancy. Interventions promoting ANC remain relevant and should focus on the number of ANC visits, the recommended time for the first visit, and the importance of IPTp being given to all pregnant women to prevent malaria. To be effective, activities can:

- **Work with health providers to promote early ANC.** Four in five (**80%**) of respondents had the perception that if a woman goes to the health facility during the first three months of her pregnancy, the providers will send her away. This belief was highest among people aged 25-34 years (**87%**). Accordingly, only **82%** of women attended ANC during their first trimester.
- **Capitalize on high existing self-efficacy.** Having a high perceived self-efficacy to obtain ANC/IPTp was associated with **4.5 (p<0.01) times higher odds** of intending to obtain the first ANC during the first trimester of the next pregnancy.

3 Emphasize the importance of male involvement in antenatal care and communication between spouses regarding ANC. Interventions can:

- **Promote inter-spousal dialogue and equitable decision-making about ANC.** Only **37%** reported ever having discussed ANC with their spouse, and only **41%** of women reported that they participated in decisions about obtaining ANC, compared to 83% of men. Respondents who reported having discussed malaria with a spouse or friend had **1.9 (p<0.05) times higher odds** of intending to obtain early ANC during their next pregnancy. Furthermore, only 49% of women reported that their spouse had accompanied them to ANC, with the lowest proportion in the South (37%) and highest in the North (**71%**).

4 Take advantage of high self-efficacy, and promote attitudes and community norms favorable to ANC and SP. Programs can:

- **Promote a positive attitude.** Attitudes towards ANC and IPTp were low, with only **42%** of respondents reporting positive attitudes, whether male or female. Rural respondents (45%) had more favorable attitudes than their urban (37%) counterparts. Favorable attitudes toward ANC/IPTp were associated with **2.4 (p<0.01) times higher odds** of intending to obtain early ANC.
- **Capitalize on high existing self-efficacy and perceived response efficacy of ANC and IPTp.** Almost all (**94%**) of women feel confident in their ability to obtain ANC/IPTp, compared to 74% of men. Furthermore, **96%** of respondents believe ANC to be effective at preventing malaria and **90%** of respondents believe that IPTp is effective at preventing malaria during pregnancy.
- **Increase community norms.** Only **62%** of respondents believe most women in their community go to ANC care at least four times when they are pregnant. Only **58%** of women believe most women in their community take medicine to prevent malaria when they are pregnant. Finally, only **11%** of respondents believe most people in their community approve of women taking medicine to prevent malaria during pregnancy.

Media Habits and Channels

BEHAVIORS AT-A-GLANCE



26%

of households in Benin own a television

31%

of respondents, both with and without a TV, reported watching television at least once a week; 16% watch television programs regularly

49%

of households own a radio, with some regional differences:



48% North

56% Center

40% South



Community Health Workers (48%) and health workers (40%) were the most frequently cited sources of exposure to malaria messages, with (36%) mentioning radio



More people in the North (38%) reported exposure to malaria messages in the past 6 months than in the other zones (Center 22%, South 21%) There were few differences between male and female, or urban and rural.



Only 10%-13% of people saw malaria messages on television whereas 36% heard messages on radio.



SBC RECOMMENDATIONS

1 Increase the broadcasting frequency of malaria messages at key times throughout the day, across multiple channels.

- Overall, only **28%** of respondents heard a message about malaria in the past six months through mass media, interpersonal channels, and/or community events.

2 Billboards and television were less likely to have reached audiences, compared to radio or interpersonal communication. Community health workers and the radio were the most frequently cited channels of exposure to malaria SBC messages.

- One in three (**36%**) of respondents heard malaria messages on radio, as compared to only 12% on television, whereas **48%** of people reported receiving information on malaria from community health workers. Increasing radio broadcasts and interpersonal communication through health workers could increase exposure to malaria SBC messages.

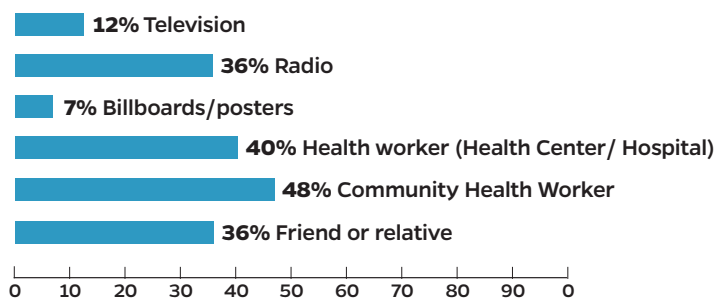
3 Late evening is the best time to reach men and women of any age through television, across zones. Generally, late morning and late evening are the best times to reach men and women of any age by radio, across zones.

- **Nearly 90% of people in the North** could be reached by radio if radio broadcasts were concentrated in **early morning, late morning, and late evening**, whereas early evening and late evening would have the biggest audiences (about **60%** of listeners) in the Center, and late morning and late evening have the most listeners in the South – 60% of listeners.
- **Few men and women** of any age, in any zone, prefer to listen to the radio in the **afternoon or at night**.
- **At least half** (between 49% - 65%) of audiences across zones could be reached by television with broadcasts in late evening. Neither early morning, late morning, afternoon nor night were preferred viewing times in the Center or South, but late morning has potential to reach 19% of the viewing audience in the North.

4 Further research is needed to determine the most relevant additional approaches for reaching each audience¹, including social media and mobile technology as well as targeted social mobilization. Existing platforms, such as CHWs, can also be leveraged to increase exposure.

- **40%-48%** reported hearing messages about malaria from a health worker/ a community health worker, while **36%** reported hearing messages from a friend or relative.
- Populations with more access to television tend to have more access to mobile technology.

Sources of malaria messages



¹ Participants could select multiple options. Social media usage was not measured in this survey.