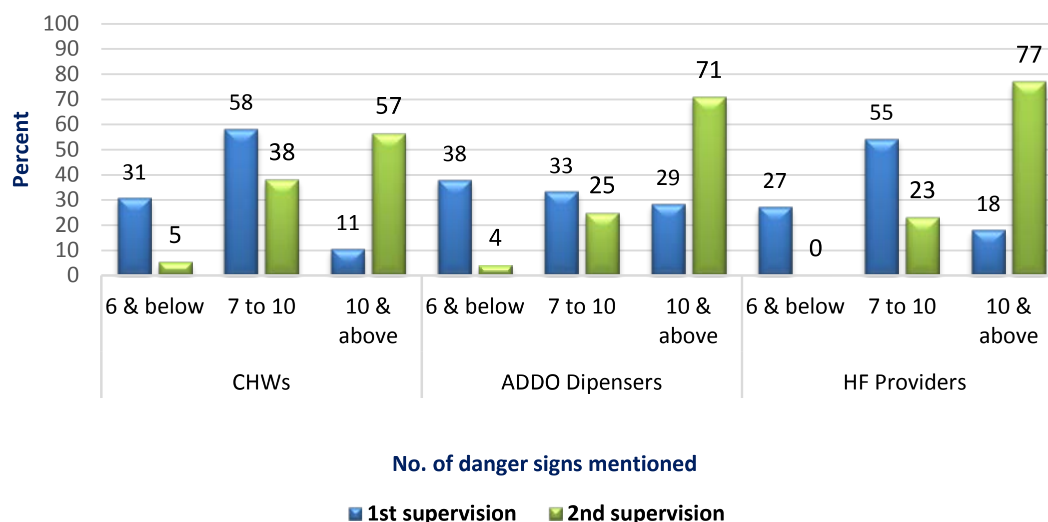
Strengthening Linkages Between Community Health Workers, ADDO Dispensers, and Health Facility Providers for Improved Health Care: Results from Supervision Visits in Kibaha District

Table 1: Number of Health Providers Supervised

	CHWs	ADDO Providers	HF Provider	Total
1st Supervision Visit	65	21	11	97
2nd Supervision Visit	76	24	13	113

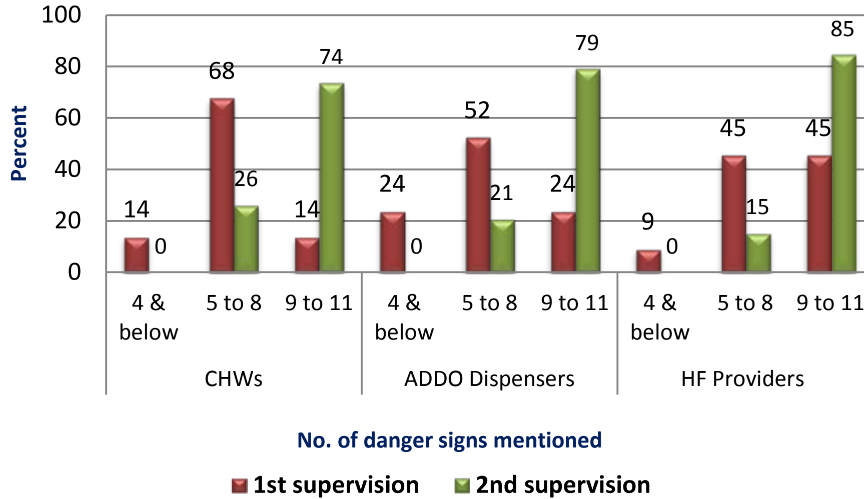
Health providers' knowledge of danger signs of illness in newborns increased significantly in the second supervision (Figure 1). The proportion of those who could mention at least 10 danger signs increased among all of the categories of health providers: community health workers (CHWs) (from 11% to 57%), ADDO dispensers (from 29% to 71%), and health facility providers (from 18% to 77%). On the other hand, those who knew less (six or less danger signs) decreased in all the categories: CHWs (from 31% to 5%), ADDO dispensers (from 38% to 4%), and HF providers (from 27 to 0%). This shows that the training and supervision were effective in raising the health providers' knowledge of danger signs.

Figure 1: Knowledge of Danger Signs in Newborns



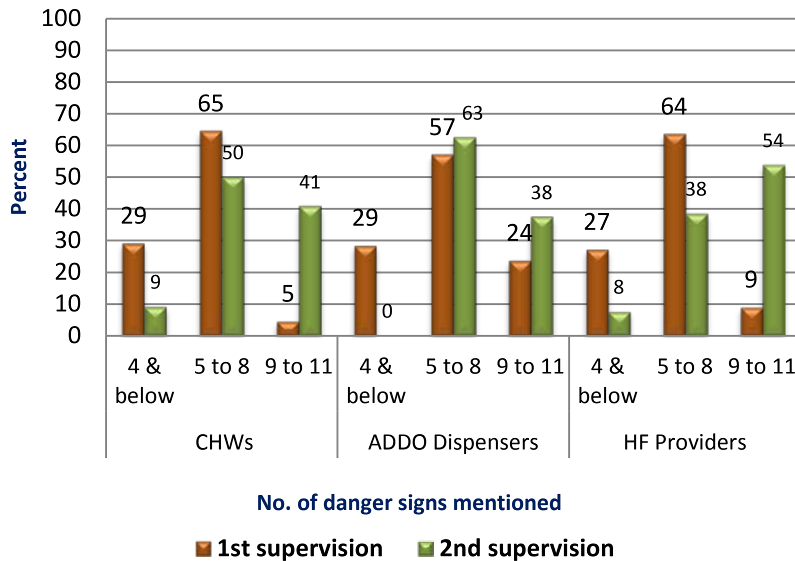
The providers' knowledge of danger signs of illness during pregnancy also increased (Figure 2). There was no single CHW, ADDO dispenser, or HF provider who could not mention at least 5 danger signs during the second supervision. The proportion of providers who knew the highest range of danger signs (9-11) increased from 14% to 74% among CHWs, 24% to 9% among ADDO dispensers, and 45% to 85% among HF providers.

Figure 2: Knowledge of Danger Signs during Pregnancy



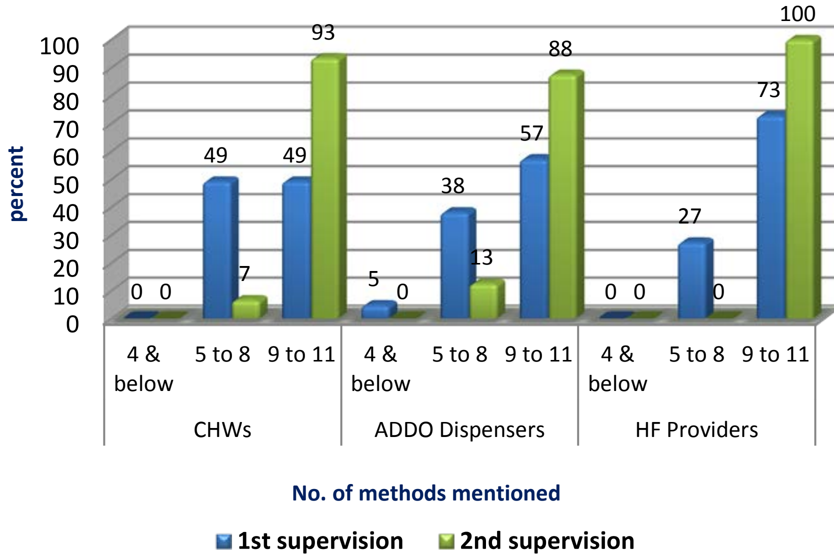
The health providers' knowledge of danger signs of illness after delivery was also found to have increased during the second supervision (Figure 3). The proportion of providers who knew few danger signs dropped (from 29% to 9% among CHWs, 29% to 0% among ADDO dispensers, and 27% to 8% among HF providers), while those who knew more (9-10 danger signs) increased in all the categories: CHWs (5% to 41%), ADDO dispensers (24% to 38%), and HF providers (9% to 54%). The increase was highest among health facility providers.

Figure 3: Knowledge of Danger Signs after Delivery



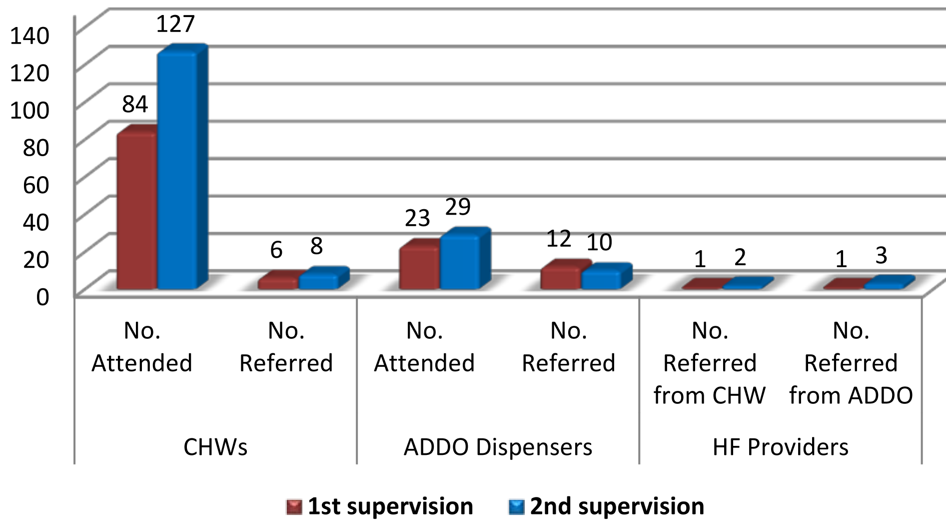
The proportions of health providers who had knowledge about FP and were able to mention many (9-11) FP methods grew from 49% to 93% among CHWs, 57% to 88% among ADDO dispensers, and 73% to 100% among HF providers (Figure 4). Health facility providers and CHWs appeared to be more knowledgeable about family planning methods than ADDO dispensers.

Figure 4: Knowledge of Family Planning (FP) Methods



It was learnt during both supervision visits that CHWs attended to many more newborns than ADDO providers, since the CHWs visit the children in their homes (Figure 5). On the other hand, ADDO providers referred more children to the health facility than do CHWs. However, there was a significant gap between the total number of children referred by both CHWs and ADDO dispensers (36 in both supervisions) and those received at the health facility (7 in both supervisions). This could be attributed to poor documentation of referrals at the health facility level, since only 3/11 facilities and 5/11 facilities had referral registers in the first and second supervisions, respectively. It could also be possible that some of the referred children were not taken to public health facilities for care.

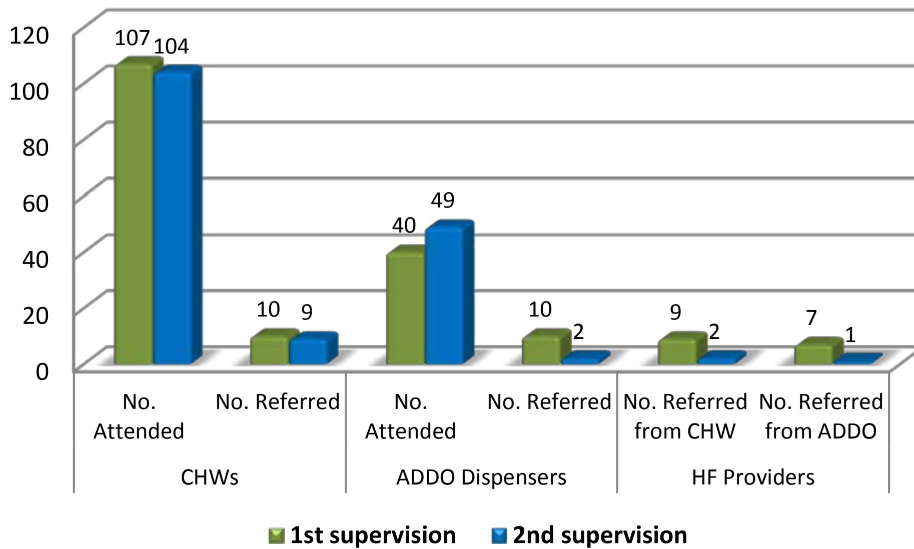
Figure 5: Number of Newborns Attended or Referred



The other potential factor could be cultural practices which inhibit movement and interaction with the newborn and the mother in the first few days to weeks after delivery, which may potentially affect early care seeking behavior. This could be one of the reasons why reducing newborn deaths remains a major challenge despite the significant decrease in under-five mortalities in Tanzania.

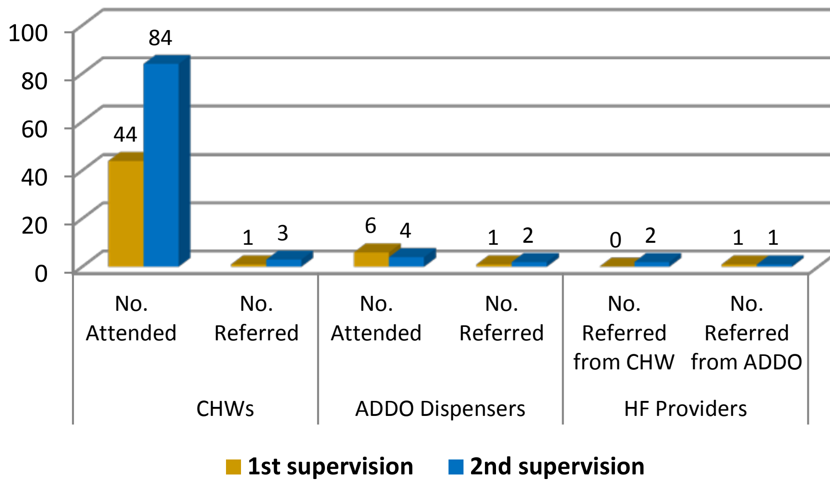
A marginal increase in the total number of pregnant women attended by CHWs and ADDO dispensers was observed (from 147 in the first supervision to 153 in the second supervision) (Figure 6). However, there was a significant drop in the total number referred (from 20 in the first supervision to 11 in the second supervision). The drop was most significant in the referrals by ADDO providers. This could be attributed to the observed increase in knowledge of the danger signs in pregnancy (Figure 2). The proportion of providers who knew the highest number of danger signs (9-11) increased from 14% to 74% among CHWs, and from 24% to 79% among ADDO dispensers. Since ADDO dispensers have commodities (medicines) that CHWs do not have, they were more likely to attend to pregnant women who would otherwise have been referred to the health facility for care.

Figure 6: Number of Pregnant Women Attended or Referred



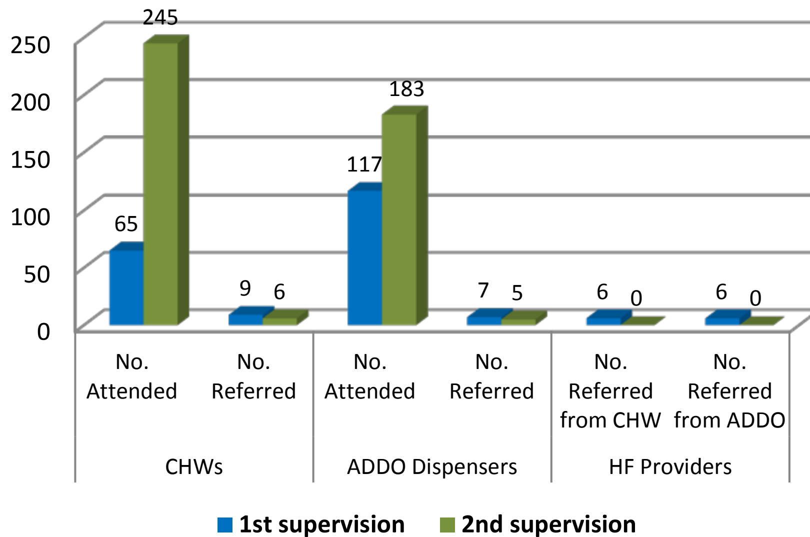
More pregnant women who had given birth were attended by CHWs than ADDOs, mainly because of household visits by the CHWs (Figure 7). The increase in those attended by CHWs observed during the second supervision visit can be attributed to a slightly longer reporting period (three weeks of the first supervision and four weeks for the second supervision) and a slight increase in the numbers supervised (65 in the first supervision and 76 in the second supervision).

Figure 7: Number of Women who have had a Birth Attended or Referred



There was a considerable increase in the number of family planning users attended by both CHWs and ADDO dispensers in the second supervision (Figure 8). This can also be attributed to the slightly longer reporting period in the second supervision and an increase in the number of CHWs and ADDO dispensers supervised. However, there was a slight drop in the numbers referred, which can be explained by the increased knowledge of the health providers on family planning methods, hence their ability to better counsel those in need of family planning.

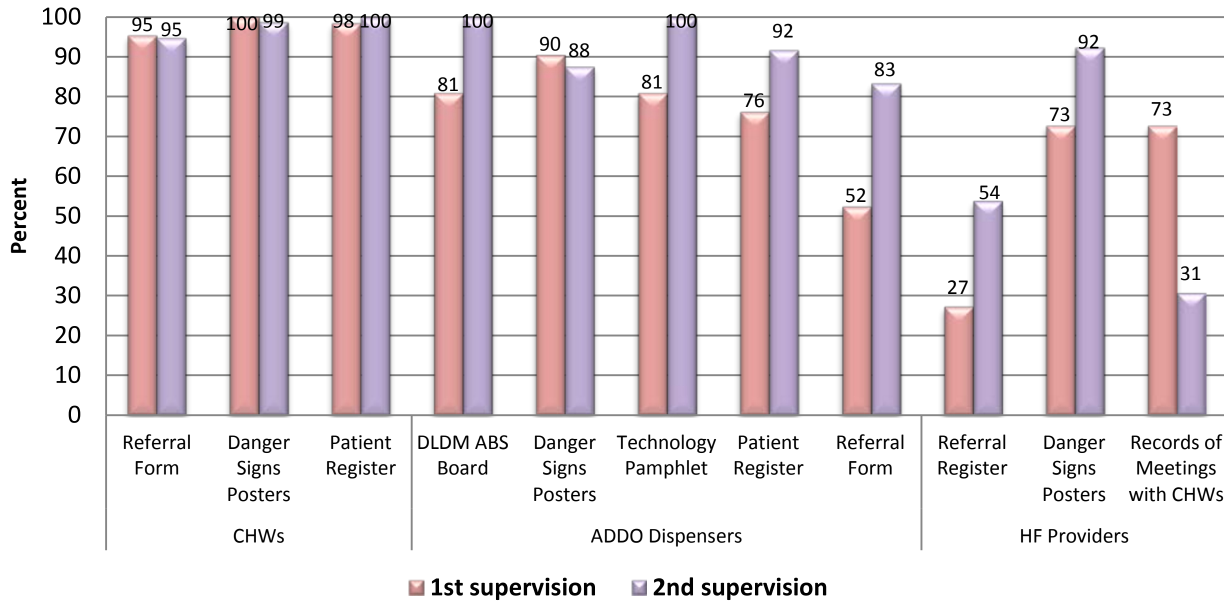
Figure 8: Number of Family Planning Users Attended or Referred



Community health workers and ADDO dispensers generally had most of the working tools during the first and second supervision visits (Figure 9). Some marginal increase was observed in the availability of most of the tools among all three service providers. Nonetheless, the unavailability of referral registers in the health facilities and a lack of records of the meetings between HF providers and CHWs was a problem. The

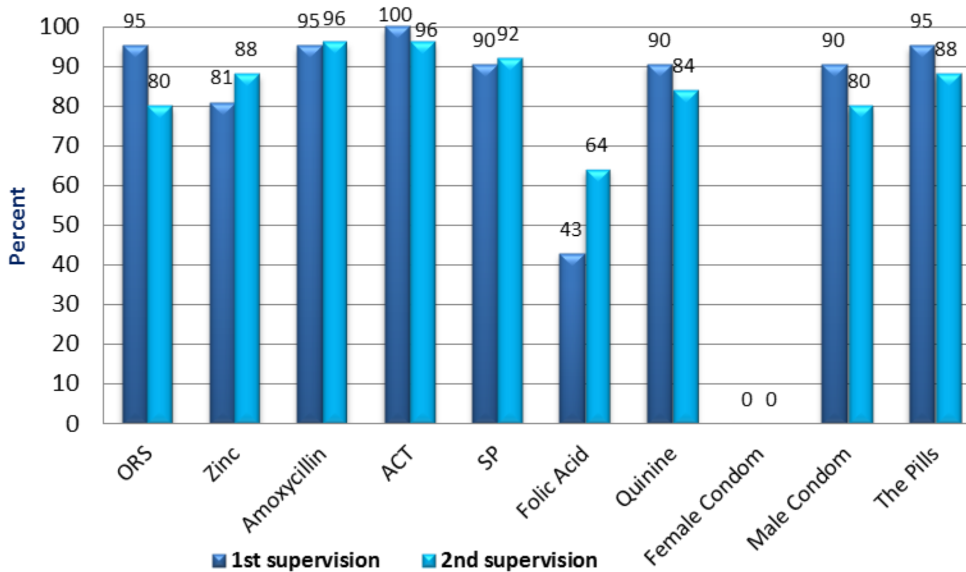
shortage of referral registers in health facilities is a major contributing factor to the poor documentation of referrals by health facility providers.

Figure 9: Availability of Essential Working Tools



The availability of essential medicines in ADDOs was generally stable. However, the availability of folic acid and female condoms was a problem in most of the drug shops (Figure 10).

Figure 10: Availability of Selected Medicines in ADDOs



Most facilities did not have more than 21 essential medicines, which underscores the need for a linkage with ADDOs to bridge the shortages in public health facilities (Figure 11). However, the availability of critical medicines was stable in most of the facilities, as indicated in Figure 12.

Figure 11: Availability of Medicines in Health Facilities

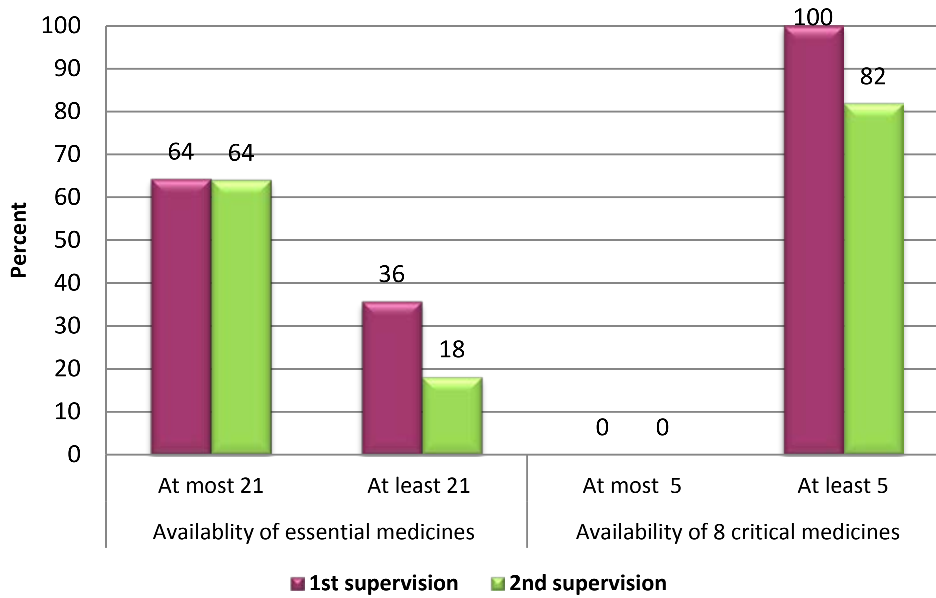


Figure 12: Availability of Critical Medicines in Health Facilities