**Variation in maternal mortality in Sidama Regional State, southern Ethiopia: A population based cross sectional household survey**

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# **Abstract**

## **Introduction**

Maternal mortality studies conducted at national level do not provide information needed for planning and monitoring health programs at lower administrative levels. The aim of this study was to measure maternal mortality, identify risk factors and district level variations in Sidama Regional State, southern Ethiopia.

## **Methods**

A cross sectional population-based survey was carried in households where a woman reported pregnancy and birth outcomes in the past five year. The study was conducted from July 2019 to May 2020. Complex sample logistic regression analysis was used to identify variables independently associated with maternal mortality.

## **Results**

We registered 10602 live births (LB) and 48 maternal deaths yielding the overall maternal mortality ratio (MMR) of 419; 95% CI: 260-577 per 100,000 LB. The highest MMR was observed in Aroresa district; 1142 (95% CI: 693-1591) per 100,000 LB. Haemorrhage and eclampsia were the leading cause of death. Fifty-nine percent mothers died during labour or with 24 hours after delivery, 47% died at home and 38% at health facility. Mothers who did not have formal education had higher risk of maternal death (AOR: 4.3; 95% CI: 2.0 – 9.2). The risk of maternal death was higher in districts with low midwife to population ratio (AOR: 3.0; 95% CI: 1.2-7.9).

## **Conclusion**

We observed high maternal mortality with district level variations. Targeted interventions should be instituted in areas with high maternal mortality rates. Attention should be given for female education and to improve shortage of midwives.

## **Presenter**

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## **Biography**

Aschenaki Kea is a public health specialist by profession and currently studying a PhD in Public Health/Epidemiology in a joint PhD program between University of Bergen, Norway and Hawassa University, Ethiopia. Aschenaki’s focus of research in his PhD work is, measuring maternal mortality and access to skilled delivery in southern Ethiopia. This time, Aschenaki made ready three manuscripts for publication from PhD work. Previously, Aschenaki worked as a research director in REACH Ethiopia non-profit organization for REACHOUT consortium research project and published 12 articles in peer reviewed journals. After completion of his PhD study, Aschenaki has a goal to be a researcher in joining academic institutions. Out of his education and research activities, Aschenaki involves in church activities, likes singing and playing a guitar. Aschenaki is married and a father of two daughters.