Report on Immediate Followup after Training on ADDO-CHW-Health Facility Linkage to Improve Maternal, Neonatal, and Child Health

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INTRODUCTION

In April 2014, the President of Tanzania introduced a national strategy for maternal, newborn, and child health addressing the need to reduce maternal and newborn deaths through innovative approaches.

Responding to this call, the Kibaha District Council decided to use existing health care service providers at the community level. These include:

- Primary health facilities (dispensaries and health centers) where health professionals of low cadres are located and provide integrated maternal and child health services. They supervise both accredited drug dispensing outlets (ADDOs) and community health workers (CHWs).
- Community health workers have received basic training to assess health conditions of members
 of households through house-to-house visits. At the moment they are trained to identify
 household members who are HIV positive and refer them to nearby health facilities for
 appropriate management. They are well linked to the nearby primary health facilities.
- ADDO dispensers who have received basic training can identify critically sick children and refer
 them to health facilities after giving them their first dose of appropriate medicine. They are well
 linked to the nearby primary health facilities.

Currently, the CHWs and ADDOs lack a formal relationship to one another, but each is independently linked to the health facilities.

Management Sciences for Health's (MSH) Sustainable Drug Seller Initiatives (SDSI) program aims to enhance the long-term sustainability of ADDOs, ensure the quality of products and services provided, and help improve community-based access to medicines and health care. SDSI is proposing to formally link ADDOs with CHWs and health facilities to improve community-based access to medicines and health care. It is believed that this linkage would strengthen the quality of services provided by both CHWs and ADDOs and expedite patients' receipt of proper care.

In June 2014, MSH organized a training in Kibaha that was centered on creating awareness of these three categories of health care service providers at the community level and the potential they have, if organized to work together, in improving maternal and newborn health. Immediate results of this training were:

- A common understanding among relevant stakeholders (MOHSW, community health management team [CHMT], and stakeholders, including MSH) was reached on how ADDOs, CHWs, and front line health workers should work together at the community level.
- 17 CHMT members were involved in discussions related to empowering ADDOs, CHWs, and health workers at primary health facilities to work together in the priority area of maternal and newborn health.
- A total of 142 health care service providers at the community level were trained (40 ADDO dispensers, 85 CHWs, and 17 health workers).

• A linkage was created among the three categories of health workers, working tools were provided, and a system of referral for identified critically ill newborn, pregnant women, women who have delivered, and people needing family planning (FP) methods was put in place.

PERFOMANCE OF THE HEALTH CARE SERVICE PROVIDERS

The training in June, 2014 covered the following topics:

- maternal and newborn health in Kibaha district council;
- the status of the ADDO program in Kibaha district council;
- danger signs during pregnancy;
- danger signs after delivery;
- danger signs of sick newborns;
- a video of sick newborns with danger signs;
- family planning methods commonly used in Tanzania;
- the roles and responsibilities of ADDO dispensers, CHWs, and the health facility supervisor at the community level in this linkage; and
- networking among the three entities and the referral system at the community level.

It was agreed that a team of supervisors will be formed to follow up with all of the trained personnel at the community level to:

- identify and assist ADDO dispensers and CHWs who have not been able to identify the sick newborns, pregnant women, and women who have delivered who need referral because they do not understood the process.
- identify and assist supervisors at the health facility level who have not supported ADDO dispensers and CHWs in the process of identifying and referring critically ill people, and to see if they are keeping records.
- observe and document what is working and what is not working in the linkage process.

As planned, monitoring and supervision of the trained health care providers took place July 15 - 21, 2014. The exercise covered 11 wards of the Kibaha District Council, as shown in the table below.

Table 1: Number of Respondents per Category of Service Providers

S/N	Wards	CHW	ADDO Dispenser	Health Worker	Total
1.	Mlandizi	16	6	1	23
2.	Janga	7	3	0	10
3.	Kilangalanga	5	3	0	8
4.	Magindu	4	2	2	8

S/N	Wards	CHW	ADDO Dispenser	Health Worker	Total
5.	Gwata	5	1	2	8
6.	Kwala	3	2	2	7
7.	Boko	5	1	0	6
8.	Soga	4	2	1	7
9.	Kikongo	7	0	2	9
10.	Ruvu Station	7	1	0	8
11.	Dutumi	2	0	1	3
	Total	65	21	11	97

A total of 97 respondents were reached (65 CHWs, 21 ADDOs, and 11 health workers), or 68% of the total number of health care providers who received training.

Specific results of the monitoring exercise are highlighted below.

Knowledge of Danger Signs in Maternal and Newborn Health

Respondents were assessed on their understanding of danger signs during pregnancy, after delivery, and in newborns. All three heath care categories showed sufficient knowledge of the danger signs surrounding maternal and newborn health; however, more effort is needed to improve their knowledge. Statistics are detailed in the tables below.

Table 2: Danger Signs during Pregnancy

Number of danger signs known	Number of Respondents	Percentage
0-4	15	16%
5-8	60	63%
9-11	21	22%
Total	96	100%

Table 3: Danger Signs after Delivery

Number of danger signs known	Number of Respondents	Percentage
0-4	28	29%
5-8	61	64%
9-11	7	7%
Total	96	100%

Table 4: Danger Signs of Newborns

Number of danger signs known	Number of Respondents	Percentage
0-6	31	32%
7-10	51	53%
10+	15	15%
Total	97	100%

Knowledge in Family Planning

Results from the supervision/monitoring shows community health service providers have adequate knowledge to provide family planning and sexual/reproductive health services to their surrounding communities. Only one out of 96 respondents did not understand family planning, as can be seen below.

Table 5: Knowledge in Family Planning

Number of issues known or understood	Number of Respondents	Percentage
0-4	1	1%
5-8	43	45%
9-11	52	54%
Total	96	100%

Comparison of the Knowledge between CHWs, ADDOs, and Health Workers

Apart from assessing the overall knowledge of danger signs surrounding maternal and newborn health, the monitoring exercise also focused on the level of knowledge per category of health service provider. The level of knowledge among the service providers do not differ significantly, although health workers proved to have slightly higher knowledge than CHWs and ADDOs.

For example, 45 out of 65 CHWs (69%) were able to identify more than five dangers signs of newborns, while 13 out of 21 ADDOs (62%) and 8 out of 11 health workers (73%) were able to identify more than five (over 80% of the targeted danger signs). An assessment of knowledge on other areas is detailed in the table below.

As can be seen in Table 6, CHWs performed much better than ADDOs regarding knowlege of danger signs and FP methods. This is expected, as the CHWs in this district have been in place for years (some up to 20 years) working as community-based FP distributors and as CHWs for the HIV programme providing home care for AIDs patients. They are therefore well versed on health matters and have been regularly supervised. For the majority of the ADDO dispensers, this was their first onthe-job training, and so one should appreciate their performance two weeks later. There is great pontential on this cadre, and if given regular on-the-job refresher trainings and supportive supervison, they can prove quite useful in the community.

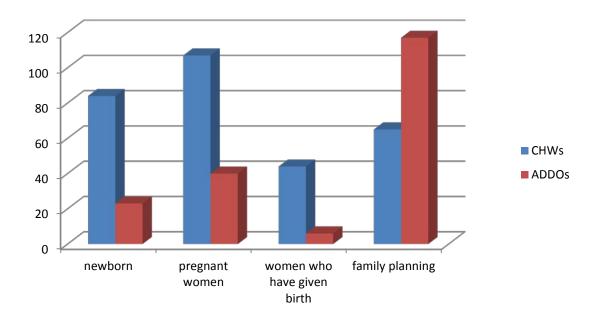
Table 6: Assessment of Knowledge on Dangers Signs between CHWs, ADDOs and HWs

Area of Knowledge	CHWs	ADDOs	Health Workers
Newborn	69%	62%	73%
Pregnancy	85%	76%	91%
After delivery	70%	71%	73%
Family planning	100%	95%	100%
Average Score	81%	76%	84%

Number of Patients Attended and Referred

Although both CHWs and ADDOs are trained to provide maternal and newborn health services, it is evident that the community has a preference for where to obtain certain services. ADDOs are providing family planning services, whereas CHWs care for mothers and newborns.

Diagram 1: Number of Patients Attended - CHWs vs. ADDOs in Kibaha DC



CHWs and ADDOs are well linked to nearby health facilities and both refer patients to these facilities. The table below provides details on the number of patients attended and referred as per data obtained during monitoring and supervision.

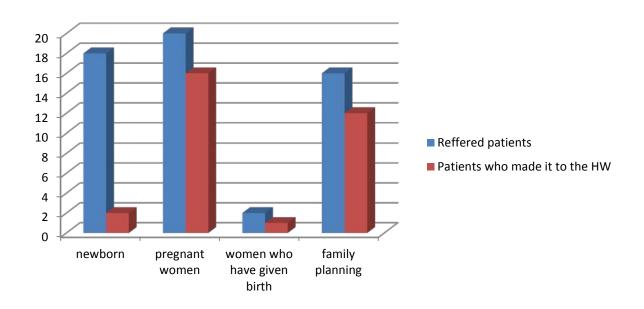
Table 7: Number of Patients Attended and Referred

	CHW		ADDO		HW	
	No. Attended	No. Referred	No. Attended	No. Referred	No. Referred from CHW	No. Referred from ADDO
Newborn	84	6	23	12	1	1
Pregnant women	107	10	40	10	9	7
Women who have given birth	44	1	6	1	0	1
Family planning	65	9	117	7	6	6
Total	300	26	186	30	16	15

From the table above, we note that a total of 56 patients were referred by ADDOs and CHWs, but only 31 patients (55%) attended the primary health facilities. The lowest rate belongs to newborns, as only two out of 18 referred patients reached the health facilities. This rate makes one wonder where these newborns are taken, especially in the Mlandizi ward, where the dropout rate was 40%, followed by the Janga ward, at 20%. There is a possibility that referred neonates are received but not recorded at health facilities due to poor record keeping. Both of the above-mentioned wards have several private clinics around them and are near the district and regional hospital, where the neonates may have been taken to. The supervisors did not visit any of these health facilities for interviews or follow up of referrals.

(Further studies are needed to determine the fate of referred neonates from the community health providers, CHWs, and ADDOs.)

Diagram 2: Attendance Rates of Patients Referred to Health Facilities



Availability of Working Tools

During the training conducted in June 2014, it was agreed that the CHMT should work to ensure that health service providers are provided with essential working tools that will help them effectively deliver services.

Results of this monitoring exercise revealed that most of the CHWs and ADDOs had sufficient working tools. The challenge remains with health facilities, where the availability of tools was less than 80%.

Table 8: Availability of Working Tools as Per Category of Health Service Providers

Category	Working Tool	No. with Tool	Percent Coverage
CHW	Referral forms	62	95%
(n=65)	Posters on danger signs	65	100%
	Patients register	64	98%
ADDOs	DLDM poster	17	81%
(n=21)	Posters on danger signs	19	90%
	Poster with instruction for mobile phone use	17	81%
	Patients register	16	76%
	Referral form	11	52%
Health workers (n=11)	File for receiving referred patients from ADDO and CHW	3	27%
	Posters on danger signs	8	73%
	Registers on meetings with the ADDOs and CHWS	8	73%

Availability of Selected Medicines in the ADDOs

The monitoring exercise visited 21 ADDOs in 10 wards. It should be noted that Kibaha DC has a total of 11 wards, but two wards (Dutumi and Kikongo) do not have an ADDO.

Results show at least 5 out of 10 selected medicines are available in every ADDO; however, none of the ADDOs had all 10 selected medicine, as none had stock of female condoms. Table 9 provides details on the number of selected medicines found in the visited ADDOs.

Table 9: Availability of 10 Selected Medicines

Number of Selected Drugs	Number of ADDOs	Percentage
<5	0	0%
5	2	10%
6	1	5%
7	4	19%
8	8	38%
9	6	29%
10	0	0%
	21	100%

Most of the ADDOs lacked folic acid, while all 21 visited ADDOs had combined malaria drugs (dawa mseto). Diagram 3 below provides more details on the type of selected medicine at each ADDO and its availability.

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Diagram 3: Availability of Selected Medicines in 21 ADDOs

Availability of Drugs and Commodities at Health Facilities

Our visit to the health facilities focused on the availability of 26 essential drugs and 8 critical drugs. A facility is considered to have sufficient drugs if it has at least 80% of the required drugs (i.e., at least 21/26 essential drugs and 5/8 critical drugs). 14 health facilities were visited during this exercise, and only 5 out of 14 health facilities had more than 21 essential drugs, while all 14 facilities had more than five critical drugs. Critical drugs such as Oxytocin, ACT, and DEPO injections were found in all visited health facilities. Few facilities lacked the necessary antibiotics for managing a sick newborn infant.

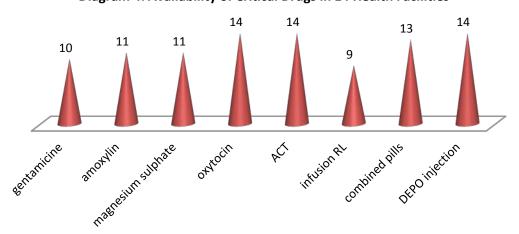


Diagram 4: Availability of Critical Drugs in 14 Health Facilities

Conclusion

Findings from this supervison indicate that it is feasible to increase health care coverage by extending care to the community and in homes using the existing cadres. The CHWs and ADDOs given regular supportive supervison, including working tools and appropriate drugs/commodities, can provide first hand health care/advice nearer to the homes and can refer cases accordingly.

Likewise, the CHMTs have to give supportive supervison to the health facilities that are supervising the cadrers at the community level. It is important to remind them that referral is a two way street. The HWs have to keep records of the cases reffered to them by the CHWs and the ADDOs and send them feedback as indicated in their refferal forms.

It is reccomended that a similar follow up, under the observation of a central team, be done again a month from now. This should try to reach as many as possible. This one covered about 70% of the targeted health care providers, but the aim should be for above 90%.

Some of these health care providers were missing working tools. It is therefore recommended that the CHMTs provide missing tools soon.

It is also recommended that in the next follow-up, the three cadres (ADDOs, CHWS, and HWs) meet together with the visiting team. This can be organized the last day of supervsion at each ward, and the meeting can take place at the nearby health facility or the village office, which ever is convinient. The focus of the meeting should be to remind them that they are an important team in the community they are serving, and that team work is important. This meeting will also provide an avenue to air out their reservations and provide support from a higher level.

A refresher training is advisable at least once a year. This will also help to capture new employees. In general, the working linkage between ADDOs, CHWs, and health workers, as seen in this intervention, has the potential to improve maternal, neonatal, and child health. It needs to be strengthened and scaled out to reach many communities in Tanzania.

ANNEX 1: Names of Supervisors

SN	Names of Supervisors	Roles	Place of work/ organization /Department
1	Dr Suleiman Kimatta	Principal Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers Oriented Supervisor on how to conduct this follow up after training	MSH Tanzania Coordinator of the Supervision
2	Dr Pyande Mongi	Assistant Supervisor to this activity. Maternal and Child Health Specialist and a retired WHO officer on Maternal and Newborn Health (MNH)	Freelance, Dar es Salaam Tanzania Extensive experience in Maternal, Newborn and child health programs as well as Community health programs
3	Dr Rukia Bakari	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	Health Education and Promotion Unit/ CHW section of the MOHSW
4	Ms Rose Wassira	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	RCH/ FP unit of MOHSW In-charge of Community Based Family Planning
5	Dr Zeina Mtajuka	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	District IMCI/Malaria Focal person for Bagamoyo district. MOHSW uses her as the National trainer for Distant IMCI trainings in the country
6	Aishi Kisandu	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	Works with the RCH department of the Bagamoyo District Hospital.
7	Judith Shemboko	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	Works with the RCH department of the Mkuranga District Hospital. Has experience in Mystery Shopping Techniques and a national trainer for Growth and Monitoring of underfives using the new growth charts
8	Calista Mlula	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	Works with the RCH department of the Kisarawe District Hospital.
9	Maria Kahema	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	District Reproductive and Child Health Coordinator of Kibaha DC Trainer of CBDs for CBFP and IMCI. Expert in coordinating health services at community level. Vitamin A Supplementation, deworming and Vaccinations. Coordinates Village Health Days
10	Elizabeth Sekkaya	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	District CHW Coordinator of Kibaha DC Trainer of CHWs and resourceful in orienting CHWs on House to House visits
11	Geoffrey Mjema	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	District Pharmacist, national trainer of ADDO dispensers
12	Lalballa Mbelwa	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	District Nursing officer with extensive experience in Family Planning and Community health Work
13	Jestina Kajiru	Trainer and Supervisor of the ADDO Dispenser, CHWs and Frontline Health Workers	District Coordinator of CHWs working with The Red Cross under Pathfinder support
14	Dr Victoriana Ludovick	District Medical Officer Trainer and Supervisor of health workers	DMO for Kibaha DC