In Kenya, maternal and under-five mortality rates are high at 510/100 000 live births and 74/1000 live births respectively. This is attributed to poor Maternal and Child Health (MCH) outcomes reported across the country. In Mwingi, 38% of women do not seek Focused Antenatal Care (FANC), 55% deliver without Skilled Birth Care (SBC), 47.3% do not ensure their children complete immunization program, and 55.5% of infants are not exclusively breastfed. Since inception of Community Health Strategy (CHS) in Kenya, intervention effect on MCH outcomes in rural semi-arid regions such as Mwingi is not known. Specific objectives of this study were to establish effect of CHS on; FANC coverage, SBC utilization, Infant Vaccination Coverage (IVC), Exclusive Breastfeeding (EBF), and utilization of modern Postpartum Family Planning (PPFP) methods in Mwingi West sub-county. The study design was a pretest-post-test experiment with intervention and control sites. Mwingi West and Mwingi North sub-counties were intervention and control sites respectively. Participants in intervention and control sites received MCH care under CHS intervention and the standard MCH care in Kenya respectively. In each site, a baseline and 2 post-intervention surveys were conducted with each survey having a sample size of 422 participants. Data was collected using a structured questionnaire. Main respondents were women with a child aged 9-12 months. Both purposive and simple random sampling methods were employed. In the intervention arm; women at end term survey were 1.7 times more likely to seek ANC services for at least 4 times compared to baseline survey (Adj. OR 1.717, 95%CI: 1.464-2.014, P<0.0001), women in end-term survey were 1.6 times more likely to deliver under SBC compared to baseline (Adj. OR=1.556, P<0.0001; 95%CI: 1.295-1.868), infants in end-term survey were 2.5 times more likely to have received all recommended vaccines compared to baseline survey (adj. OR=2.516, P<0.0001; 95%CI: 1.796-3.5240), infants in end-term survey were 1.4 times more likely to be breastfed exclusively compared to baseline (Adj. OR=1.447, P<0.05; 95%CI: 1.145-1.829), and women in end-term survey were 1.4 times more likely to utilize modern PPFP methods compared to women at baseline survey (adj. OR=1.386, P<0.05; (95%CI: 1.164-1.651). The results suggest that CHS significantly improved MCH outcomes in Mwingi West sub-county. These findings are supported by several studies conducted to evaluate CHW led interventions in resource poor countries. To improve MCH outcomes in Kenya, all county governments need to implement CHS in areas where implementation has not yet been done.