

## ***Rapid Knowledge, Practices and Coverage (KPC) Survey*** **MODULE 4E: MALARIA**

### **INTERVIEWER INSTRUCTIONS**

#### ORGANIZATION OF THIS MODULE

The Malaria Module contains 15 questions on malaria case management and two sub-modules on malaria prophylaxis during pregnancy and bednet use and maintenance. In the sub-module on bednet use/maintenance, Questions 1, 2, and 4 are highlighted to indicate that they also appear in the *Rapid CATCH*.

#### ASKING QUESTIONS AND RECORDING ANSWERS

In this module, most of the information that you will record is based upon answers directly provided by the mother. One exception is Question 7 in sub-module B, which assesses the quality of the child's mosquito bednet. For that question, you are instructed to inspect the bednet and note its condition on the questionnaire. For all other questions, you will ask the mother for information about her child. It is very important that you ask each question exactly as it is written on the questionnaire. In addition to the questions, there are statements that appear in all capital letters, indicating that they are interviewer instructions and should not be read aloud to the mother.

Most questions in this module have precoded responses. It is important that you do not read these choices aloud to the mother. When you ask a question, you should listen to the mother's response then circle the code next to the category that best matches her answer. For some questions, an OTHER code is included in the list of precoded responses. If the mother provides an answer that does not fit into any of the precoded categories, circle the OTHER code and write the mother's answer in the blank space provided.

#### FILLING IN IDENTIFICATION INFORMATION

Before you begin asking the mother questions, record the cluster, household, and record numbers at the top of the questionnaire. This is the same information that you recorded on the cover page of the survey. In addition, record the child's age and sex in the second set of boxes.

#### Qs.1 and 2: FEVER IN LAST TWO WEEKS

Fever is a common symptom of malaria, which is a major cause of illness and death among young children in many countries. A response of YES to Question 1 is appropriate only if the fever occurred during the two weeks before the date of the interview. Question 2 identifies children who had a febrile episode that ended within the two weeks preceding the survey.

#### Qs.3 through 14: TREATMENT FOR FEVER

Questions 3 through 14 document information related to the treatment of fever. In Question 3, you will ask whether the mother sought advice or treatment for (NAME'S) fever. You will then note the first and second places that she went for treatment in Questions 4 and 8. Questions 5 and 9 ask how long after the mother noticed the fever that she sought treatment.

In Question 10, you will refer back to the mother's answers in Questions 4 and 8 to see if she mentioned a health facility. If she did, check YES and proceed to Question 11. If she did not seek care from a health facility, check NO and skip to Question 12. Circle all medicines given to (NAME) in Question 13. The precoded list of responses for this question includes anti-malarial and other drugs. The mother may report more than one drug, and it is important that you record all that are mentioned. If the mother is unable to recall the name of the drug, ask her to show it to you. If she cannot provide you with the medicine that she gave the child, show her examples of each anti-malarial drug and ask her to identify which, if any, were given to the child. For each anti-malarial drug, you must also circle the correct code that reflects the number of days after the fever started that the child began taking the medicine [0=same day, 1=one day, 2=two days, 3= three or more days, 8=don't know]. Question 14 asks if any of those medicines were injections.

#### SUB-MODULE A, Qs.1 AND 2

These two questions pertain to malaria prophylaxis during pregnancy. In Question 1, you will ask the mother if she took any drugs to prevent malaria while she was pregnant with (NAME). If she answers YES, you will record the drugs that she took in Question 2. Note that the response codes are letters instead of numbers, reminding you that you should circle all drugs that are mentioned.

SUB-MODULE B, Q.2: WHO SLEPT UNDER A BEDNET LAST NIGHT

The mother may report more than one person who slept under a bednet the previous night. Record all individuals mentioned. Whether or not the child (NAME) is mentioned will determine whether to proceed with the remaining bednet questions or end the module. As long as the mother mentions the child, regardless of whether she reports other family members, you are instructed to proceed to the next question (Q.3). If the mother mentions other individuals but does not mention the child, do not ask the remaining questions in the module.

SUB-MODULE B, Q.3: HOW LONG AGO WAS THE BEDNET BOUGHT OR OBTAINED?

SUB-MODULE B, Q.5: HOW LONG AGO WAS THE BEDNET LAST SOAKED OR DIPPED?

SUB-MODULE B, Q.6: HAVE YOU OR SOMEONE ELSE IN YOUR HOUSE EVER WASHED THE BEDNET? (RECORD NUMBER OF TIMES)

For all three of these questions, there is no precoded list of responses. For each question, write the mother's response in the two boxes provided. If her answer has fewer digits than the number of boxes, fill in the left box with a "0" then record her answer in the second box. For example, if the mother reports that the bednet was bought "7" months ago, you should record "07" in the two boxes provided.

SKIP PATTERNS FOR MALARIA MODULE

It is very important that you ask the mother only those questions that are relevant to her child's situation. For example, a mother whose child did not have a fever in the last two weeks should not be asked questions about treatment received for fever. For certain questions, you are instructed to skip to the next appropriate question if the mother gives a particular response. Skip instructions are located in the far right-hand column of the questionnaire. The following list summarizes all skip patterns within the Malaria Module.

	Question	Response	Instructions
	Q.1. "Has (NAME) been ill with fever in the last two weeks?"	yes (1) no (2); don't know (8)	Go to Q.2 SKIP TO Q.15
	Q.3. "Did you seek advice or treatment for (NAME'S) fever?"	yes (1) no (2); don't know (8)	Go to Q.4 SKIP to Q.15
	Q.7. "Did you go anywhere else for advice or treatment for (NAME'S) fever?"	yes (1) no (2); don't know (8)	Go to Q.8 SKIP to Q.10
	Q.10. HEALTH-FACILITY CARE OR NO HEALTH-FACILITY CARE?	yes no	Go to Q.11 SKIP to Q.12
	Q.11. "Was (NAME) treated with any medicines before going to the health facility?"	yes (1) no (2); don't know (8)	SKIP to Q.13 SKIP to Q.15
	Q.12. "Was (NAME) treated with any medicines?"	yes (1) no (2); don't know (8)	GO to Q.13 SKIP to Q.15
<b>SUB-MODULE A</b>	Q.1. "When you were pregnant with (NAME), did you take any drugs to prevent you from getting malaria?"	yes (1) no (2)	Go to Q.2 END SUB-MODULE A
<b>SUB-MODULE B</b>	Q.1. "Do you have any bednets in your house?"	yes (1) no (2); don't know	Go to Q.2 END SUB-MODULE B
	Q.2. "Who slept under a bednet last night?"	If (NAME) mentioned If (NAME) not mentioned	Go to Q.3 END SUB-MODULE B
	Q.4. "Was the bednet ever soaked or dipped in a liquid to repel mosquitoes or bugs?"	yes (1) no (2); don't know (8)	Go to Q.5 SKIP TO Q.6

### SUGGESTED QUALITATIVE RESEARCH QUESTIONS

Certain topics are better explored using qualitative research techniques rather than a structured questionnaire. It is suggested that answers to the following questions be obtained from key informants or focus group discussions:

- C        What do you know about malaria?
- C        How do people in your community get a fever (malaria)?
- C        How can you tell if a person has malaria?
- C        What do people in your community do to avoid getting malaria?
- C        What do people in your community do when a child has a fever?

The qualitative research component will yield important information on community knowledge, beliefs, and normative practices related to malaria. As a formative research technique, findings from focus group discussions could be used to modify the questionnaire to reflect local terms, concepts, and customs. In addition, upon completion of the KPC study, there may be additional areas that need to be explored. Thus, qualitative methods can be employed once again to provide explanations for phenomena (e.g., observed care-seeking patterns for childhood illnesses) that were identified but not sufficiently explained by the KPC.

IDENTIFICATION	
CLUSTER NUMBER .....	
HOUSEHOLD NUMBER .....	
RECORD NUMBER .....	

AGE OF CHILD (IN MONTHS) .....	
SEX OF CHILD (1=MALE, 2=FEMALE) .....	

**MALARIA CASE MANAGEMENT**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	Has (NAME) been ill with fever in the last two weeks?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<15
2	Does (NAME) have a fever now?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
3	Did you seek advice or treatment for (NAME'S) fever?	YES ..... 1 NO ..... 2	<15
4	Where did you first go for advice or treatment? <sup>1</sup>  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.  _____ - (NAME OF PLACE)	HEALTH FACILITY HOSPITAL ..... 01 HEALTH CENTER ..... 02 HEALTH POST ..... 03 PVO CENTER ..... 04 CLINIC ..... 05 FIELD/COMMUNITY HEALTH WORKER ..... 06 OTHER HEALTH FACILITY _____ 07 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER ..... 08 SHOP ..... 09 PHARMACY ..... 10 COMMUNITY DISTRIBUTORS ..... 11 FRIEND/RELATIVE ..... 12  OTHER _____ 88 (SPECIFY)	
5	How long after you noticed (NAME'S) fever did you seek treatment from that person/place?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS ..... 2 THREE OR MORE DAYS ..... 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
6	Who decided that you should go there for (NAME'S) illness? RECORD ALL MENTIONED.	RESPONDENT ..... A HUSBAND/PARTNER ..... B RESPONDENT'S MOTHER ..... C MOTHER-IN-LAW ..... D FRIENDS/NEIGHBORS ..... E  OTHER _____ X (SPECIFY)	
7	Did you go anywhere else for advice or treatment for (NAME'S) fever?	YES ..... 1 NO ..... 2	<10
8	Where did you go next for advice or treatment? <sup>1</sup>  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.  _____ - (NAME OF PLACE)	HEALTH FACILITY HOSPITAL ..... 01 HEALTH CENTER ..... 02 HEALTH POST ..... 03 PVO CENTER ..... 04 CLINIC ..... 05 FIELD/COMMUNITY HEALTH WORKER ..... 06 OTHER HEALTH FACILITY _____ 07 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER ..... 08 SHOP ..... 09 PHARMACY ..... 10 COMMUNITY DISTRIBUTORS ..... 11 FRIEND/RELATIVE ..... 12  OTHER _____ 88 (SPECIFY)	
9	How long after you noticed (NAME'S) fever did you seek treatment from that person/place?	SAME DAY ..... 0 NEXT DAY ..... 1 TWO DAYS ..... 2 THREE OR MORE DAYS ..... 3	
10	<p>LOOK AT THE RESPONSES TO QUESTIONS 4 AND 8 TO SEE IF A HEALTH FACILITY (ANY OF RESPONSES 01 THROUGH 07) WAS CIRCLED FOR EITHER QUESTION. IF (NAME) WENT TO A HEALTH FACILITY, CHECK THE FIRST BOX AND GO TO QUESTION 11. IF NOT, CHECK THE SECOND BOX AND GO TO QUESTION 12.</p> <p><b>TAKEN TO A HEALTH FACILITY?</b></p> <p>YES <input type="checkbox"/> &lt; GO TO Q.11</p> <p>NO <input type="checkbox"/> &lt; SKIP TO Q.12</p>		
11	Was (NAME) treated with any medicine(s) before going to the health facility?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<13 <15
12	Was (NAME) treated with any medicine(s)?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<15

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
13	<p><b>Which medicines were given to (NAME) for his/her fever?<sup>1</sup></b> CIRCLE ALL MEDICINES THAT WERE GIVEN.</p> <p>IF MOTHER IS UNABLE TO RECALL DRUG NAME(S), ASK HER TO SHOW THE DRUG(S) TO YOU. IF SHE IS UNABLE TO SHOW YOU THEM, SHOW HER TYPICAL ANTI-MALARIALS AND HAVE HER IDENTIFY WHICH WERE GIVEN.</p> <p>FOR EACH ANTI-MALARIAL MEDICINE ASK: <b>How long after the fever started did (NAME) start taking the medicine?</b></p> <p>CIRCLE THE APPROPRIATE CODE.</p> <p><u>CODES:</u> SAME DAY = 0 NEXT DAY AFTER THE FEVER = 1 TWO DAYS AFTER THE FEVER = 2 THREE OR MORE DAYS AFTER THE FEVER = 3 DON'T KNOW=8</p>	<p><b>ANTI-MALARIAL DRUGS</b></p> <p>A. CHLOROQUINE ..... 0 1 2 3 8</p> <p>B. FANSIDAR ..... 0 1 2 3 8</p> <p>C. AMODIAQUINE ..... 0 1 2 3 8</p> <p>D. QUININE ..... 0 1 2 3 8</p> <p><b>OTHER DRUGS</b></p> <p>E. ASPIRIN</p> <p>F. PANADOL</p> <p>G. CO-TRIMOXAZOLE</p> <p>X. OTHER _____ (SPECIFY)</p> <p>Z. UNKNOWN DRUG</p>	
14	Were any of these injections?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
15	<p>What causes malaria? RECORD ALL MENTIONED.</p> <p>Anything else?</p> <p>RECORD ALL MENTIONED.</p>	<p>MOSQUITO BITES ..... A</p> <p>WITCHCRAFT ..... B</p> <p>INTRAVENOUS DRUG USE ..... C</p> <p>BLOOD TRANSFUSIONS ..... D</p> <p>INJECTIONS ..... E</p> <p>SHARING RAZORS/BLADES ..... F</p> <p>KISSING ..... G</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	

<sup>1</sup> PVOs can modify response categories as necessary. However, the broad categories must be maintained.

**SUB-MODULE A: MALARIA PROPHYLAXIS DURING PREGNANCY**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	When you were pregnant with (NAME), did you take any drugs to prevent you from getting malaria?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	<END
2	<p>Which drug did you take?<sup>1</sup></p> <p>RECORD ALL MENTIONED.</p>	<p>FANSIDAR ..... A</p> <p>CHLOROQUINE ..... B</p> <p>OTHER _____ X (SPECIFY)</p> <p>UNKNOWN DRUG ..... Z</p>	

<sup>1</sup> Develop list of responses locally and revise based upon the pretest.

SUB-MODULE B: MOSQUITO BEDNET USE AND MAINTENANCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	Do you have any bednets in your house?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<END
2	Who slept under a bednet last night?  RECORD ALL MENTIONED.	CHILD (NAME) ..... A MYSELF ..... B HUSBAND/PARTNER ..... C  OTHER _____ X (SPECIFY)	<END
3	How long ago was the bednet bought or obtained?	MONTHS ..... 111  DON'T KNOW ..... 98	
4	Was the bednet ever soaked or dipped in a liquid to repel mosquitoes or bugs?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<6
5	How long ago was the bednet last soaked or dipped?  RECORD ANSWER IN MONTHS (LESS THAN 1 MONTH = 00)	MONTHS ..... 111  DON'T KNOW ..... 98	
6	Have you or someone else in your house ever washed the bednet?  IF NO, RECORD 00 IF YES, RECORD NUMBER OF TIMES	NUMBER OF TIMES ..... 111  DON'T KNOW ..... 98	
7	ASK TO SEE THE BEDNET AND INSPECT IT FOR HOLES OR TEARS. NO HOLES/TEARS= GOOD CONDITION. VISIBLE HOLES AND/OR TEARS=DAMAGED.	GOOD CONDITION ..... 1 DAMAGED ..... 2	

**TABULATION PLAN**

This module is designed for areas where malaria prevalence is relatively high and/or where malaria control activities are being implemented. Maternal report of fever is used as a proxy for malaria; however, it is not recommended that Q.1 be used to derive a prevalence estimate of childhood malaria. The information gleaned from this module can, however, provide some insight into case management behavior.

When the questions on chemoprophylaxis during pregnancy and bednet use/maintenance are included in the survey, one may obtain a basic assessment of malaria prevention within the target population. As seen below, a minimum list of indicators is presented in this tabulation plan. The malaria prophylaxis and bednet indicators can be calculated only if the questions in the sub-modules are asked during the interview.

**TABLE 4E-1: MALARIA INDICATORS**

<b>INDICATOR</b>	<b>DESCRIPTION/DEFINITION</b>
<i>Malaria Case Management</i>	<p>Percentage of children aged 0-23 months with a febrile episode that ended during the last two weeks who were treated with an effective anti-malarial drug within 48 hours after the fever began</p> $\frac{\text{No. of children with 0 or 1 circled for any drug in A through D of Q.13}}{\text{No. of children with response=2 for Q.2}} \times 100$
<i>Health Facility Care-seeking for Fever</i>	<p>Percentage of children aged 0-23 months with a febrile episode that ended during the last two weeks who were brought to a health facility within 48 hours after the fever began</p> $\frac{\text{No. of children with (response=01 through 07 for Q.4 and response=0 or 1 for Q.5) OR (response=01 through 07 for Q.8 and response=0 or 1 for Q.9)}}{\text{No. of children with response=2 for Q.2}} \times 100$
<i>Malaria Prophylaxis During Pregnancy</i>	<p>Percentage of mothers who took anti-malarial medicine to prevent malaria during pregnancy</p> $\frac{\text{No. of mothers with response=1 for Q.1, sub-module A}}{\text{Total no. of mothers with children aged 0-23 months}} \times 100$
<i>Household Bednet Possession</i>	<p>Percentage of children whose mothers report the presence of bednets in the house</p> $\frac{\text{No. of children aged 0-23 months with response=1 for Q.1, sub-module B}}{\text{Total no. of children aged 0-23 months}} \times 100$
<i>Child Bednet Use</i>	<p>Percentage of children aged 0-23 months who slept under an insecticide-treated bednet the previous night</p> $\frac{\text{No. of children with response A for Q.2, sub-module B AND response=1 for Q.4, sub-module B}}{\text{Total no. of children aged 0-23 months}} \times 100$

Given its relatively small sample size, data from the KPC may be tabulated either manually or by computer. Below is an example of a manual (hand) tabulation table for Q.3. For each child, a check mark (T) would be placed in the row of the category that matches his/her mother's response. The frequency column indicates the number of children with a particular response (i.e., total number of check marks in a specific row), whereas the percent column is the number of children with that response divided by the

total number of children for whom the question was asked.

**TABLE 4E-2: EXAMPLE OF HAND TABULATION TABLE FOR Q.3**  
("Did you seek advice or treatment for (NAME's) fever?")

CODE	CATEGORY	CHECK MARKS (T)	FREQUENCY	PERCENT
1	yes			
2	no			
8	don't know			
TOTAL NUMBER OF RESPONSES FOR Q.3				100.0
OVERALL FINDING BASED ON THIS TABULATION:				

In order to cross tabulate a particular question with child's age, place questionnaires in different piles or folders according to the child's age group. Separate tabulation tables can then be calculated for each age group. This process can be performed for a number of socio-demographic and behavioral variables. Table 4E-3 illustrates how the data can be organized in a table to assess the relationship between fever in the last two weeks (Q.1) and who slept under a bednet during the previous night (sub-module B, Q.2).

**TABLE 4E-3: CROSS TABULATION TABLE FOR FEVER IN THE LAST TWO WEEKS**  
**AND WHO SLEPT UNDER A BEDNET DURING THE PREVIOUS NIGHT**

PERSON WHO SLEPT UNDER A BEDNET THE PREVIOUS NIGHT (Q.2, SUB-MODULE B)	FEVER IN LAST TWO WEEKS (Q.1)		
	yes	no	don't know
child (NAME)			
myself (respondent)			
husband/partner			
other			
TOTAL			
OVERALL FINDING BASED UPON THIS CROSS TABULATION:			

In the above table, it is likely that the total number of responses will exceed the total number of children in the sample. This is due to the fact that the mother may mention multiple people in Q.2. Since the rationale for asking Q.2 is to determine if the child in question (NAME) slept under a bednet, the data could be reorganized as follows:

**TABLE 4E-4: CROSS TABULATION TABLE FOR FEVER IN THE LAST TWO WEEKS**  
**AND WHETHER THE CHILD SLEPT UNDER A BEDNET DURING THE PREVIOUS NIGHT**

(NAME) SLEPT UNDER A BEDNET THE PREVIOUS NIGHT?	FEVER IN LAST TWO WEEKS			TOTAL
	yes	no	don't know	
yes				
no				
TOTAL				

(NAME) SLEPT UNDER A BEDNET THE PREVIOUS NIGHT?	FEVER IN LAST TWO WEEKS			TOTAL
	yes	no	don't know	
OVERALL FINDING BASED UPON THIS CROSS TABULATION:				

If the mother mentioned that (NAME) slept under a bednet--even if she mentioned other family members who also slept under bednets--the child would be classified as YES for the variable in the first column. If the child was not mentioned by the mother, s/he would be classified as NO. By reorganizing responses to Q.2 in this manner, the number of check marks in the table should equal the number of children within the sample.

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**REFERENCES FOR MALARIA-RELATED SURVEYS**

Listed below are other surveys that may be of assistance when modifying the KPC to meet the needs of your particular project.

- (1) CARE (1999). *Rapid Impact Evaluation Survey* (Malaria Survey).
- (2) ORC Macro (2000). *MEASURE DHS+ Model A Questionnaire for High Contraceptive Prevalence Countries* (Qs. 466-474).
- (3) UNICEF (1995). *Multiple Indicator Cluster Survey* (Malaria Module).