ANALYTICAL REVIEW OF THE ASSOCIATION BETWEEN AMBULANCE REFERRAL NETWORK INTERVENTION AND MATERNAL HEALTH OUTCOMES WAJIR, KENYA

BY

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DECLARATION.

I, **Fatuma Ibrahim Adan**, do hereby declare that this thesis is my original work and has not been submitted for the award of a degree or diploma in any other University or college.

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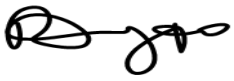
Signature……  ….Date…….12/09/2021……

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ABSTRACT

Maternal health is a global public health concern. Every year more than half a million women die in childbirth, mainly from haemorrhage, infection, and complications of abortion worldwide with about 99% of these maternal mortalities occurring in Sub-Saharan African countries. Studies have linked the majority of these deaths to weak health systems substandard quality of care, and delays in accessing maternal health care. While the Ambulance Referral Network in certain regions of Kenya aims to minimize delays in obtaining maternal health care, its effectiveness has not been extensively assessed. This study sought to analytically review the association between ambulance referral network intervention and maternal health outcomes. Specifically, the study sought to determine the effect of demographic characteristics on maternal health outcomes, determine the Maternal clinical conditions on maternal ambulance referrals; assess the influence of the cost of ambulance on maternal health outcomes; analyze the effect of ambulance usage on maternal health outcomes; and to explore the effect of health facility condition on maternal health outcomes. This study was a longitudinally retro-prospective time series study and was specifically designed to assess both the cost and effectiveness of ambulance referral networks in influencing maternal health outcomes. The research involved the collection of secondary data from various sources, including ambulance logbooks, patient registers, logistics records, and maternal death surveillance records. A total of six hundred twenty-three (623) records of mothers who had utilized the Ambulance Referral Network during the referral process were used in sourcing data for the study. Data was analysed both descriptively and inferentially using SPSS version 23. Descriptive statistics used included percentages, frequencies, and means. The inferential statistics used were correlation and regression analyses. Results were presented in tables and figures. The correlation study results indicated that there was a statistically significant positive association between all the demographic characteristics, maternal clinical conditions, cost of ambulance; usage of ambulance, and health facility condition indicators with maternal health outcome in Wajir County. The regression results showed that demographic characteristics had explanatory power over maternal health outcomes, accounting for 23.6 percent of maternal health outcomes (R^2= .236) maternal Clinical conditions had significant power over maternal health outcome with a total of 619 mothers and 545 infants' lives were saved by the ambulance maternal referrals .while cost of the ambulance had explanatory power over maternal health outcomes accounting for 80.6 percent of maternal health outcomes (R^2 = .806). The results also indicated that ambulance usage had explanatory power over maternal health outcomes, accounting for 34.1 percent of maternal health outcomes (R^2 = .341), while health facility condition had explanatory power over maternal health outcome accounting for 46.5 percent of maternal health outcomes (R^2 =.465). The study concluded that demographic characteristics, maternal clinical condition, cost of ambulance, ambulance usage, and health facility condition all had a significant influence on maternal health outcomes. The study recommended that county governments should invest in and make more use of ambulance referral network interventions (Demographic characteristics, maternal clinical condition, cost of ambulance, ambulance usage, and health facility condition) since this study has found them to have statistically significant positive effect on maternal health outcomes.