

## ABSTRACT

About 17,000 children below five years of age die each day across the world, 99% occur in developing nations with 50% accounted for by Sub-Saharan Africa (SSA). Kenya's high under-five mortality rate (U5MR) at 52 deaths per 1,000 live births won't scale down without solving the high under-five mortality (U5M) in rural areas. Despite Karemo Sub-County in Siaya County having relatively good access to public and private health facilities, it nevertheless exhibit U5MR of 184 deaths per 1000 live births. This is over 3 times higher than the national U5MR; hence an understanding of risk factors is required as a way of fast tracking progress of achieving Sustainable Development Goal 3 (SDG) by 2030. The aim of this study was to assess maternal factors influencing U5M in Karemo Sub-County. Specifically, the study sought to identify maternal social-demographic, economic and health seeking behaviour on U5M. A retrospective cross-sectional design in which multi-stage probability sampling, Probability Proportional to Size (PPS) and simple random sampling was employed to recruit 299 mothers with under-fives (U5s) from 5 selected sub-location. Data was collected using pre-tested structured questionnaire on a face to face interview. Categorical data were analyzed against U5M using Chi-square test and logistic regression performed with SPSS version 22. Significant factors associated with U5M were; education, birth order, marital status, polygamy, occupation, birth interval and maternal age. Children born to mothers with tertiary level of education were 78% less likely to die than those whose mothers had primary education (OR=0.223,  $p<0.0001$ ). However, children of higher birth orders of 4 and above were seven times more likely to die than those of lower birth orders of 3 and below (OR=7.687,  $p<0.0001$ ). Accordingly, children born in polygamous union were four time more likely to die than their counterparts in monogamous union (OR= 4.165,  $p<0.0001$ ). Contrarily, children of married mothers were 68% less likely to die than those of single mothers (OR= 0.324,  $p=0.001$ ). Similarly, children of employed mothers were 6% less likely to die compared to those of none employed mothers (OR=0.941,  $p<0.0001$ ). In addition, children of older mothers between 35 to 49 years were three times more likely to die than those born to mothers below age 20 years (OR=3.214,  $p=0.021$ ). Lastly, those with short birth interval of less than 2 years were 1.9 times more likely to die than those with longer birth intervals (OR=1.997,  $p=0.011$ ). The study concluded that; old age, higher birth order, single motherhood, short birth intervals, lack of post primary education and occupation were major factors influencing U5M. Therefore, promotion of women economic empowerment, advocacy on girl child education beyond primary levels and; sensitization and mobilization of mother to accept and use birth control mechanism should be emphasized as effective strategies of reducing U5M in this community. Therefore, shift interventions as prioritized in this study are encouraged to enhance faster reduction of U5M in this community.