



Gender and Malaria in Kenya

January 2015



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LIST OF ACRONYMS

ACT	Artemisinin-based Combination Therapy
CDC	Centers for Disease Control and Prevention
DHIS	District Health Information System
HIS	Health Information System
IPTp	Intermittent Preventive Treatment in Pregnancy
ITN	Insecticide-treated Net
KHSSP	Kenya Health Sector Strategic and Investment Plan
KMIS	Kenya Malaria Indicator Survey
KNMSP	Kenya National Malaria Strategic Plan
LLIN	Long-lasting Insecticide-treated Net
M&E	Monitoring and Evaluation
MCU	Malaria Control Unit
QoC	Quality of Care
RDT	Rapid Diagnostic Test
WHO	World Health Organization

I. BACKGROUND

A. Gender and Health

Gender is a cross-cutting issue that can inform decision making and best practices in all health areas. HIV care and treatment, for example, has benefitted from increased attention to gender inequities over the past decade. Although transmission of malaria is not comparable to HIV, commonalities such as access to health care and power in decision making are also affected by gender norms and roles. Learning from what we know regarding how gender impacts other disease interventions can and should assist in strategy and planning for effective malaria prevention and response.

The Kenya Ministry of Health's Malaria Control Unit (MCU), one of the departments receiving technical assistance from the MEASURE Evaluation PIMA Project in Kenya, has recognized the need to incorporate gender into malaria programming and requested technical assistance to ensure that human rights and gender are fully reflected in the upcoming National Malaria Strategy and Monitoring and Evaluation (M&E) Plan. Gender M&E provides evidence to examine gender differences in who is getting malaria, who is accessing treatment when and where, and what differences exist in malaria prevention and awareness.

According to the Centers for Disease Control and Prevention (CDC), malaria is the third leading cause of death in Kenya (CDC, 2013). In 2009, Kenya announced the ambitious goal of a malaria-free Kenya in the updated Kenya National Malaria Strategic Plan (KNMSP). A focus on gender equality in anti-malaria programming and policies will be fundamental to achieving this goal. Neglecting the role that gender plays will undermine efforts to reach crucial milestones and improvements in the health of families and communities in Kenya.

As discussed in this report, gender is the manifestation of socially constructed roles and expectations placed on people based on their sex (Interagency Gender Working Group, 2012). The parameters of socially acceptable behavior for women and men vary widely between societies, are dynamic over time, and have far-reaching effects on health status. It has long been observed that gender-related factors—such as generally accepted men's and women's roles, women's autonomy, spousal relationship quality, and experience with and attitudes about intimate partner violence—impact health outcomes, including the risk of HIV, access to all types of health care, use of family planning, maternal and child health, and risk of malaria.

This gender and malaria review focuses on the monitoring and evaluation aspects of various documents, strategic plans, and current practices in the path toward a malaria-free Kenya. It was completed by a MEASURE Evaluation Gender Specialist through a combination of remote record review, in-country stakeholder meetings, and document reviews.

B. Gender and Malaria

Some might argue that malaria is gender blind because the mosquito does not discriminate regarding whom it bites. Further examination, however, reveals many ways in which gender can influence who gets malaria and how it is treated. While children and pregnant women are biologically more susceptible to malaria, there are compounded gender differences due to sociocultural norms and expectations that influence patterns of exposure, decision making, and economics.

Exposure patterns, for example, can be affected by gender norms if men are more likely to be working in the fields at dusk or if women are expected to gather water early in the morning. Norms around sleeping arrangements often have a gender dynamic and can impact who sleeps under mosquito nets. Additionally, expectations around decision making in the household can have important gender considerations. Women are the primary caregivers in the family, but they are not always able to make decisions on when and how to seek care for sick children. One study on the Kenyan coast revealed that there was relatively little conflict over treatment of childhood fevers

related to malaria; however, treatment of convulsions was more disputed and included implications for age, gender, and relationship to head of household (Molyneux, Murira, Masha & Snow, 2012).

Understanding how gendered patterns of behavior influence exposure to mosquitoes, treatment decisions, and access to care can, therefore, assist in developing more effective recommendations for preventing malaria infection (WHO, 2007). Table I offers sample questions to investigate where and how gender plays a role in malaria.

Table I: Gender and malaria questions
Are there gender differences with occupational exposure to malaria?
Are there gender constraints around who has the authority to purchase and use bed nets?
Are there gender norms that affect who might sleep under a bed net?
Are there gender differences in who is accessing treatment?
How does education affect treatment-seeking behaviors?
Do women need permission to seek treatment for themselves or their children?
Does the burden of cost impede treatment and does this impact men and women differently?

Here are some other ways that gender can play a role:

- Unequal decision making ability about if and when to seek treatment.
- Restricted mobility of women affecting care-seeking.
- Social or cultural perceptions about obtaining medical treatment.
- Unequal burden of care based on gender roles.

For more specific examples of the above dynamics of how gender can play a role in the exposure, prevention, and treatment in malaria, see the World Health Organization (WHO) document on gender, health, and malaria provided in Appendix A.

II. INCORPORATING GENDER INTO MALARIA PLANNING

Incorporating a specific focus on gender in the M&E of any health program will ensure that gender is integrated in a tangible way and will be a measureable component of program inputs, outputs, and outcomes. When gender is not well integrated into M&E systems, gender norms and inequalities that influence health and health-seeking behaviors may become invisible or marginalized in favor of issues supported by stronger information.

Gender-related information provides evidence to raise awareness of gender imbalances, advocate for change, address gender dimensions of health, and demonstrate program progress and impact. Information should be used in program planning, data collection, monitoring and evaluation, and everyday program implementation.

At the foundation of gender M&E are sex-disaggregated data and gender-sensitive indicators. Any indicator collected from or about individuals can be, and should be, disaggregated by sex. This will allow analysts to look for potential differences between women and men and boys and girls. Gender-sensitive indicators go beyond sex to measure gender dynamics directly, including gender norms and expectations, and gendered phenomena like attitudes and practices relating to gender-based violence. Taken together, sex-disaggregated and gender-sensitive indicators offer an in depth picture of gender and health.

In the Kenyan malaria context, there is a notable dearth of research investigating the role of gender inequality in relation to malaria. Capturing such this information requires sex-disaggregation of data and ongoing research findings as well as exploratory research in order to fully understand how gender is affecting malaria prevention, infection, and treatment. A small but growing body of literature demonstrates the importance of gender on malaria prevalence and health-seeking behaviors. For example, a comparative study using data from 90 countries, including Kenya,

demonstrated significant direct and indirect relationships between women's social status relative to their economic rights and malaria prevalence (Austin, Noble, & Mejia, 2014). In fact, the analysis found women's socio-health status to be a stronger predictor of malaria prevalence than geographic latitude.

Gender M&E is crucial in understanding and combatting the malaria epidemic. The gender dynamics of exposure, treatment, and care described above must be included in program planning and M&E efforts to track and address the gender component of malaria. A focus on gender in the M&E of malaria will ensure that the impact of gender inequality on malaria incidence and treatment will not remain hidden.

A. Findings: Current Strengths and Gaps

As mentioned earlier, the MCU is reviewing the KNMSP 2009–2017, which is mid-way in implementation. The revision of the KNMSP will ensure proper alignment of the malaria program priorities with the country's broad strategic plans and other health-specific plans in the context of the devolved structures.

For this report, stakeholder meetings and document review provided a well-rounded picture of the current efforts to address gender in the fight against malaria. In-person meetings provided insight into current attitudes and practices around gender M&E and malaria, and documents provided evidence of current data collection, analysis, and reporting trends.

Results reveal that until now, there has not been systematic attention to gender in malaria and that there is a lack of sex-disaggregated data collection, analysis, and use. The program for this gender analysis, however, reflects increasing efforts to address the gender dynamics of the malaria epidemic and efforts to include gender in the revisions to the KMSPP 2014-2018 and M&E plan.

Current Strengths

- **Gender has been acknowledged as a cross-cutting area.** For example, the KNMSP includes a brief section on gender equality and human rights that discusses the importance of these factors. Gender is also included in the Kenyan Constitution, the Kenya National Health Policy, and the Kenya Health Sector Strategic and Investment Plan (KHSSP), which further demonstrates Kenya's commitment to gender equality in general and as it relates to health.
- **Goal of universal access and coverage.** This goal includes all genders and vulnerable groups. In order to reach this goal, all people, including women and men, boys and girls, and gender minorities, will need health care coverage, and gender-responsive programming will be a key approach to achieving this.
- **Sex-disaggregated data are available in multiple non-routine data sources.** A number of surveys, including the Malaria Indicator Survey, the Qualitative Study on Barriers to Net Use among Most at Risk Populations in Kenya, and the Evaluation of the 2011 Mass Long-Lasting Insecticide Treated Net Distribution Campaign, all include sex-disaggregated data. This offers an opportunity for sex-disaggregated analysis of malaria prevalence, coverage of insecticide-treated nets (ITNs), and patterns of antimalarial use.
- **Data are collected by sex at the facility and community case management levels.** Data at the facility level and those collected through community case management are disaggregated by sex. This is a crucial step in enabling further analyses to examine gender differences in malaria access, treatment, and prevention.

Current Gaps

- **Limited attention to and awareness of importance of gender in malaria.** Through stakeholder meetings and document reviews, we found limited awareness of the importance of gender in malaria. It is a common belief that malaria is "gender blind" because

mosquitos bite indiscriminately. A deeper understanding of how gender can influence malaria and health through access, treatment, decision making, and exposure would benefit the MCU and improve efforts for a malaria-free Kenya.

- **Limited sex-disaggregated routine summary data.** The most significant barrier to a gender-responsive malaria program is the availability and use of sex-disaggregated data. Routine data are collected at the facility level and entered into the health registers according to sex. However, when data are summarized and entered into the District Health Information System (DHIS), they are aggregated to number of people, losing gender distinctions. This eliminates the possibility for crucial sex-disaggregated analysis of the data, which in turn impacts the ability of program managers, decision makers, and policymakers to make decisions that take gender into account. While we determined that it was not possible to change the summary data collection forms at this time, stakeholders are open to advocating for maintaining sex-disaggregation of facility data when they are entered into the DHIS in future updates.
- **Limited attention to gender dynamics.** Beyond sex-specific data, there has been little effort to look at gender dynamics surrounding malaria, such as decision making, power dynamics, and control of resources to access and use of malaria prevention and treatment. Available research focuses on sub-Saharan African, with few studies looking specifically at in Kenya. Increased attention to gender dynamics in malaria research and M&E, in both governmental and non-governmental sectors, will illuminate gender-related challenges to reaching ambitious malaria goals.
- **Existing gender-related information is not prominently highlighted.** The sex-disaggregated and gender-related information that is available (e.g., Kenya Malaria Indicator Survey [KMIS], Evaluation of Long-lasting Insecticide-treated Net [LLIN] Study) do not prominently highlight gender differences (or lack thereof). The survey data are often collected and at times analyzed by sex, but gender implications are often not highlighted or discussed. More robust gender analysis using the currently available sex-disaggregated data would greatly improve current efforts to examine gender differences.

III. INVESTIGATIVE METHODS

This gender and malaria review was completed by a MEASURE Evaluation Gender Specialist through a combination of remote record review, in-country stakeholder meetings, and document reviews. Working in collaboration with the PIMA Malaria M&E Advisor, all appropriate malaria documents were collected and reviewed for attention to gender in data collection, analysis, results, and reporting. The documents reviewed include:

- KNMSP 2009-2017
- National M&E Plan
- Kenya Malaria Indicator Survey
- Qualitative Study on Barriers to Net Use among Most at Risk Populations in Kenya
- Evaluation of the 2011 Mass LLIN Distribution Campaign
- Amref Health Africa documents and quarterly reports
- Community health forms
- Survey instruments

The document review noted strengths and gaps with respect to gender in programming, research, and M&E.

In tandem with the document review, a two-week in-country visit elaborated the current gender and malaria context through indepth meetings about gender in malaria. The Gender Specialist met with key malaria stakeholders to discuss current efforts to address the gender dimensions of malaria in Kenya, raise awareness about the importance of gender in malaria, and provide feedback on gaps and

opportunities moving forward. Stakeholder meetings were held with the following agencies (see Appendix B for the full list of individuals):

- Malaria Control Unit, Ministry of Health, Kenya
- World Health Organization
- U.S. President's Malaria Initiative, U.S. Agency for International Development (USAID)
- M&E Unit for Malaria at the Ministry of Health
- Gender Mainstreaming Office, Ministry of Health
- Amref Health Africa, Kenya Office
- The Kenya Alliance of NGOs Against Malaria

Discussions covered the level of gender awareness in malaria efforts; the extent to which sex-disaggregated data are collected, analyzed, and used; and whether gender considerations are taken into account during program, research, and M&E design and implementation. Meetings included a brief explanation of the importance of gender, the Gender Integration Continuum, and gender M&E basics (see Appendix C for the gender M&E handout).

The preliminary results were presented at a workshop of the Global Fund Programmatic and Financial Gap Analysis on October 31, 2014, and at the MCU on November 3, 2014. The debriefing meeting included preliminary results and recommendations to improve attention to gender in the National Malaria Strategy, KMIS, and general data collection, use, and analysis. A draft revised strategic plan and accompanying M&E plan are available.

IV. ADDITIONAL BACKGROUND AND RATIONALE

Additional factors have impacted the request for this study at this time. Kenya is currently implementing the Global Fund Round 10 Phase 2 funding. The Global Fund's new funding model enables strategic investment for maximum impact and provides implementers with flexible timing, better alignment with national strategies, and predictability on the level of funding available. The new funding model will be based on the activities outlined in the revised KNMSP 2014–2018. There is a need to show that Kenya's request for funding represents strategic and prioritized choices on where to invest limited resources for maximum impact over the longer term, while also addressing critical enablers such as human rights, gender equity, and community systems strengthening. In addition, structural barriers to accessing services, including those related to gender, will need to be adequately understood and addressed in order to achieve the targets set in the KNMSP.

This study also follows several in-country stakeholder consultations that included specific recommendations for a technical review of the gender component as a cross-cutting consideration in malaria. Further, the MCU and the President's Malaria Initiative also expressed a need for further technical assistance to review and update the Kenya Malaria Strategy 2009-2017 and the companion Kenya Malaria M&E Plan 2009-2017.

V. BRIEF SUMMARY OF KEY DOCUMENTS REVIEWED

Kenya National Malaria Strategic Plan 2009–2017. Strengths of the KNMSP include an emphasis on the vulnerability of pregnant women and a human rights and gender section. Attention to pregnant women is a crucial gender component, as pregnant women are particularly vulnerable to malaria and anemia. The KNMSP thoroughly addresses this issue and includes intermittent preventive treatment as a key strategy.

Outside the human rights and gender section, the KNMSP lacks attention to sex-disaggregated data and gender-sensitive indicators. None of indicators referenced in the Strategic Plan are recommended to be disaggregated by sex, and there is no further discussion of examining gender norms for influence on the incidence, prevention, or treatment of malaria. The mid-term review did

not include gender and human rights as an area for exploration or gap analysis. In addition, achieving the six objectives of the KNMSP will be strengthened by including gender in the implementation of strategies and monitoring and evaluation.

In the future, sex-disaggregating malaria data will allow for gender analysis and illumination of differences between women and men, and boys and girls. Integrating gender more thoroughly into the KNMSP will improve advocacy, communication, and social mobilization, as well as coordination and leadership in efforts against malaria.

These suggestions are further detailed in Appendix D.

Kenya Malaria Programme Performance Review 2009. This document did not include gender thematic areas, although it did include malaria in pregnancy. There was no mention of sex or gender, and surveillance, M&E, and operations research failed to mention gender.

Malaria M&E Plan. Because the Malaria M&E Plan maps to the KNMSP, the gender considerations will be based on the inclusion of gender in the KNMSP. Currently, attention to gender and sex disaggregation are lacking in the M&E Plan; however, including gender in the future can be done in incremental and feasible ways. As with the KNMSP, sex disaggregation of objectives and indicators when possible will lead to substantial improvements in gender awareness and responsiveness. In particular, indicators measuring prevalence or proportions of people (e.g., malaria parasitaemia prevalence (pf) rate among children < 5yrs in lake endemic areas; proportion of patients with fever presenting to health facility who are tested for malaria with rapid diagnostic test [RDT] or microscopy) should be disaggregated by age and sex. While some of these indicators require changes in the health information system (HIS) and will need to be incorporated in future iterations of the M&E Plan, other indicators, for example, those collected from surveys, should be disaggregated by sex as soon as possible.

Gender can also be included in the M&E plan in more ways than simple sex disaggregation. Additional indicators can be used to measure if and how gender is included in trainings, meeting agendas, male engagement efforts, data demand and use plans, inter-sector collaboration, and operational research. These suggestions are further detailed in Appendix E.

Kenya Malaria Indicator Survey. The KMIS contains valuable information that is collected and in some cases analyzed and reported by sex. This wealth of sex-disaggregated data could be used to examine and highlight gender differences even more. The KMIS also mentions the importance of women's education in malaria prevention, which could also be discussed in greater detail.

Reporting differences, or lack of differences, between women and men, or boys and girls, is essential to raise awareness that researchers and decision makers are paying attention to gender. For example, if there are no significant differences between the sexes in the prevalence of malaria, this should be celebrated and highlighted to show attention to gender as well as a lack of gender discrepancy in disease prevalence. Gender differences are reported in various results and tables within the KMIS; however, these differences could be featured more consistently and prominently. Appendix F provides additional detail and recommendations.

The Evaluation of the 2011 Mass LLIN Distribution Campaign. This evaluation report assessed the mass distribution campaign of 2011/2012 in Western, Nyanza and part of the Rift Valley provinces, finding that the number of LLINs increased significantly, but correct usage remains a challenge. This report collects and uses sex-disaggregated data for demographics and various analyses. Demographic discussion breaks down the population by sex, and reports that 30% of households are headed by women, noting that the role of husbands in the other 70% of households may be an important part of shifting behavior. Analysis looking at net ownership and use by household characteristics did not include the sex of the head of household in the analysis. Additionally, analyses looking at net use based on relationship to the head of household did not

break down results by gender. While the evaluation report includes significant sex-disaggregated data, gender could be more prominently highlighted and discussed as a cross-cutting issue important to distribution and use of LLINs. See Appendix G for additional detail and recommendations.

Qualitative Study on Barriers to Net Use among Most at Risk Populations in Kenya. This study investigates the factors associated with barriers to net use among vulnerable populations in Kenya (PSI & DMC, 2013). Both women and men were intentionally sampled and included in interviews and separate focus group discussions. It was found that women hold primary responsibility for obtaining, hanging, and using the nets, and net use and coverage was impacted by cultural sleeping habits based on gender. Decision making for net use focused on what prompted the participant to use the net but did not focus on the gender dynamics of decision making. It was noted that the decision to use the net was often made by the woman, as the de facto caregiver, but this was not systematically explored or discussed. Many respondents noted that pregnant women and children were most vulnerable to malaria and should be prioritized for net use, but several participants also acknowledged that it was important for everyone to sleep under nets. See Appendix H for additional detail and recommendations.

Community health documents. Many of the community health documents reviewed included sex-disaggregated data, including nearly all indicators at the individual level in household registers and the community treatment and tracking register. However, it appears that data are aggregated when they are summarized into the service delivery log book and community health worker summary, and in the community chalk boards.

A quarterly report from AMFREF shows sex-disaggregation with substantial differences between the sexes. For example, *Number of people with uncomplicated malaria receiving artemisinin-based combination therapy (ACT) treatment as per national treatment guidelines at the community under Community Case Management of Malaria in Western and Nyanza province* indicated that 12 boys and 43 girls between ages 1 and 5 received treatment, while 678 boys and 1,301 girls between ages 5 and 19 received treatment. These large discrepancies between boys and girls are a cause for concern and should be checked to ensure that the data are accurate, and if so, they should be investigated as to why this might be happening. See Appendix I for additional detail and recommendations.

Stakeholder meetings. Meetings were held with key malaria stakeholders to discuss gender and malaria and the importance of gender M&E and to learn about current gender efforts within Kenya's malaria program and M&E efforts (see Appendix B). The initial response to discussions around the importance of gender and gender M&E varied. Several stakeholders felt that malaria was gender blind, and that it did not hold the same importance as it does for a disease like HIV. Others felt that the efforts focused on malaria in pregnancy were sufficient in addressing gender.

Discussions included raising awareness about the importance of gender in malaria, including the M&E process. Discussion tools provided in Appendix A and Appendix C were used to clarify the role gender plays in malaria, gender M&E, and the continuum of gender integration into programs and M&E. As discussions continued over the two week consultation, stakeholders began to realize the role gender plays in malaria and M&E.

By the final debriefing meeting, stakeholders acknowledged the role gender plays in malaria and committed to including gender in the Strategic Plan; advocating for sex-disaggregated data collection, analysis, and use in the future; and exploring a gender analysis framework for malaria. During the debriefing meeting, preliminary results were discussed, as well as recommendations and a way forward. Recommendations are discussed below.

VI. CONCLUSION AND RECOMMENDATIONS

Gender is a cross-cutting theme throughout the Kenyan health sector, and malaria is no exception. Efforts to highlight and focus on gender equality within malaria control programs have been historically weak; however, improvements are underway and continued efforts will bolster an ambitious and successful campaign for a malaria-free Kenya. Strengthened capacity for gender awareness and analysis, increased availability and use of sex-disaggregated and gender-sensitive data, and renewed commitment to a gender focus will enable equitable access, treatment, and prevention of malaria in Kenya. Recommendations for achieving these goals are provided below.

1. Strengthen capacity and understanding of malaria and gender. Strengthening the capacity of key malaria stakeholders, managers, and data analysts to understand, prioritize, and use gender-related information is crucial to success in the fight against malaria. Sustainable and meaningful integration of gender into malaria efforts is not likely to be successful without a thorough understanding of the importance of gender at all levels of malaria program design, implementation, and evaluation.

When players at all levels understand the importance of gender, clinicians will be more likely to collect client data based on sex, facility managers will be more invested in maintaining sex disaggregation in the data, analysts will be more apt to look for gender differences, and decision makers will be able to draw conclusions based on the gender-related data. Thus, it is critical that stakeholders at all levels are trained on the importance of gender in malaria, how to look for and address gender dimensions, and how to improve gender M&E capacity in malaria.

2. Increase availability and use of sex-disaggregated and gender-sensitive data. The lack of sex-disaggregated data prevents critical gender analysis of routine service delivery data. Increasing the availability and use of sex-disaggregated data will be a considerable step forward in knowing what, if any, gender differences exist in service utilization and treatment. These data are crucial to informed decision making in malaria programming and policies. Without sex-disaggregated data, program managers will not know whether there are gender differences between men and women accessing treatment at facilities, which could be important information for communication and awareness campaigns or behavior change communication.

Gender-sensitive data go beyond sex disaggregation and measure gender roles, norms, and expectations. Gender-sensitive data are often collected from surveys or special studies. For example, it would be important to explore the gender dynamics of decision making for seeking treatment and control over and use of resources for nets or services. This could be done through survey questions around decision making in the KMIS.

3. Increase attention to gender in strategies, publications, and studies. The current approach to address gender and key populations focuses primarily on pregnant women and children under five. While these are vulnerable populations that should be prioritized in malaria prevention and treatment, gender issues go beyond malaria in pregnancy. Thus, the gender and human rights section in the revised strategy could be strengthened and included in other key documents. This could be implemented in the form of a section or subsection discussing the importance of gender in malaria, highlighting gender differences (or lack thereof) and advocating for change, if appropriate. In addition, gender should be integrated throughout documents, through sex-disaggregation of indicators, inclusion of gender-sensitive indicators, and discussion of risks and approaches to meet goals. Graphs comparing the prevalence and treatment of malaria for women, men, boys, and girls, for example, will be helpful for quickly identifying gender differentials. Additionally, making connections to the gender equity components of national documents such as the Constitution and the KHSSP would demonstrate the commitment to gender as a cross-cutting principle in Kenya's malaria program, as well in as the health system.

4. Conduct operational research to explore gender and malaria dynamics in Kenya. Operational research surfaced in several stakeholder meetings as a way to explore the current gender and malaria situation in Kenya. Potential topics to explore include:

- What, if any, are the differences between women and men, boys and girls, at the facility level in selected areas?
- What are barriers for men and women in accessing prevention and treatment interventions?
- How does use of (and compliance with) malaria treatment differ for men and women?
- How does the division of labor impact the vulnerability of men and women to malaria?

5. Work with and learn from other disease areas. Gender is a cross-cutting issue in all health areas, and thus it can be beneficial to learn from and build on the gender successes in other departments and with diseases. HIV, for example, has increased attention and responses to gender inequality over the past 10 years. While malaria transmission is not comparable to HIV, commonalities such as access to healthcare and decisionmaking abilities are affected by gender regardless of the health outcome addressed. In this way, learning from and working with other programs can save time and resources.

6. Provide gender analysis framework guidance. Stakeholder meetings revealed requests for a gender analysis framework guidance document specific to Kenya. Once stakeholders affirmed their commitment to include and address gender components of malaria, they requested programmatic guidance. It was discussed during the debriefing meeting at the MCU that the Gender Mainstreaming Office could fill this gap.

VII. REFERENCES

Austin, K. F., Noble, M. D. & Mejia, M. T. (2014). Gendered vulnerabilities to a neglected disease: A comparative investigation of the effect of women's legal economic rights and social status on malaria rates. *International Journal of Comparative Sociology*, 55(3), 204-228. doi: 10.1177/0020715214543158

Centers for Disease Control and Prevention. (2013). CDC in Kenya Factsheet. Available at <http://www.cdc.gov/globalhealth/countries/kenya/pdf/kenya.pdf>

Interagency Gender Working Group. (2012). What is gender? And why is it important? Available at <http://www.igwg.org/articles/whatisgenderjanuary2012.aspx>

Molyneux, C.S., Murira, G., Masha, J. & Snow, R. W. (2002). Intra-household relations and treatment decision-making for childhood illness: A Kenyan case study. *Journal of Biosocial Science*, 34, 109-131.

World Health Organization. (2007). Malaria, Gender, and health: Gender and health information sheet. Department of Gender, Women and Health. WHO. Available at: http://www.who.int/gender/documents/malaria/gender_malaria_leaflet/en/



Gender, Health and Malaria

Despite prevention and control efforts, malaria remains a leading cause of morbidity and mortality worldwide. According to data for 2005, an estimated 1 million deaths were related to malaria. Most of these deaths occur in children in high-transmission areas and malaria accounts for approximately one in five of all childhood deaths in Africa. However, the true burden of malaria is difficult to estimate as many people are treated at home and no proper postmortem diagnosis is made in the case of death. As a result, many malaria cases go unreported. (1)

A gender approach contributes to both understanding and combating malaria. Gender norms and values that influence the division of labour, leisure patterns, and sleeping arrangements may lead to different patterns of exposure to mosquitoes for men and women. There are also gender dimensions in the accessing of treatment and care for malaria, and in the use of preventative measures such as mosquito nets. A thorough understanding of the gender-related dynamics of treatment-seeking behaviour, as well as of decision-making, resource allocation and financial authority within households is key to ensuring effective malaria control programmes. Therefore, gender and malaria issues are increasingly being incorporated into malaria control strategies in order to improve their coverage and effectiveness in different contexts.

What do we know?

- There are four main types of parasite that cause human malaria - *Plasmodium vivax*, *P. malariae*, *P. ovale* and *P. falciparum*. *P. falciparum* malaria is the most deadly, and is most common in sub-Saharan Africa, accounting in large part for the extremely high malaria-related mortality in this region. (2)
 - Those at highest risk biologically are infants and young children (from six months to five years), pregnant women, non-immune people (such as travellers, labourers and populations moving from low-transmission to high-transmission areas) and people living with HIV/AIDS.
 - Available evidence suggests that given equal exposure, adult men and women are equally vulnerable to malaria infection, except for pregnant women who are at greater risk of severe malaria in most endemic areas. (3)
 - Data on malaria is often not sex-disaggregated.
- Malaria is a particular problem for pregnant women*
- The rate of malaria infection is higher in pregnant women because of their decreased immunity. Studies have shown that infection rates are highest in first and second parity women with lower rates in later pregnancies. (4, 5, 6)
 - Pregnant women with malaria have an increased risk of abortion, stillbirth, premature delivery and low-birth-weight infants. (3, 5, 6)
 - *P. falciparum* is generally accepted as a leading cause of anaemia in pregnant women. (7) It is estimated that anaemia causes as many as 10 000 maternal deaths each year. (4) However, despite the dangerous impact of malaria on pregnant women and their infants, it is estimated that less than 5% of pregnant women have access to effective interventions. (5)
 - Although *P. vivax* is a more common cause of malaria than *P. falciparum* in many parts of the tropics outside Africa, much less is known about its harmful effects on pregnancy. Available research indicates that although the effects of *P. vivax* infection are less severe compared to *P. falciparum*, *P. vivax* malaria during pregnancy is also associated with maternal anaemia and low birth weight. (8)
 - Women with dual HIV and malaria infection are at particular risk of severe anaemia and adverse birth outcomes. One study in Kenya found that HIV-seropositive women with malaria were twice as likely to have anaemia than HIV-seronegative women with or without malaria. (9)

- Adolescent girls are particularly vulnerable to malaria. In many sub-Saharan African settings, adolescents are often parasitaemic and anaemic when they first become pregnant. According to data from Malawi, both non-pregnant and pregnant adolescent girls had significantly higher parasite rates than women over 19 years of age. (10)
- As adolescents often face difficulties in accessing health services, pregnant adolescent girls might not seek timely care for malaria. Participants in a study in Uganda, for example, perceived pregnant adolescents as a group least likely to use antenatal care. (11) Although the study indicated that pregnant adolescents recognized the importance of seeking preventive care for malaria, there were several constraints that limited access to services. These were mainly the stigma associated with adolescent pregnancy and the negative attitude of health workers. Similar findings were also reported in a study in Nigeria. (12)
- Women often have to ask for their husband's permission to access treatment for themselves and/or their children. (16) A study on gender roles and responses to malaria in Ghana found that women who lacked either short-term or long-term economic support from male relatives, or who disagreed with husbands or family elders about seeking appropriate treatment, faced difficulties in accessing health care for children with malaria. (17) They also faced the heavy burden of the cost of seeking treatment despite often limited access to resources.
- Evidence from some countries indicates that restricted mobility of women may also impede their attendance at primary health care clinics for malaria testing. (18, 19)
- However, in some settings males utilize health care services less than females. For example, a study in Papua New Guinea found that adolescent (10-19 year-old) and adult (20-40 year-old) women were more likely than similarly aged men to walk long distances to obtain malaria treatment at a clinic. (19) The study estimated that 37% of infected adolescent males did not attend for care because of the distance to the clinic. Only 3.8% of infected adolescent females were deterred by distance. It was suggested that men may assign a low priority to their health, making them reluctant to spend much time walking to a health centre even when malaria is suspected. On the other hand, the same men indicated that they might readily attend a clinic if it was nearby.

Patterns of exposure often coincide with gender norms and behaviour

- In some societies, men have a greater occupational risk of contracting malaria than women if they work in mines, fields or forests at peak biting times, or migrate to areas of high endemicity for work. (3) Women who get up before dawn to perform household chores may also be exposed to mosquitoes and consequently to malaria infection. (13)
- In other societies, the activities of men and women during peak biting times may result in equal risks of infection. For example, a study in Myanmar on activities that enhance human-vector contact revealed that gender-specific patterns of both leisure and work activities during peak biting periods by men and women placed them at equal risk of contracting malaria through exposure to mosquitoes. (14)
- The division of labour as a result of gender roles may play a significant part in determining exposure to mosquitoes. However very few studies have been conducted to specifically look at this.
- Similarly, in addition to leisure activities, sleeping arrangements may also affect malaria transmission. In some societies, men tend to sleep outdoors and this may increase their risk of exposure to mosquitoes. (15)
- Understanding how gendered patterns of behaviour influence exposure to mosquitoes can therefore assist in developing more-effective recommendations for preventing malaria infection.
- These varied findings on access to health services may be explained by varying gender roles and relations across societies, and the gender dynamics of decision-making and access to financial resources. Social customs too can affect the treatment-seeking behaviour of women and men and their access to health services. In Tigray, Ethiopia, focus groups revealed that women are reluctant to see male health workers for cultural reasons, and this may contribute to underreporting of malaria cases among women in the study area. (18)
- Another study in Ethiopia found that women were using Community Health Worker services for malaria less frequently than men because their workload left them little time to attend to their own and their children's health needs. (20) In addition, men dominated in decision-making, and women were not in the habit of expressing their needs and might even be perceived as sexually disloyal if they visited a male health worker.
- It is possible that in settings where there are different ethnic groups, and consequently different languages, that communication with health care workers may be more difficult for women than for men. For example, a study in rural Burkina Faso found that communication between health workers and patients was easier with men since they generally spoke more languages. (21) The study found that 24% of adult women were unable

Access to health care services for malaria can be affected by gender issues, including gender inequality

to communicate with the health care worker in the same language compared with only 10% of men.

- Levels of education may also affect malaria treatment-seeking and prevention behaviours. A study in south-eastern Nigeria found that higher levels of education were associated with improved knowledge and practices in relation to appropriate prevention and treatment strategies. (22) Although the study did not include a gender analysis, as women tend to have lower educational and literacy levels than men, this may affect their ability to recognize the signs and symptoms of malaria and their knowledge of available treatment.
- Although both men and women in areas of endemic tropical diseases suffer from discrimination due to class inequality and poverty, women are particularly disadvantaged due to factors linked with gender inequality. A study in Cameroon found that the burden of illness due to malaria rested disproportionately on economically disadvantaged women and on women with low social status. (23) Excess morbidity was found among women who were not employed, women living in poor neighbourhoods, and those living in households without modern amenities.
- As women in most parts of the world have the primary responsibility of caring for others in the household, it is they who provide the majority of treatment to sick family members. However, decisions about seeking treatment for children are made by men and, to a lesser extent, by senior females in the households. Therefore, only targeting women in malaria intervention programmes is insufficient for ensuring improved access to services. (24)

Insecticide Treated Net (ITN) use is also subject to gender norms

- ITNs have been shown to reduce both the number of malaria cases and malaria-related deaths in pregnant women and their children. (5)
- The acceptability and use of ITNs are strongly linked to culturally accepted sleeping patterns, in which gender plays an important role. In some instances, young children sleep with their mother and are therefore protected by her bednet if she has one. Alternatively, if a household only has one bednet, priority may be given to the male head of the household as he is often considered the primary breadwinner. In other contexts, men have very little access to ITNs if they predominantly sleep outside. (25)
- Economic inequities in areas such as the control of household resources also affect access to ITNs and are an important gender issue. In one study in Benin, many

women explained that since they were financially dependent on their husbands, they were unable to purchase an ITN for themselves and their children unless their husbands prioritized the use of bednets (25). The study also revealed that when women did earn an income and had control over this income, they were much more likely than men to purchase an ITN for their household.



Pregnant woman with ITN

- Women are often responsible for the maintenance of ITNs as part of their household duties. This includes washing and often chemical re-treatment of the nets. Studies on the use of ITNs indicate that women frequently have to request their husband's permission for money to re-treat the nets (25).

Malaria can have different socioeconomic consequences for men and women

- Although more research is needed on this issue, a study in rural Colombia found that illness in an adult male placed the whole household at risk. The workload of women was significantly increased as they had to take care of sick household members as well as replace males in farm production. The study found that 64% of all tasks normally undertaken by the sick person were then performed by women. The women expressed concern about the loss of the main economic provider as well as about having to work harder in order to earn money to buy medicine and food. The study pointed out that although the disease burden was greatest amongst adult males, the indirect economic burden of the disease was greater for women. (26)

What research is needed?

- As most studies on malaria in pregnancy have looked at *P. falciparum* infection, more studies are required on the effects of other malaria parasites on pregnancy, particularly *P. vivax*.
- Research on the interactions between antiretroviral drugs, prophylaxis with co-trimoxazole and antimalarial drugs, particularly with regard to pregnant women, is urgently required.
- More research across a variety of settings is needed on the impact of the division of labour on the vulnerability of men and women to malaria. The gender dimensions of mobile communities, such as the leisure and work patterns of male and female migrant workers, refugees and others, must also be studied when looking at patterns of exposure to malaria infection.
- Increased attention should be paid to the production and distribution of ITNs suitable for pitching outdoors during the farming season when men may remain on the farms.
- There is limited knowledge on the gender dimensions of the economic and social consequences of malaria within households. Further research could be conducted on the strategies of different household members for coping with malaria, particularly with regard to food, economic security and caregiving.
- Research should be carried out on the barriers for men and women in accessing prevention and treatment interventions for malaria. Surveys should examine cultural contexts to ascertain preferences for prevention and treatment, access to financial resources and to what extent limited mobility for women affects both prevention and treatment-seeking behaviour. Such research would be very useful in designing interventions that are more accessible to both women and men.
- Sex-disaggregated data should be collected and analysed on the use of (and compliance with) malaria treatment to see whether these differ for men and women.
- Some studies indicate that there are concerns surrounding the effect of Intermittent Presumptive Treatment (IPT) and other malaria drug treatments on the health of pregnant women and young children. Research should therefore be conducted across a range of settings into the perceptions of men and women regarding malaria treatment, and whether these perceptions affect the use of, and compliance with, treatment regimens.

What are the implications for policies and programmes?

- There are indications in some areas that women may not have full access to malaria prevention and treatment resources. Programme planners should determine if gender-related barriers exist in their coverage areas and if so take steps to remove them.
- Pregnant women and children under five in high-transmission areas should be targeted for malaria control interventions, for free or subsidized ITNs and for appropriate effective treatment through maternal and child health services.
- Many programmes are already moving towards free or highly subsidized malaria prevention and treatment. However, in addition to targeting pregnant women and young children it is important that eligibility criteria must also ensure fair access for other vulnerable and disadvantaged groups (for example, people living with HIV/AIDS, orphan-headed households and widows).
- Malaria prevention in pregnancy using Intermittent Presumptive Treatment (IPT) and ITNs should be one of the packages delivered through antenatal care services.
- In rural areas where health services are a long distance from villages, the provision of community-based malaria treatment through home management of malaria will greatly increase access and the attendance of men and women for treatment and/or testing for malaria.
- Education sessions should be developed alongside treatment, with messages targeted at different groups including mothers, pregnant women, men, fathers, male and female adolescents, and schoolchildren. These sessions could focus not only on early recognition of malaria, but also encourage prevention, more equitable household decision-making and the sharing of caregiving activities.
- Researchers, programme managers and policy-makers working on malaria research, prevention and control need to be trained in gender analysis.
- Young men and women should be meaningfully involved in advocacy and education around malaria through participatory approaches such as peer education initiatives.



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Roll Back Malaria Partnership (RBM))
HIV/AIDS, TB and Malaria (HTM)

APPENDIX B: STAKEHOLDER MEETINGS AND PARTICIPANTS

Gender and Monitoring and Evaluation Meeting with Malaria Control Unit (Surveillance, Monitoring and Evaluation), October 22, 2014

Dr. Rebecca Kiptui, Focal point, Surveillance, Monitoring and Operational Research, MCU
Deborah Ikonge, Planning Officer MCU
Dr. Nathan Bakyiata, Malaria Technical Advisor, WHO
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Monitoring and Evaluation Meeting with KENAAM, October 23, 2014, at KENAAM Offices

Edward Mwangi, CEO KENAAM
Anne Njeri, Afri Afya
Dr. Martha Njenga, World Vision International (Chair)
Chacha Lucas, Lifecare (Vice chair)
Josephine Mburu, KENAAM Programs
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Monitoring and Evaluation Meeting with AMREF, October 23, 2014, at AMREF Offices

Jared Oule, AMREF Project Manager
Emmanuel Musombi, AMREF M&E Officer
Michael Nduri, Grants Officer, AMREF
Christopher Oyieke, Assistant Grants Officer, AMREF
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Monitoring and Evaluation Meeting with Dr. Daniel Wacira USAID Malaria Specialist, October 27, 2014, at Measure Evaluation Offices

Dr. Daniel Wacira
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Monitoring and Evaluation Meeting with Dr. Nathan Bakyiata, WHO, October 28, 2014, at Measure Evaluation Offices

Dr. Nathan Bakyiata, Malaria Technical Advisor, WHO
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Monitoring and Evaluation Meeting with M&E Department MoH, October 29, 2014, at Afya House

Mirasi Tom, Program Officer M&E Unit
Dr. Isabella Maina, Head of M&E unit
Hellen Kiarie, M&E specialist
Michael Onyango, Intern
Dr. Lairumbi, Geoffrey, Associate Director, PIMA
Moses Njatha, M&E Associate, PIMA

Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Monitoring and Evaluation Meeting with HIS Department represented by Dr. Martha over the phone, October 29, 2014

Gender and Monitoring and Evaluation Meeting with Gender Mainstreaming Unit MoH, October 29, 2014, at Afya House

Joyce Muthuuri, Gender Mainstreaming Officer, MOH
Joseph Baraza, Gender Mainstreaming Officer, MOH
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

Gender and Malaria Dissemination Meeting, November 3, 2014, at MCU

Dr. Rebecca Kiptui, Focal point, Surveillance, Monitoring and Operational Research, MCU
Dr. Nathan Bakiyata, Malaria Technical Advisor, WHO
Beatrice Machini, M&E Officer, MCU
Joyce Muthuuri, Gender Mainstreaming Officer, MOH
Joseph Baraza, Gender Mainstreaming Officer, MOH
Dr. Abdinasir Amin, Associate Director, PIMA
Dr. Agneta Mbithi, Malaria M&E Advisor, PIMA
Abby Cannon, Gender Specialist, MEASURE Evaluation
Zena Lyaga, Consultant, PIMA

APPENDIX C: MAKING GENDER COUNT, GENDER M&E BASICS HANDOUT

A Gender Integrated Approach considers the impact of gender on the people, the health program, and the results. Gender integration is an iterative process that occurs throughout the program cycle. Here we see the five steps of gender integration



Assessment

- Examines relational differences in women's and men's and girls' and boys' lives and how these differences impact health. Specifically, a gender analysis looks at:
 - **Activities** of men and women
 - **Gender norms**
 - **Bargaining position (POWER)** of women and men
 - Women's and men's **access to resources**

Strategic Planning and Design

- Results of the gender analysis are used to develop gender objectives. Gender objectives are useful in identifying appropriate approaches to meet those objectives. The **Gender Equality Continuum** categorizes approaches by how to treat gender norms and inequities in the design, implementation, and evaluation of program/policy. It is important to consider whether gender accommodating, gender transformative, or a combination of the two approaches would be most effective in achieving improved outcomes.

Monitoring and Evaluation

Monitoring	Evaluation
<ul style="list-style-type: none"> • Uses indicators that measure gender-specific outputs. • Uses indicators that track progress of gender-specific elements of programming. • Disaggregates data collection and analyses by sex and age, at a minimum. • Collects data to measure gender outcomes, such as attitudes and behavior that reflect gender norms. 	<ul style="list-style-type: none"> • Identifies elements that address gender norms and gender equality. • Measures impact on outcomes that relate to gender-specific programming. • Uses data to demonstrate progress and impact, influences demand for richer data.

Define Your Gender-related M&E Questions

Different M&E questions will require different data, different monitoring plans, and different evaluation designs. For example, if at the end of your program you want to know whether health status has changed (e.g., from the above example, HIV incidence), you will need population-based measures. If all you want to know is that the target population was reached (e.g., if men participated in gender sensitization activities), you may only need monitoring data (i.e., the number of men participating in gender sensitization activities). It is important to develop your questions when creating the M&E system and during program planning, so the appropriate information is collected and available for users.

In general, here are some examples of the types of questions you might ask...

Monitoring:

- Are we implementing gender and health programming as planned?
- If applicable, are men and women both receiving/participating in the program?
- Are institutional and organizational policies more supportive of gender equity?
- Have identified changes contributed to increasing access to healthcare and information?

Evaluation:

- Has the program reduced power differences in relations between men and women? (For instance, is decision making more equitable? Do men and women have more equal opportunities? Has women's mobility outside the home increased?)
- Has stigma and discrimination against people who do not follow traditional gender norms and behaviors been reduced?
- Has the removal of gender-based constraints contributed to improved health outcomes?

Select Indicators to Measure Gender-related Outputs and Outcomes

What are gender M&E indicators?

Many different indicators can be used to look at potential gender differences in health and at the effect of gender-integrated programs on health and gender outcomes. These can be categorized in one of two ways:

- **Sex and age disaggregated indicators:** That is, regular health indicators that are presented for both men and women or boys and girls. It is also important to note that we emphasize disaggregating by sex because most data are collected according to male and female sex. However, some surveys are beginning to include other identities, such as transgender, in which case the data would be disaggregated by gender identity. Striving to

include all gender identities in future M&E efforts will enhance health- and gender-focused programs by allowing them to understand and respond to all gender differences. Examples of sex disaggregated indicators include:

- Number of adult patients (disaggregated by sex and age group) in treatment one year after initiation of ARV treatment
- Proportion of children under age 5 (disaggregated by sex) given vitamin A by provider
- **Gender-sensitive indicators:** Indicators that address gender directly and go beyond sex disaggregation alone. For example gender-based violence, as well as other more complex indicators like gender attitudes and norms, power differences, female autonomy, access to educational and economic opportunities. **Gender-sensitive indicators should also be disaggregated by sex, when possible.** For example:
 - Proportion of target population (disaggregated by sex) who agree that women should have the same rights as men
 - Proportion of people (disaggregated by sex) who have access to cash and can spend it without permission

GENDER EQUALITY CONTINUUM TOOL

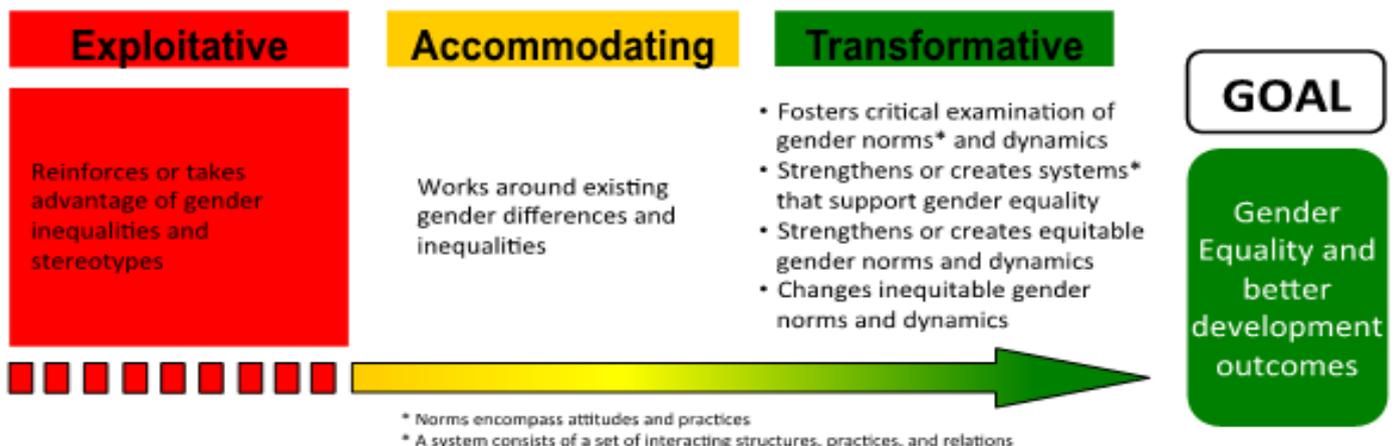
Ignores:

- the set of economic/social/political roles, rights, entitlements, responsibilities, obligations and power relations associated with being female & male
- dynamics between and among men & women, boys & girls

Gender Blind

Gender Aware

- Examines and addresses these gender considerations and adopts an approach along the continuum



Gender and Health M&E Resources and Tools:

MEASURE Evaluation gender web site:

www.measureevaluation.org/gender

VAW/G Compendium:

<https://www.cpc.unc.edu/measure/publications/ms-08-30>

Gender scales:

<https://www.c-changeprogram.org/content/gender-scales-compendium/index.html>

Online Gender M&E Course: <http://www.globalhealthlearning.org/course/gender-m-e>

K4 Health IGWG Gender and Health Toolkit:

<http://www.k4health.org/toolkits/igwg-gender>

Resource guide for gender data and statistics (WHO, IGWG/USAID & MEASURE Evaluation)

<https://www.cpc.unc.edu/measure/publications/ms-12-52>

Compendium of Gender Equality and HIV Indicators:

<https://www.cpc.unc.edu/measure/publications/ms-13-82>

Questions about Gender M&E? Ask the expert!

<https://www.cpc.unc.edu/measure/our-work/gender/ask-the-gender-expert>

APPENDIX D: KENYA NATIONAL MALARIA STRATEGY 2014-2017

Suggestions and Recommendations

Section 2.1 discussed the epidemiological situation in the country. This section does not discuss the current malaria prevalence breakdown between women and men, boys and girls. This would be a good opportunity to highlight the data from the KMIS that show that malaria prevalence between the sexes is relatively equal.

Section 2.2, The Kenya Health System, would also benefit from a gender sentence or paragraph pointing out the Kenyan Constitution's support of gender equality, the KHSSP, and the Kenya National Health Policy's attention to gender equality (e.g., Policy Principle 5.1.1. "Equity in distribution of health services and interventions," which includes gender equality; and 6.2.3 iv., which specifies "leadership and stewardship for overall health management in the county, through building linkages with, and putting in place strategies to influence health related sectors in the county, such as education, roads, **gender**, nutrition, and others. This will ensure that the interventions of these sectors have positive health outcomes" [p. 30 <http://countryoffice.unfpa.org/kenya/drive/FinalKenyaHealthPolicyBook.pdf>]). These policies could be referenced in the KMSP to show attention to gender across multiple Kenyan strategies/policies.

- From the KHSSP: "At different levels of the health system, sector performance shall be subjected to an equity analysis looking at various dimensions such as gender, aridity, rural/urban residence, literacy levels and poverty" (pg. 105) → where/how is this implemented in KNMSP?
- Possible language addition under 2.4 "As the KHSSP identifies the area of gender and vulnerable populations as requiring collaboration and partnership under strategic objective 6, so does the KNMSP. The MCU recognizes that gender and human rights considerations and collaborations with partners must be taken into account when planning, implementing, monitoring and evaluating malaria interventions." (Feel free to use part or all of this language)

Achieving the six objectives of the KNMSP will be strengthened by including gender in the implementation of strategies and monitoring and evaluation. For example:

- Objective 1: To have at least 80% of men and women living in malaria risk areas using appropriate malaria prevention interventions by 2017.
 - Advocate for sex disaggregation of this objective in the future.
 - Is male engagement part of any campaigns or education activities with regard to malaria in pregnancy?
- To have 80% of all self-managed fever cases receive prompt and effective treatment and 100% of all fever cases who present to health workers receive parasitological diagnosis and effective treatment by 2013.
 - Gender issues should be considered with regard to affordability of medicines. Women often have less access to and control over family finances, and this can impact their ability to obtain transportation to and purchase of medicines.
- Objective 4: Ensure that all malaria indicators are routinely monitored, reported and evaluated in all counties by 2017.
 - This objective could include sex disaggregation in appropriate indicators, as possible.

- Ensure that the KMIS and other surveys continue to collect, analyze, and report data by sex.
- Potential operations research questions for future research could investigate gender differences in use of nets, decision making, and access to and affordability of care.
- Could include a session on the importance of gender in M&E in future trainings for M&E and data demand and use.
- If community health information system tools are still being finalized, would it be possible to include and maintain sex disaggregated data?
- Objective 5: To strengthen advocacy, communication and social mobilization capacities for malaria control to ensure that at least 80 percent of people in malarious areas have knowledge of prevention and treatment of malaria by 2014.
 - It would be good to disaggregate to ensure that 80% of women and men have knowledge of prevention and treatment.
 - The following challenge listed under Objective 5 also has gender implications: The non-health sector was not actively engaged for increased advocacy of malaria within their sector; hence malaria remains a health issue as opposed to a socio-economic burden requiring sector wide participation.
 - Women usually hold the responsibility for caring for sick family members, so their productivity and socio-economic contributions are even more impacted by having or caring for those who have malaria.
- Objective 6: To improve capacity in coordination, leadership, governance, and resource mobilization at all levels toward achievement of the malaria program objectives by 2017.
 - The narrative mentions these capacities needed to achieve universal access—attention to gender could also be included in the list of considerations in achieving universal coverage.

APPENDIX E: NATIONAL M&E PLAN

As discussed above, it would be important to disaggregate all KMS objectives by sex (and age) when possible, particularly Objective 4, in relation to the M&E Plan. As the M&E Plan flows from the KMS, gender additions to the KMS should also be reflected in the M&E Plan. The suggestions below to include gender in the M&E Plan focus primarily on disaggregating indicators by sex, with consideration for indicators measuring attention to gender in capacity building, meeting agendas, and inter-sector collaboration. All recommendations however, are pending corresponding changes to the KMS.

Table 2:

- Goal: To have reduced morbidity and mortality caused by malaria in the various epidemiological zones by two thirds of the 2007/2008 level by 2017.
 - Disaggregate by sex: Malaria parasitaemia prevalence (pf) rate among children < 5yrs in lake endemic areas (by microscopy)

Objective 1: To have at least 80% of people living in malaria risk areas using appropriate malaria preventive interventions by 2017

- Strategy 1: Universal distribution of ITNs/LLINs through appropriate channels (1 LLIN for 2 people)
 - Include sex disaggregation (and specify sex disaggregation in indicator reference sheet) when possible, such as:
 - Proportion of U5 sleeping under ITN/LLIN
 - Proportion of people sleeping under ITN/LLIN
 - Proportion of population protected by ITNs/LLINs
- Strategy 4: Provision of IPTp at antenatal clinics and its promotion at community level
 - If any male engagement strategies are adopted, it would be good to have an indicator to track number of outreach activities to engage men, or whatever the male engagement efforts are

Objective 2: To have 100% of all suspected malaria cases presenting to a health provider managed according to the national malaria treatment guidelines by 2017

- Strategy 1: Capacity building for malaria diagnosis and treatment at health facilities
- Disaggregate by sex, if possible in with the quality of care:
 - Proportion of patients with fever presenting to health facility who are tested for malaria with RDT or microscopy (<5 years and ≥5 years of age)
 - Proportion of patients with fever presenting to health facility who are managed in accordance with national malaria guidelines (tested for malaria AND test positive prescribed ACT or test negative not prescribed an antimalarial)
 - Proportion of patients with fever presenting to health facility who are managed in accordance with national malaria guidelines (tested for malaria AND test positive prescribed ACT or test negative not prescribed an antimalarial)
- Strategy 3: Strengthening Community Case Management of Malaria
 - Input: Malaria training curriculum and guidelines—this should include gender

Objective 4: Ensure that all malaria indicators are routinely monitored, reported and evaluated in all counties by 2017

- Strategy 4.7: Human resource capacity building in monitoring and evaluation
 - If indicators can be added, add something like “Number of trainings that include attention to gender and malaria” and/or “number of staff trained in gender M&E”

Objective 5. To increase utilization of all malaria control interventions by communities in Kenya to at least 80% by 2017

- Strategy 2: Strengthen program communication for increased utilization of all malaria interventions.
- Disaggregate by sex and age:
 - Proportion of the population that cite LLIN as the best protection against malaria
 - Proportion of population who know that they should seek treatment within 24 hours of fever onset
 - Proportion of population who correctly cite at least three main symptoms of malaria
 - Proportion of people who recall hearing or seeing targeted malaria messages in the last six months
- Strategy 3: Advocate for inter-sector collaboration for malaria Advocacy Communication and Social Mobilization
 - Number of consultative meetings held with non-health sector partners
 - This indicator could include meetings with a focus on gender or that have gender on the agenda
- Strategy 4: Strengthen community-based social and behavior change communication for increased utilization of all malaria interventions
 - Proportion of people who received malaria messages through community channels
 - Disaggregated by sex and age

Objective 6: To improve capacity in coordination, leadership, governance and resource mobilization at all levels towards achievement of the malaria program objectives by 2017

- Strategy 3: Capacity strengthening for planning, partnerships, coordination and implementation at all levels
 - Number of MCU and county staff who participated in short courses in malaria management
 - Could include something about number of staff trained on importance of gender in malaria (dependent on gender and malaria being included in the KNMSP)

2.4.2 School-based Malaria Survey

- Is this survey disaggregated and/or can it be disaggregated and sex differences highlighted in any reports?

2.4.3 Sentinel Surveillance

- What data are disaggregated by sex and age here? Can more be disaggregated to monitor inpatient and malaria trends?

2.4.4 Program Monitoring

- It would be great to have gender included in the business plan if possible in the future, to help ensure there is budgetary support for any gender and malaria activities or trainings in the future.

2.4.5 Routine Monitoring at the Community Level

- Data are collected by sex at the community level (per Amref documents), but this is not noted in the M&E Plan. This could be highlighted if the community data continue to be collected and/or analyzed by sex.
- What happens to the data that are collected by sex at the community level when they are entered into the community health information system and HIS? When is the data aggregated to number of people, instead of number of women/men?

2.4.5 Community and Facility-based Surveys

- These should include sex and age disaggregation as appropriate and feasible. When disaggregation is included, it should be noted in order to draw attention to the gender-related efforts.
- Monitoring Quality of Care (QoC)
 - “MCU will continue QoC and expand it to include both outpatient and inpatient”
 - Would it be possible to include attention to gender via sex-disaggregated data here?

2.4.7 Operational Research and Translation

- “As Kenya progresses to malaria elimination in the long-term, there is need to undertake operational research in key areas which include: Social behavioural research in malaria control, [*Recommendation to add: including research with a gender perspective*]; entomological studies; tracking of changes in malaria transmission; cost-effectiveness analysis of different combination of control interventions and other emerging questions relevant to malaria control.”

3 Implementation Arrangements

- Consider including lack of attention to gender and sex-disaggregated data as a weakness in the M&E system. Having this documented as a weakness recognizes the gap and will provide accountability toward improvement.

3.2 Current MCU M&E Unit Resources

3.2.1 Human Resources

- The assessment did not highlight a need for gender M&E in human resources because it did not look for it, but this is an area that needs to be strengthened. Could it be added as an area for improvement even if it was not included in the assessment?

Appendix 3: Data Demand and Information Use Plan

- Gender should be integrated into the Data Demand and Information Use Plan as a cross-cutting theme, as well as specific data standards that include sex-disaggregation, use, and reporting.
- Data Use and Data Analysis plans should also include attention to gender analysis.
- Capacity building in data use core competencies should also include attention to sex and gender in data analysis, interpretation, and use.

APPENDIX F: KENYA MALARIA INDICATOR SURVEY

- Sex disaggregation present and used in some analyses, but not all.
- Information was collected on households, women ages 15-49 and children ages 0-14.
- Table 5.1, Prevalence and prompt treatment of children with fever:
 - Almost no difference between prevalence between boys and girls (27.0 vs. 27.6)
 - Very small difference with regard to percentage who had blood taken for testing (11.6 vs. 12.1)
 - Differences become more evident when looking at percentage of who took anti-malarials (boys: 37.8; girls: 32.4), percentage who took anti-malarials on the same or next day (boys: 24.2 and girls 17.0); percentage who took ACT (boys 20.2 and girls 15.9); and percentage who took ACT on the same or next day (boys 13.9 and girls 7.5).
 - Results show higher percentages of boys receiving treatment than girls.
 - Unknown if these differences are statistically significant, likely not, but something to keep an eye on.
- There are small differences in source of treatment by sex (unknown if significant), but appears that treatment sought from faith-based sources or shops is higher for boys than girls, and treatment from traditional healers and government is higher for girls than for boys. Other sources are similar for boys and girls.
- Table 5.3: Type and timing of antimalarial drugs taken by children with fever also shows differences between boys and girls with respect to percentage of children who took ACT and percentage of children who took ACT the same or next day. (20.2 vs 15.9 and 13.9 and 7.5, respectively).
- Table 5.4: Seriousness of child's fever does not report results by sex. This would be an important indicator to look at by sex, as it could illuminate if parents perceived their sons or daughters to have differing degrees of seriousness of fever.
- Prevalence of malaria in children 3 months–14 years: There are slightly more boys that test RDT and slide positive than girls (15.3 vs 14.0 and 11.6 vs 10.9). This is likely not significant, but could be interesting to keep an eye on.
- Anemia prevalence shows similar results with 2.9% vs 2.3% of boys vs. girls having severe and 24.0 vs. 22.9% of boys vs. girls having moderate anemia.
 - Results are not broken down by sex with different age groups
- Girls' education is noted as a way to increase antenatal care, malaria treatment, and net use.

Recommendations:

- Add chapter/sub-section to highlight gender differences
- Include graphs comparing prevalence and treatment of boys and girls
- Include sex-disaggregation with regard to seriousness of child's fever
- Add questions about decision making for seeking treatment
- Add questions about controlling/using/deciding to use money to pay for medical services

APPENDIX G: EVALUATION OF THE 2011 MASS LONG-LASTING INSECTICIDE TREATED NET (LLIN) DISTRIBUTION CAMPAIGN

- Assessed the mass distribution campaign of 2011/2012 in Western, Nyanza and part of the Rift Valley provinces.
- Found that the number of LLINs has increased significantly, but correct usage remains a challenge.
- Collects and uses sex-disaggregated data for demographics and various analyses.
- Study population: Who was being interviewed? Did they attempt to interview both men and women? What was the breakdown? This should be noted.
- P. 14 Gender attention: Notes that women of reproductive age should receive greater exposure to health services and awareness because they are a high-risk malaria group.
- Demographic discussion breaks down the population by sex:
 - 30% of households are headed by women.
 - Notes that husbands' role in the other 70% may be an important part of shifting behavior, but not discussed further or anywhere else in the report.
- Analysis looking at net ownership and use by household characteristics did not include the sex of head of household in the analysis.
- Table 15: Relation of household member who slept under the net the previous night is an interesting analysis to look at, but it does not differentiate the sex of head of household or of the child, partner, to relative, which could be important to illuminate any potential gender bias.
- While the evaluation report includes significant sex-disaggregated data, gender could be more prominently highlighted and discussed as a cross-cutting issue important to distribution and use of LLINs.
- Among households that did not receive nets in the distribution (most common reasons were due to absence, they were not visited, or they did not know about the registration), it would be interesting to look at gender.
 - E.g., was it because the mother was absent or too busy? Why did the father not go instead? Was this more or less common in female-headed households?
- Good job of addressing potential inequalities in wealth quintiles, this should be done for gender as well.
- The report recommendations include promoting equity of ownership across wealth quintiles, but should also include gender.
- Recommendations include investment in communication—this should also include an analysis of what messages and to whom are most effective. Targeting women may be less effective if men are making decisions. Further research “understanding the effectiveness of the various communication channels towards increasing net coverage and use needs to be explored” should include gender analysis.

APPENDIX H: QUALITATIVE STUDY ON BARRIERS TO NET USE AMONG MOST AT RISK POPULATIONS IN KENYA

- Indepth interviews and focus groups were completed with both men and women (about equal numbers for focus group discussions, but significantly more women in the key informant interviews)
- Most people received nets from antenatal care or distribution campaigns, but some purchased them, those who could afford it (p. 30).
 - Gender and decisionmaking around purchasing nets was not explored.
- Findings show that women hold the responsibility for hanging and using nets.
 - This fits with the campaign and education directed toward women, but also leaves children and family members vulnerable if the mother is away or not committed and the fathers are not engaged.
- Household habits and sleeping arrangements impact net use.
 - Gender was a factor in where children slept, especially over age 10 and if the boy child was circumcised.
 - Visiting family members also influence net use, e.g., it is taboo for a mother-in-law to use a net used by son-in-law, so she may go without a net if there are not enough.
- Decisionmaking for net use
 - The women usually decide to use the net and are responsible for obtaining nets.
 - Questions focused on why it was decided to use the net, but did not examine gender differences or norms with respect to who has authority to make decisions regarding if/when to purchase the net (if applicable).

APPENDIX I: COMMUNITY HEALTH FORMS REVIEWED

- Community Referral form (MOH100): Includes sex disaggregation.
- Household Register (MOH513): Includes sex disaggregation for all household members and their information.
- Service Delivery Log Book (MOH514): No indicators are sex disaggregated.
- Community Health Extension Worker Summary (MOH515): Total number of adolescent and youth (13-24) is disaggregated by sex, but no other indicators are disaggregated.
- Community Chalk Board (MOH516): Number of children fully immunized is not disaggregated by sex; total adolescent youth 13-24 is disaggregated by boys and girls. Additional indicators that measure number of children (e.g., number of children participating in growth monitoring, number of children with severe malnutrition) are not disaggregated by sex.
- Community treatment and tracking register (TTR): Includes sex disaggregation for each individual and their assessment, referral, treatment, and outcome data.

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- This document was sex-disaggregated and showed substantial differences between the sexes.
- For example: Number of people with uncomplicated malaria receiving ACT treatment as per national treatment guidelines at the community under Community Case Management of Malaria in Western and Nyanza province indicated that 12 boys and 43 girls between ages 1 and 5 received treatment, and 678 boys and 1,301 girls between ages 5 and 19 received treatment.
 - These large discrepancies between boys and girls should be checked to ensure that the data are accurate, and if so, these should be investigated as to why this might be happening.



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