The authors investigated measles immunity among young infants by examining the presence of IgG and IgM EIA antibodies against measles virus in oral fluid obtained from infants at 6 and 9 months of age. IgG EIA antibodies were positive in 26/211 (12.3%) at aged 6 months and, among 26 IgG EIA positives, two showed positive for IgM EIA antibodies. IgG EIA antibodies were positive in 90/295 (30.5%) at 9 months of age. Among them, 9 were born to IgG-negative mothers and five out of nine were also IgM-positive. Among 142 infants without having IgG EIA just before immunization, 85 (58.2%) became positive for IgM EIA after vaccination. It suggested that infants were exposed with measles before vaccination and then six-months infants seem to be a better timing for immunization. And the E-Z strain had poor immunogenicity in infants at 9 months of age in Mozambique.

Major comments:
1) As for the methodology of IgG and IgM EIA antibodies against measles virus in oral fluid.

Several authors reported that the detection of measles-specific antibodies in oral fluid has been recommended as a safe, effective, and noninvasive method. They examined IgM capture radioimmunoassay or EIA antibodies using paired serum and saliva or oral fluid. As for the IgG EIA antibodies in oral fluid, several authors mentioned the usefulness for testing IgG EIA antibodies in oral fluid, (Reference No.16 and 17). Their detection method was based on IgG capture EIA. The author mentioned simply commercially available EIA, MicroImmune test kit. Is the detection system based on a capture method or indirect EIA? If the kit is based on indirect EIA, the author should compare the detection of IgG and IgM antibodies using paired blood and oral fluid. As for the detection of IgG antibodies in oral fluid, there were conflicting reports on sensitivity, using indirect EIA and IgG capture EIA. Do you have any preliminary data on it?

The specificity of EIA kit for the detection of IgG antibodies is 86.7% as they mentioned in the section of screening method. This means the false positive are observed and, thus, it suggests the possibility of false positives for the high positive rate of IgG EIA in oral fluid. Oral fluid samples positive for IgG EIA should be checked for background absorbance values to the negative-antigen wells.

2) Poor sero-conversion rates
Low sero-conversion rate may be influenced by the interference of low level of IgG antibodies, as discussed in the text. Oral fluid was obtained two weeks after vaccination. One possibility is that 2 weeks after vaccination may be too early for the maximum detection rate, because peak serum IgM response would be noted around 3 weeks after vaccination.

The authors mentioned detection of IgM antibodies in 142 infants initially IgG negatives. How about the remaining initially IgG positives?

Minor comment.

In Table 1, a total number of IgG positive mothers were 397 in the left column but 403 in the very right column. And the numbers of negatives and missing were different.

The contents of the paper are interesting and contribute to the general health for measles immunization but I think the assessment of methodology seems poor and sensitivity of the detection of IgG and IgM EIA antibodies should be compared using paired sera and oral fluid.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.