Hepatitis E outbreak response in Fangak County, South Sudan: coverage and acceptance of a vaccination campaign targeting women of reproductive age

Joseph Aumuller, Epicentre, France

Background
In September 2023, the South Sudan Ministry of Health declared an outbreak of hepatitis E virus in Fangak County, Jonglei State. From April to November 2023, MSF identified 169 hepatitis E cases, among them 45% pregnant women. Cases reported at the hospital were severe and the case fatality ratio (CFR) was high with 18 deaths, 53% were women of reproductive age and 42% were pregnant women. In response, MSF together with the Ministry of Health conducted the 2nd ever reactive vaccination campaign with the Hecolin vaccine. The 1st to target exclusively women of reproductive age.

Methods
This is a descriptive, cross-sectional cluster survey with a two-stage cluster sampling design. The two strata selected were the Old Fangak and Mareang/Toch Payams.

To complement the vaccination coverage estimates, understand perception of the vaccine, and the acceptance of the strategy to vaccinate only women of reproductive age, qualitative methods were utilized following the second round of vaccination.

Results
High coverage was observed of at least one dose of hepatitis E vaccine, according to recall or card, among vaccine eligible women: 94% [95% CI 92-95] in Old Fangak and Mareang /Toch Payams. Coverage of two doses was lower, with estimated coverage of 77% [95% CI 74-80%] according to recall or card. Vaccination coverage was similar in both strata, even in hard-to-reach areas.

While community members reported high acceptance of vaccine, many were critical of the vaccine strategy targeting women aged 16 to 45. This was perceived to conflict with the observed cases of Hepatitis E among the population and physical reproductive age, exclude other vulnerable groups, and not consider community priorities or decision-making structures.

Conclusion
The vaccination campaign reached high coverage despite challenging field conditions, and low acceptance of the strategy.

In response to a Hepatitis E outbreak MSF conducted the second ever reactive campaign reaching high coverage in women of reproductive age.