



Illustrative Gender Indicators for Malaria

Sex-Disaggregated Indicators:

The prevalence of malaria (by sex and age)

The incidence of malaria (by sex and age)

The number of people treated for malaria (by sex and age)

The number of ITNs distributed (by sex)

Percentage reporting sleeping under an ITN (by sex and age)

Knowledge, perceptions, and beliefs about malaria and its symptoms (by sex)

Access to healthcare (by sex)

Health-seeking behavior and utilization of healthcare (by sex)

Gender-Sensitive Indicators:

The incidence of malaria among pregnant women

The percentage of currently married women who usually make a decision about their own healthcare, either by themselves or jointly with their husbands

The percentage of women who can make the decision to take a child to the health facility if she or he has a fever or is displaying other malaria symptoms

The percentage of men and women who hold gender-equitable beliefs (on the Gender Equitable Men [GEM] Scale) (Nanda, 2011)

The existence of a multisectoral malaria strategy that includes gender, addressing the needs and vulnerabilities of men, women, girls, and boys

Laws, regulations, or policies that present obstacles to effective malaria prevention, treatment, care, and support for marginalized populations or vulnerable groups

The Importance of Gender in Malaria Data

Addressing gender when monitoring and evaluating malaria projects helps ensure equity in access and benefits for men and women. This brief explores the importance of gender in monitoring and evaluation activities and suggests indicators to reveal and explain gender gaps in malaria outcomes.

Background

Although malaria affects both men and women, gender roles and gender dynamics give rise to different vulnerabilities, such as exposure patterns. For example, traditional gender roles may involve men working in the fields at dusk or women gathering water early in the morning, exposing them to peak mosquito-biting times (Reuben, 1993; Vlassoff & Manderson, 1998; Cotter, et al., 2013). Socially marginalized populations, such as sex workers and people who are lesbian, gay, bisexual, transgender, and queer, may be more vulnerable, because they are more likely than others to be homeless and sleep outside and less likely to seek health services, owing to stigma related to gender expectations (Walters & Gaillard, 2014). Along borders and in hard-to-reach areas that have more focal transmission, mobile and migrant populations drive transmission, because they often sleep outside without protection. Men are typically at greater risk in these settings (Guyant, et al., 2015).

Prevention and treatment of malaria are also influenced by gender. Though men may be more vulnerable than women to exposure, women may be more vulnerable than men to the consequences of malaria (Bates, et al., 2004). Women may be more willing than men to invest in malaria-prevention measures—such as insecticide-treated bed nets (ITN)—but many lack the financial and decision making power to do so (Lampietti, Poulos, Cropper, Mitiku, & Whittington, 1999). Gender norms around sleeping arrangements can affect who sleeps under mosquito nets (Garley, Ivanovich, Eckert, Negroustoueva, & Ye, 2013). Gender dynamics can also influence who within a household can decide if and when to access healthcare (Tolhurst & Nyongator, 2006). For biological and social reasons, women—particularly pregnant women—and children are at the greatest risk of contracting malaria both in high and low malaria-endemic areas (Steketee, Nahlen, Parise, & Menendez, 2001; Duffy & Fried, 2005; Mbonye, Neema, & Magnussen, 2006); Okonofua, Feyisetan, Davies-Adetugbo, & Sanusi, 1992).

Gender often intersects with other factors, such as poverty and education, to contribute to poor malaria outcomes. Several studies have shown that formal education is important for appropriate prevention and treatment strategies (Atieli, et al., 2011; Pell, Straus, Andrew, Meñaca, & Pool, 2011; Ankomah, et al., 2012). However, others have found a significantly higher

rate of ITN use among less-educated pregnant women. A study in Nigeria found that women without formal education were 1.75 times more likely to sleep under an ITN than those with postsecondary education (Auta, 2012). This may be directly related to the type of dwelling that wealthier and poorer women occupy, because wealthier households may have glass windows and air conditioning that reduce the number of mosquitos in the home. These examples illustrate how cultural, social, and economic contexts shape the way gender influences malaria outcomes. It is important to consider such contexts when examining potential gender-related influences on malaria transmission and treatment.

The U.S. Agency for International Development (USAID) seeks to understand gender differences, both to improve the overall impact of its malaria programs and to ensure that women and men have equitable access to the health services they need.

Integrating Gender in Malaria Data

The fundamental way to understand the effect of gender on program efforts is to disaggregate key indicators by sex. These data can identify where, when, and if gender inequalities exist. Often, malaria data are collected at the facility level by sex, but aggregated when sent to higher district, provincial, and national levels. Thus, data users and decision makers lose the ability to compare data for women, men, boys, and girls.

Health information systems have the opportunity to collect important information on the sex distribution of malaria cases, but disaggregation should be built into the system from the beginning. Most systems are designed to collect information on the number of pregnant women diagnosed with and treated for malaria, but it is less common to find sex-disaggregated data on children and nonpregnant adults. Sex disaggregation is not always feasible and can be costly, but it is important to consider when updating HIS data collection forms and databases at aggregate levels (province, national, etc.), because it can reveal important inequities. If disaggregation by sex is not feasible, qualitative research methods can be helpful in exploring potential gender considerations. For example, if an indicator collecting the number of people who sleep under an ITN cannot be disaggregated, interviews or focus group discussions with women at the health center to ask about their bed net usage and factors affecting it can be used instead.

Gender-sensitive indicators can be used to monitor and evaluate underlying gender norms and expectations that drive inequalities. For malaria data, including indicators related to household decision making and access to and distribution of household resources may shed light on prevention and treatment patterns. Data on vulnerable populations can help determine if specific groups are more at risk than others for infection or less likely to seek treatment. Gender data from evaluation activities can help determine the extent to which malaria programs affect or are affected by gender inequities.

Questions to Assess How Gender Affects Malaria Data and Outcomes

One can ask a number of questions to assess if and how gender influences malaria data and outcomes. We list some of them here:

- Are gender differences associated with occupational exposure to malaria?
- Are there gender constraints on who has the authority to buy and use bed nets?
- Are there gender norms that affect who sleeps under a bed net?
- Are there gender differences in who accesses 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 affect men and women differently?
- Are there unequal household decision making abilities concerning if and when to seek treatment?
- Are there different social or cultural perceptions about obtaining medical treatment for men and women?
- Do gender roles create an unequal burden of care between men and women?

Resources

- K4Health. A Guide to Gender and Malaria Resources. Retrieved from <https://www.k4health.org/toolkits/igwg-gender/guide-gender-and-malaria-resources>
- United Nations Development Programme. Discussion paper: Gender and Malaria. Retrieved from http://www.undp.org/content/dam/undp/library/HIV-AIDS/Gender%20HIV%20and%20Health/Discussion%20Paper%20Gender_Malaria.pdf
- World Health Organization. Gender, Health & Malaria. Retrieved from http://www.who.int/gender/documents/gender_health_malaria.pdf
- Roll Back Malaria Partnership. Malaria and the Sustainable Development Goals (SDGs). Retrieved from <http://www.rollbackmalaria.org/about/about-malaria/sustainable-development-goals>
- Kenya Ministry of Health. Gender and Malaria in Kenya. <http://www.cpc.unc.edu/measure/pima/malaria/gender-and-malaria-in-kenya>

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Definitions

Gender is the culturally defined set of expectations about the roles, rights, and responsibilities associated with being female and male, as well as the power relations between and among people based on those expectations. Gender varies over time and within and between cultures. Transgender persons, whether they identify as women or men, are also subject to these gender expectations. (Interagency Gender Working Group [IGWG])

Sex refers to the classification of people as male or female. At birth, infants are assigned a sex based on a combination of bodily characteristics including chromosomes, hormones, internal reproductive organs, and genitalia. (USAID, March 2012 Gender Equality and Female Empowerment Policy)

Gender identity refers to a person's deeply felt internal and individual experience of gender, which may or may not correspond with the sex assigned at birth. It includes both the personal sense of the body, which may involve, if freely chosen, modification of bodily appearance or function by medical, surgical, or other means, and other expressions of gender, including dress, speech, and mannerisms. (American Psychological Association [APA], 2015)

Sexual orientation refers to whom a person is physically, spiritually, and emotionally attracted. Categories of sexual orientation typically have included attraction to members of one's own sex (homosexual), attraction to members of the other sex (heterosexual), and attraction to members of both sexes (bisexual). While these categories continue to be widely used, sexual orientation does not always appear in such definable categories and instead occurs on a continuum and is fluid for some people. (APA, 2012) Public health professionals often use the abbreviations MSM (men who have sex with men) and WSW (women who have sex with women) as neutral terms to describe sexual activity of individuals, which may not necessarily correlate with a person's sexual orientation.

Gender equality is the concept that all human beings, both men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or prejudices. Gender equality means that the different behaviors, aspirations, and needs of women and men are considered, valued, and favored equally. It does not mean that women and men have to become the same, but

that their rights, responsibilities, and opportunities will not depend on whether they are born male or female. (Global Fund Gender Equality Strategy, 2009)

Gender integration entails identifying gender differences and resulting inequalities pertaining to specific programs and projects. Gender integration is the process of addressing these differences and inequalities in the design, implementation, monitoring, and evaluation of programs. (USAID, March 2012 Gender Equality and Female Empowerment Policy)

Gender analysis is a systematic way of looking at the different impacts of development, policies, programs, and legislation on women and men that entails, first and foremost, collecting sex-disaggregated data and gender-sensitive information about the population concerned. Gender analysis can also include the examination of the multiple ways in which women and men, as social actors, engage in strategies to transform existing roles, relationships, and processes in their own interest and in the interest of others. (Global Fund Gender Equality Strategy, 2009)

Sex- and age-disaggregated indicators are regular health indicators that are presented both for men and women or boys and girls. 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. (Population Reference Bureau's Framework to Identify Gender Indicators for Reproductive Health and Nutrition Programming, 2002)

Gender-sensitive indicators are those that address gender directly and go beyond sex disaggregation alone—for example, gender-based violence, as well as other more complex indicators such as gender attitudes and norms, power differences, female autonomy, and access to educational and economic opportunities. Gender-sensitive indicators should be disaggregated by sex, when possible. Gender-sensitive indicators make it easier to assess how effectively gender dynamics that negatively influence health service access and outcomes have been addressed. (USAID, ADS Chapter 205)

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