Evidence and new recommendations for malaria prevention tools

Matthew Coldiron, Epicentre, USA

The early 2000s saw great advances in malaria control worldwide, in part due to scale up of proven preventive strategies such as insecticide-treated bednets and a variety of chemoprevention measures. In 2015, that progress began to stall, and in 2020, according to WHO, there was a marked increase in the number of malaria cases and deaths, larger than any seen in the last two decades: over 241 million cases of malaria and 626 000 deaths, including 479 000 deaths among African children under 5 years old.

In this troubling context, there have been many recent advances and changes regarding malaria prevention, which will be detailed in the introduction to this roundtable.

- The largest headline came in 2021, with a recommendation to use the RTS,S vaccine, the first malaria vaccine to be approved for broad use in African contexts. This modestly effective vaccine will be expensive but could have a major impact if access issues could be overcome and the vaccine used effectively at scale.
- New WHO guidelines for a variety of chemoprevention strategies are expected soon. Strategies like Seasonal Malaria Chemoprevention (SMC) may see their eligibility criteria broadened, and Mass Drug Administration may be given a more prominent place in the malaria toolbox. Older proven strategies, like Intermittent Preventive Treatment (IPT) among pregnant women and IPT among infants may be re-branded, and re-emphasized in an effort to improve uptake.

 Pyrethroid insecticides are standard in impregnated bednets. Mosquito resistance to pyrethroid insecticides is increasing, which might eventually warrant the roll-out of next-generation pyrethroid-PBO bednets, which are more expensive and less durable.

Malaria prevention is at a critical juncture. We will discuss these scientific, public health, and strategic considerations in-depth with an expert panel.