

# QUARTERLY REPORT, JAN – MARCH, 2013



Photo by: WHO/Pauline Ajello

INSIDE THE OPERATING THEATRE OF A MATERNITY WING CONSTRUCTED BY WHO. THE ORGANIZATION ALSO PROCURED ALL THE MATERNITY EQUIPMENT REQUIRED TO FURNISH THE WARD

3/31/2013

## WHO South Sudan first quarterly report, 2013

This report summarizes achievements, challenges and the way forward for the WHO South Sudan activities covering the period Jan – March 2013 and focuses on eleven programme areas.

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## WHO SOUTH SUDAN QUARTERLY REPORT, 2013

### 1.0 Background

#### 1.1 The Current context in the Republic of South Sudan.

The first quarter of 2013, saw no great improvement in the humanitarian situation in the country. There were continued displacements of people from their villages resulting from inter-tribal clashes in six priority states of Unity, Upper Nile, Warrap, Lakes, Northern Bahr el Ghazal and Jonglei states. Militia attacks especially in Jonglei state and border conflicts between South Sudan and Sudan in the border state of Unity also caused massive displacements. Access to the displaced persons in various states to deliver humanitarian assistance was challenging as this was hampered by insecurity and fear of attacks from the rivalry tribe and militia groups.

The influx of refugees from South Kordofan and the Blue Nile as well as the high numbers of returnees from Sudan into South Sudan continued in this period, this has over stretched health services in the states where the refugees have settled.

However, amidst all these reported tensions with others leading to mass casualties requiring medical care and support, WHO maintained its support by providing life saving interventions and leadership to other health partners (UN agencies, NGOs, Civil societies and MOH) in emergency and crisis preparedness at the national and sub

national levels. Technical and financial support was also provided to the Government of the RSS and the states to implement key focused life saving health interventions while advocating for more attention and funding for the country. Together with the MoH/RSS, the organization participated in joint health assessments in states affected by different emergencies.

Cases of Hepatitis E in Maban and Yida counties, Upper Nile and Unity states respectively continued during this quarter. In a period of three month, two thousand nine hundred and thirty three (2,933) newly suspected AJS (acute jaundice syndrome) cases (incidence rate of 35.51 per 100,000 populations) and 20 related deaths (CFR of 0.68%) were recorded across the ten states of South Sudan. Other suspected diseases reported and investigated during this quarter included; viral hemorrhagic fever, measles, acute flaccid paralysis and meningitis. All these were investigated by rapid response teams at the state levels.

WHO also continued providing technical, logistics and financial support the Ministry of Health at the central and state levels for immunization activities of polio and measles.

Progress was made during this quarter in financing the response, developing plans and strategies for ending the treatment crisis, revitalization of activities for HIV treatment and care, generation and dissemination of information on the HIV epidemic.

Progress towards the eradication of dracunculiasis continued in this period, the incidence of the disease continued decreasing with transmission zones shrinking to limited geographical foci of Kapoeta East and Gogrial East Counties only.

WHO further supported the Ministry of Health at the central and state levels with activities aimed at strengthening the health system in the country. These focused four main areas of: leadership and governance; donor coordination and collaboration,

development of policies, strategies and reports and strategic information capacity building.

Other programmatic areas that WHO continued providing technical and financial support were; maternal and new-born health, during which a new maternity ward constructed by WHO with funding from CIDA was handed over to the State Ministry of Health, Jonglei state; tuberculosis programme; health education and promotion and communication and advocacy.

The onchocerciasis elimination programme completed a road map document detailing activities and costing for the re-launch of the programme following a recommendation made at one of the programme's meeting in December 2012.

During this quarter, WHO supported the Ministry of Health –Republic of South Sudan with the Blue Trunk library. This was delivered and handed over to the Under Secretary Ministry of Health Dr Makur Matur Kariom by the Head of the WHO South Sudan, Dr Abdi Aden Mohamed. The Blue trunk Library was donated to enable the ministry of health at the national and state access up to date health information that will guide health interventions in the country.



WHO handed over a new maternity ward in Bor State Hospital to the State Ministry of Health. The ward was constructed with funding from Canadian International Development Agency (CIDA). And was handed over to the State Minister of Health, Honorable Jehan Deng by Dr Abdi Aden Mohamed, the Head of WHO South Sudan Office and his Excellency Mr Nick Cohan the Canadian Ambassador to South Sudan.



## 2.0 WHO's Major Achievements in the 1<sup>st</sup> Quarter. (Jan to March) 2013

### 2.1 Emergency Humanitarian Action (EHA)

The strategic objective of the EHA unit is to reduce the health consequences of emergencies, disasters, crisis and conflicts and minimize their social and economic impacts.

The overall humanitarian situation in South Sudan continued deteriorating during the quarter in focus with increased tribal clashes, unresolved border disputes between the South Sudan and Sudan, the Abyei crisis, continuous bombardment of a refugee area in Unity, the refugee influx in Unity and Upper Nile states, continued hepatitis E outbreak in Maban and Yida camps in Upper Nile and Unity states respectively and active rebel militia movements in Jonglei, Upper Nile and Unity states. To date over 350,000 civilians are internally displaced in South Sudan, with 1.8M returnees from Sudan are back to the country.

One hundred and ten thousand people continued being displaced from Abyei during this reporting period with an additional 180,000 refugees who fled into South Sudan from Southern Kordofan and Blue Nile states, and are currently living in camps in Unity and Upper Nile states. And with the already fragile health system resulting from stock out of antimalarials in some counties; inter tribal fighting, the increase in the number of returnees and refugees plus insecurity in some states negatively impacted the population.

Following all these emergencies, and the population movement, the Health Cluster was highly engaged at the county, state and national levels together with the Ministry of Health to deliver a coherent health response.

During this quarter, WHO continued to support the Ministry of Health at the national and sub national level in the areas of,

- leadership to the health cluster;
- coordination of essential information (the collection, analysis and dissemination) on health risks, needs and response;
- technical expertise appropriate to the health needs of the emergency, and ensuring and enabling sufficient capacity with emphasis on logistics and resource mobilization and management.

#### 2.1.2 Emergency Health Coordination

During the first quarter of 2013, WHO maintained its support by providing leadership to health partners (UN agencies, NGOs, Civil societies and MOH) in emergency and crisis preparedness at the national and sub-national levels. Orientation of emergency and preparedness committees at all levels that deal with coordination of emergency responses were

held. In particular WHO revitalized and supported the health coordination task force in Maban and Jonglei States to respond to the acute emergencies. As a result, the task forces were able to support and conduct regular assessments in Pibor and Maban counties. During this time eight health assessments were conducted. Coordination, distribution and prepositioning of emergency medical supplies and deployment of the key human resources to provide technical support to frontline health workers offering the health services was also done. This included in particular lifesaving medical supplies distributed and prepositioned at state and county levels. At Juba level, the health cluster supported the MOH to reactivate the task force that supported and coordinated the crisis in Pibor county by ensuring that war wounded and gunshot wounds persons access lifesaving surgeries. In this respect, 81 patients were evacuated to Bor State Hospital and Juba Teaching Hospital. Monthly Health Cluster meetings were conducted in all the 10 states of South Sudan with the Ministry of Health and State Ministries of Health as the lead and WHO as co- chair. At the national level four regular meetings were conducted while a total of 33 Health Cluster meetings were held at. Over 95 health partners participated in each of the four regular Cluster meetings held, with an average of 25 partners attending at any one time at the national or state levels. As a result of the coordination meetings, health emergency responses were well coordinated. For instance, as result of the cluster meetings at both the national and state levels, joint rapid health assessments

were conducted, health gaps identified and filled and a strategy to effectively respond to health crises developed and agreed on by various states.

WHO also continued providing its technical advice to partners. In this role, WHO undertakes the secretariat function of coordinating meetings/forums of health actors, and supports weekly and monthly coordination of forums and technical working groups to strengthen coordination mechanisms at the national and central level.

### **2.1.3 Technical support during emergencies**

As part of offering technical support during emergencies, WHO in partnership with the Ministry of Health (MoH) Republic of South Sudan supported and actively addressed the health emergency needs for returnees, refugees, IDP, conflict affected population and the vulnerable population by developing guidelines and protocols for the management and provision of health services in the refugee settings and areas with high returnees and internally displaced persons (IDPs). Over 203 technical guidelines and treatment guidelines were also printed and distributed to health partners involved in the management and the provision of health services to the population in areas harboring returnees.

The program also supported surge capacity and human resources for health in the field operations as a result coordination of health responses, information management and prompt verification of potential outbreaks

was achieved. For instance, the program supported the Ministry of Health to deploy six technical officers from the directorate of emergencies, epidemiology and disease surveillance. These were deployed to Upper Nile state to evaluate and verify hepatitis E that has persistently continued affecting the returnees and the host communities for the past ten months. Following the visits to Upper Nile, the technical teams provided recommendations for the frontline health workers to improve case detection and ensure thorough data analysis.

To strengthen management of hepatitis E cases in Upper Nile state, the programme supported a training of health workers on case management of hepatitis E and implementation of community based surveillance for hepatitis E. In addition, training in case management of measles was conducted and implementation of case based surveillance for measles in the refugee camp was also done. As a result 28 health workers were trained in both hepatitis E and measles management.

Through the EHA programme, WHO maintained its presence in the ten states while providing technical support in the emergency area. During this time, technical support was provided to guide two mobile clinics established in order to provide immunization services, triage of patients, disease surveillance activities, clinical management of patients and health education services. As a result, whose core functions of emergencies were strengthened.

National emergency public health officers were also identified and recruited for Unity state. Unity state is one of the six high risk states prone to emergencies and bordering with Sudan. The appointment of the public health officers aims to improve supervision, visibility and rapid response in terms of assessments. Thus critical gaps in emergencies are documented, and their impact in this state is reduced.

### **2.1.3 Strengthening local capacities for response and emergency preparedness**

To strengthen the capacity of health workers in responding to emergencies, WHO supported the Ministry of Health to conduct 10 trainings, among them; four Rapid response team trainings, two Integrated management of Childhood Illnesses trainings, one training on trauma management, and two trainings on disease surveillance targeting six high risk emergency states of Unity, Upper Niles, Jonglei, Western Bahr el Ghazal State, Warrap State, lakes State and Northern Bahr el Ghazal state. In four states, trainings of health workers and community opinion leaders on management of health risks in emergencies was also conducted. As a result, participants developed preparedness work plans and emergency budgets to support disease outbreak and risk communication in their counties, six trainings were also conducted in management of common illnesses and other diarrhea diseases in concentrated populations.

In order to build resilient communities for the management of disasters and to strengthen emergency preparedness, health workers and community leader were trained in management of public health risks in emergencies in Lakes, Jonglei, Western Equatoria State, Unity, Warrap, Northern Bahr el Ghazal state and Western Bahr el Ghazal state. A total of 203 health workers were trained.

### 2.1.4 Support Supervision Visits

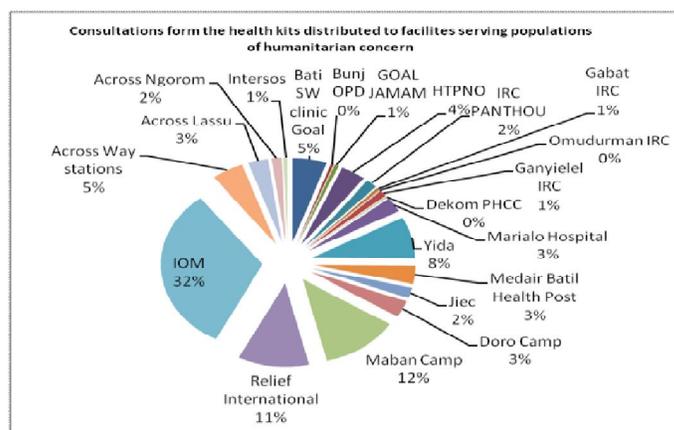
In order to improve the quality of emergency response in all the states, WHO provided support supervision visits to five high risk states of; Unity, Upper Nile, Lakes, Western Bahr el Ghazal, and Warrap . The supervision visits were also used to follow-up the emergency preparedness and response activities in the states. A total of eleven support supervision visits were conducted in all the five states. WHO technical teams also focused more in the hot spot areas of, Maban county in Upper Nile state, Yida and Renk in Unity state, Atar /Pigi and New Fangak in Jonglei state, Turalei and Agok in Warrap state and Yirol in Lakes state. The support supervision visits also explored ways of strengthening logistics management and storage space for the emergency supplies at the state level.

### 2.1.5 Filling in critical gaps

Filling in of critical gaps is one of WHO's core functions in humanitarian emergencies. To minimize the response time and mitigate the effects of emergencies, the program prepositioned adequate stocks of supplies to all the ten

states. Among the prepositioned supplies were 6 Interagency Emergency Health Kits, 6 Diarrhea disease Kits, and 5 Trauma Kits and ORS kits; In addition, emergency supplies were airlifted and distributed to the various states to support in times of crisis, among these were; 19 kits (IEHK, DDK, TRK, major and minor surgical kits) were distributed to various states through the SMOH while four trauma kits were supplied to Juba Teaching, Hospital, Boma, Akobo and Pochalla to support the surgical management of patients wounded during the Pibor crisis. The kits supplied were very critical in the management of the common illnesses in displaced populations and in the management of the surgical cases in remote counties. As result 121,666 people benefited.

WHO also back stopped health partners in Maban with antimalarial and kala-azar drugs and supplies, assorted antibiotics, basic unit kits and ORS to them respond to the number of increasing malaria cases. Basic unit, assorted antibiotic, laboratory supplies and anti-malarial kits were also provided to THESO, to strengthen the management of primary health care services in Unity state. MSF, Unity state



was also provided with assorted antibiotics, diagnostic supplies for meningitis and AWD to support the response of the refugees in Yida area.

In Aweil, Northern Bahr el Ghazal state, WHO supported Health net TPO with supplies to support the management of the displaced people in this county. Merlin on the other hand, received assorted stand alone medical supplies from WHO to strengthen case management of malaria in the facilities in Boma and Nimule Hospitals.

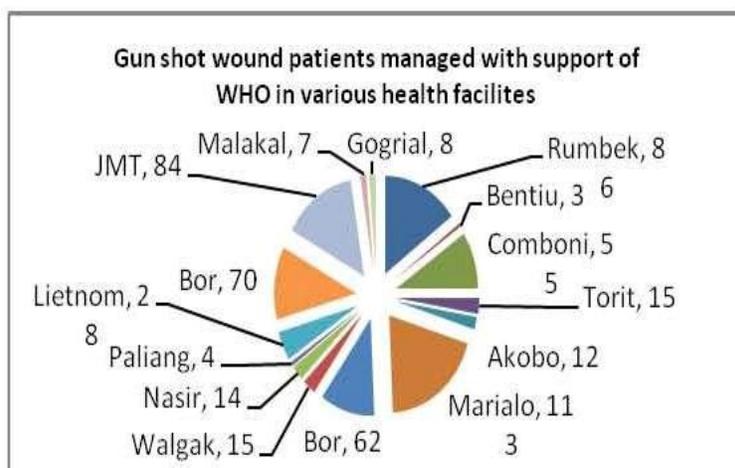
In Central Equatorial state, WHO supported the MOH to run a clinic at the returnee's camp in Kuda, where a total of 8,000 consultations were recorded in the first three months of 2013. More support was provided to ACROSS in the form of medical supplies and outbreak investigation supplies that enabled them to provide care in Gorom and Lasu settlements. Similarly IOM and Medair received assorted drugs and kits destined for the facilities in Renk to provide care for the returnees. A total of 121,666 patients were registered to have benefited from the support.

### 2.1.6 Emergency surgical and trauma management

The Health Cluster remained a strong platform for humanitarian partners to come together and determine timely emergency responses and ensure that wounded patients in conflicts access life saving surgery. Intermittent attacks by rebel militia groups in various parts of the country caused the Health Cluster to mobilize partners and respond quickly. Violent clashes in Pibor county, Jonglei in March caused over 100 fatalities, population

displacement and over 81 medical evacuations to Bor and Juba Military Hospitals for surgical intervention. The Health Cluster and WHO worked with NDHF, MSF/ICRC, MERLIN, IMC, SMOH, Ministry of Health, UNMISS and OCHA to ensure appropriate immediate surgical interventions including medical evacuations to state hospitals are done.

Also coordinated efforts took place to ensure restoration of health services in Pibor, Walgak, Akobo all in Jonglei state where health facilities were deserted. Clashes in Warrap and Lakes states during February and March initiated a surgical response and the Health Cluster coordinated with THESO, MSF and the respective SMOH to ensure that patients were managed in Leitnom and Rumbek hospitals. A total of 554 patients were managed in different health facilities for life threatening injuries.



### 2.1.7 Lessons learned

- Emergency preparedness is critical for an effective health response.

- Mainstreaming WHO activities into all programmes of WHO resulted in an integrated and joint response approach to emergencies: this is instrumental in ensuring the Organization’s successful emergency response.
- Effective coordination with health cluster partners has led to a better understanding of the mandate, technical capacity, and comparative advantage of Health Cluster members, which in turn has facilitated better information sharing and health coordination.
- The rotation of programme staff to support specific tasks has not only expanded the coverage of the emergency health services but has also improved the experience and the technical capacity of these staff.

Sudan continued to increase the risk of major epidemics due to lack of safe drinking water, poor sanitation and hygiene, overcrowding, malnutrition, inadequate vaccination coverage and low immunity to vaccine preventable diseases.



*Technical Officers and health cluster Partners discussing during EP & R meetings on Wednesday, 20th March 2013 in the M&E Meeting Hall; MoH-RSS*

### 2.1.8 Way Forward

Step up the efforts to strengthen the national capacity of MOH to respond to any potential health emergencies as stipulate in the Health Sector Development Plan

## 2.2 Communicable Disease Surveillance and Response. (CSR)

### 2.2.1 Epidemic Preparedness and Response Coordination

Emerging and re-emerging communicable diseases remained a major public health concern in South Sudan, with the country experiencing recurrent outbreaks in the past few years. During this quarter, increased population displacement and influx of returnees and refugees in South

### 2.2.2 Training and Capacity Building

Strengthening knowledge and skills of first line health care workers, surveillance officers, public health officers and other health managers is one of the key mandates of the WHO South Sudan Country Office. Integrated disease surveillance and response (IDSR) was one of the main priority areas where the Country Office (South Sudan) continued supporting in this quarter in collaboration with other health authorities and partners. Health workers and other health cadres require regular trainings and refresher trainings to upgrade their knowledge and skills given their big role in case management, laboratory diagnosis, reporting, investigation and

response to outbreaks or other health related emergencies.

During this reporting period, a total of twelve (12) different trainings were conducted across the country, as follows:

**a) Integrated Disease Surveillance Response (IDSR)**

Two (2) trainings on integrated disease surveillance and response were supported in Yei (Central Equatoria state) and Maban (Upper Nile state), where 40 health care workers from silent health facilities in greater Yei (Yei River, Morobo and Lainya counties) and 34 health care workers and public health officers working in Maban camps and the surrounding host communities were trained. This IDSR training aimed to reorient health workers on integrated disease surveillance system and provide new knowledge and skills needed to improve outbreak investigation, disease surveillance, reporting of early warning signals of impending outbreaks and help initiate an effective response in a timely manner. All trained participants received IDSR training package and technical guidelines for future reference.

**b) Rapid Response Team Trainings**

Ten (10) rapid response team trainings on outbreak investigation and response were conducted during this reporting period in nine (9) states of Central Equatoria (Juba), Western Bahr el Ghazal (Wau), Northern Bahr el Ghazal (Aweil), Jonglei (Bor), Unity (Bentiu), Lakes (Rumbek), Western Equatoria (Yambio and Maridi), Upper Nile (Malakal) and Eastern Equatoria (Torit)

targeting health care workers among them; medical officers, clinical officers, nurses, laboratory technicians etc., and health managers including; surveillance officers, county health officers, public health officers etc. from different counties. A total of 277 health workers participated in the trainings. The objective of the state level rapid response team trainings was to improve the capacity of the public health systems to detect, investigate and respond to disease outbreaks and/or unusual public health events at counties and local levels. It was also intended to improve participation of the public health laboratory in the confirmation of outbreaks and strengthen integrated disease surveillance and response implementation in the country.



*Participants during one the IDSR training for silent health facilities in greater Yei (Yei River, Morobo and lainya counties)*

**2.2.3 Surveillance and Epidemic Response**

**a) Outbreaks Investigation**

A total of one hundred and ninety-seven (197) outbreak rumors/alerts were reported and verified by state rapid response teams

in all the ten states during the first quarter of the year. About 29% of all reported and investigated outbreak rumors were acute flaccid paralysis followed by measles (28%) and meningitis (20%); and the remaining 23% being Acute Jaundice Syndrome (AJS), Guinea worm (GW), malaria, kala-azar, VHF (EHF), neonatal tetanus (NNT), cholera shigellosis and whooping cough. Of these alerts, only seven (7) measles outbreaks in Juba, Yirol East, Aweil East, Aweil Center, Tambura, Torit (Nyong), Kapoeta South (Natiere) and, Kapoeta North (Lumos) were confirmed as true outbreaks during this reporting period. All the others were classified as false alarms/alerts after verification and/or investigation. The state rapid response teams carried out all the verification and investigations of alerts/rumors on notification and over 83% of all outbreak rumors were investigated within three (3) days of notification. About fifteen percent (15%) of the rumors were investigated after more than three (3) days of notification and this delay could partly be due to insecurity, inaccessibility and high fuel prices. WHO provided the technical and financial support for all the investigations done.

Although most alerts or rumors were reported from health facilities, community informers also reported some alerts, however these often lacked detailed information like the date of onset, location, number of affected patients, etc accounting for the remaining 5% of all investigations conducted. Nevertheless, the state Rapid Response Team (RRT) members made extra efforts to timely respond to all

outbreak rumors with technical and financial support from WHO that also supported the collection of additional information for the alerts.

### b) Laboratory Specimen

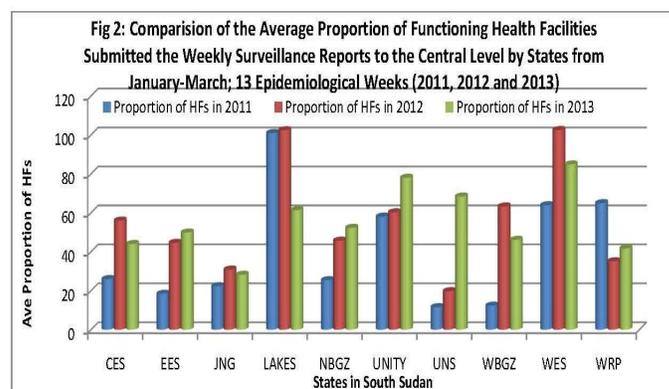
During this reporting period (January-March 2013), a total of three hundred and ninety-two (392) clinical specimens {serum/blood (358), stool (13) and CSF (21)} were collected and analyzed at reference laboratories in Juba (for measles), CDC-KEMRI (for VHF's e.g. AJS, Ebola, yellow fever) and AMREF-Nairobi (for cholera and meningitis). Of these 358 blood specimens, twenty-two (22) tested positive for measles, one (1) tested positive for Rubella IgM, and one hundred and one (101) tested positive for hepatitis E virus. Only one of the 13 stool specimen cultured indicated shigellosis. Also one of the 21 CSF specimens cultured produced a non-Neisseria meningitides isolates (i.e. Streptococcus pneumoniae bacteria). The rest of the specimens tested negative for the suspected epidemic prone diseases (measles, cholera, meningitis, Ebola, yellow fever, hepatitis E and others). (Refer to table 1 for details of laboratory specimens).

Disease	Confirmed	Unconfirmed	Inadequate	Total	
Suspected Cholera	0	12	0	13	
Suspected Shigellosis	1				
Meningitis	N. meningitides	0	20	0	21
	Strept pneumoniae	1			
Measles	22	17	0	40	
Rubella	1				
VHF	Ebola	0	217	0	318
	Hepatitis E	101			
	Yellow Fever	0			
<b>Total</b>	<b>126</b>	<b>266</b>	<b>0</b>	<b>392</b>	

### c) Health Facility Reporting Performance

All the functional health facilities are required to submit weekly surveillance reports on 14 priority diseases (mostly outbreak prone diseases) and to immediately report any suspected outbreaks to the county and/or state health authority. The sensitivity of the surveillance systems can be evaluated through the performance of early case detection, investigation, diagnosis and reporting components. Timeliness and completeness are therefore key indicators for the surveillance performance and are defined as the proportion of expected reports received on time (timeliness) and the proportion of the expected reports received (completeness). As seen in figure 1, the number and proportion of health facilities that submitted complete weekly surveillance reports slightly increased during this second quarter of the project as compared to the same project period in 2012 and 2011 with the exception of week 6. The proportion of completeness in 2013 was 62% and those in 2012 and 2011 were 56% and 37% respectively. However, for the timeliness, the proportion of health facilities slightly dropped to 35% in the first quarter of 2013 as compared to the same period in 2012 (40%). As shown in figure 2, Western Equatoria State, Upper Nile,

Lakes and Unity states were the best performing states as they maintained over 50% completeness rate of reporting. Reporting performance from Upper Nile state improved significantly during this reporting period as compared to the same period in 2010 and 2012. (Refer to figure 1 and 2 for details)

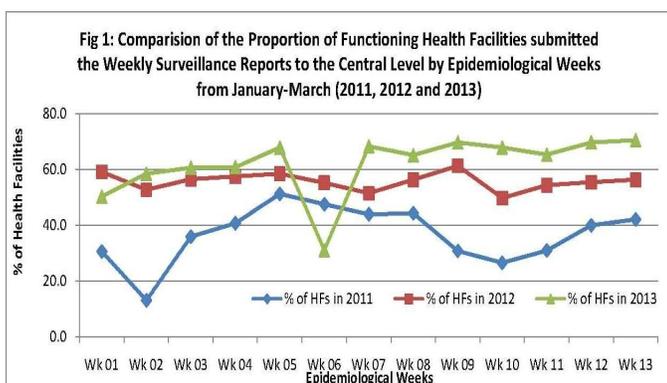


### 2.2.4 Disease Specific Surveillance Update

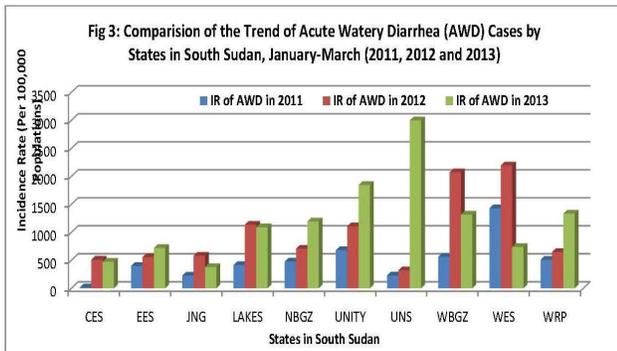
#### a) Acute Watery Diarrhea (AWD)

A total of 94,815 cases of AWD (Incidence rate of 1147.81 per 100,000 populations) with 94 deaths (CFR of 0.10%) were recorded across South Sudan between January-March 2013. The number of AWD cases recorded during this reporting period was higher as compared to those recorded in the same period in 2011 and 2012 (35,186 cases with 48 deaths; CFR of 0.14% and 68,037 cases with 107 deaths; CFR of 0.15% respectively).

Figure 3 shows that the incidence rate of AWD reported across the country remained relatively stable in most states except in Upper Nile state which increased considerably during this reporting period of 2013 as compared to the same period in 2011 and 2012, this could be attributed to

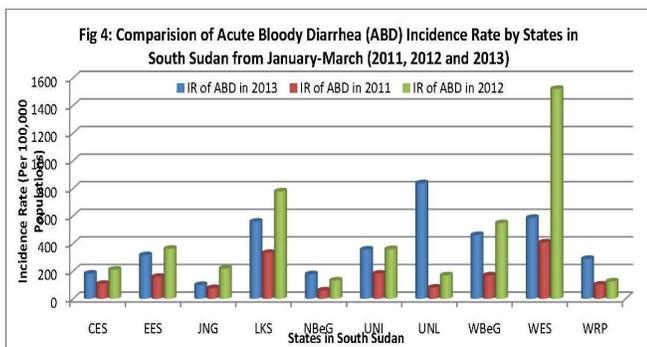


the low reporting rate from Upper Nile in 2012. The rate of acute watery diarrhoea differs by age group, with the highest rate seen in children less than 5 years of age (62%) as compared to those over 5 years of age (38%). In reference to figure 3, Upper Nile and Unity states recorded the highest AWD cases mainly due to refugees living in these two states.



A total of 29,510 cases of Acute Bloody Diarrhoea (ABD) (incidence rate of 357.2 per 100,000 populations) with 54 related deaths (CFR 0.18%) were reported in the first quarter of 2013. Children below five years of age accounted for 38% of all reported ABD cases and 87% of deaths.

As seen in figure 4, the overall ABD incidence rate recorded across the country was slightly lower in this quarter as compared to the same period of 2012, however this was higher than in 2011 (same period). In reference to figure 4, Upper Nile, Western Equatoria State and Lakes states recorded the highest



AWD incidence. There was no confirmed dysentery outbreak in any part of the country.

### b) Malaria

A total 300,530 malaria cases (10,498.6 cases per 100,000 populations) and 390 related deaths (CFR of 0.13%) were reported across South Sudan during the first three months of 2013. As seen in figure 5, the trend of malaria increased with considerable numbers in the first three months of 2013 as compared to the same period in 2011 (287,582 cases) and in 2012 (245,434 cases). Children below five years of age accounted for 41.4% of all reported malaria cases in 2013 with a case fatality rate of mostly recorded in children below 5 years of age (79.2% of total deaths). Figure 3 shows that Upper Nile, Central Equatoria State, Western Bahr el Ghazal state, and Unity states reported the highest incidence rates of malaria, followed by Eastern Equatoria State, Western Equatoria State and Northern Bahr el Ghazal ; while Jonglei state reported the lowest incidence rate during this reporting period (1<sup>st</sup> quarter of 2013).

### c) Meningitis

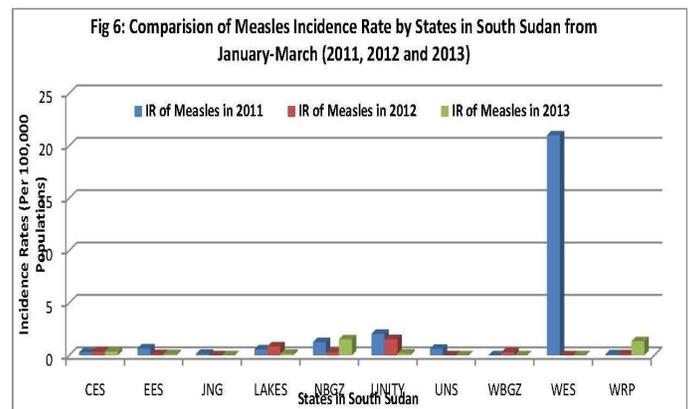
A total of thirty-four (34) suspected meningitis cases (incidence rate of 0.41 per 100,000 populations) and seven related deaths (CFR of 20.6%) were reported during the first three months of 2013. All reported cases were sporadic from different counties or locations with none crossing the alert or epidemic threshold. There was no confirmed meningitis outbreak during

the first quarter, and all CSF specimens collected for confirmation of meningitis tested negative for Neisseria Meningitidis. Over 50% of the suspected meningitis cases reported were in children below five years of age. Warrap and Northern Bahr el Ghazal states recorded the highest meningitis cases in this period followed by Central Equatoria state. Northern Bahr el Ghazal state recorded the majority deaths due to suspected meningitis (57%). WHO and the MoH-RSS prepositioned laboratory supplies and drugs to high risk states, and conducted refresher trainings on meningitis surveillance, case management, and meningitis epidemic preparedness and response.

#### d) Measles

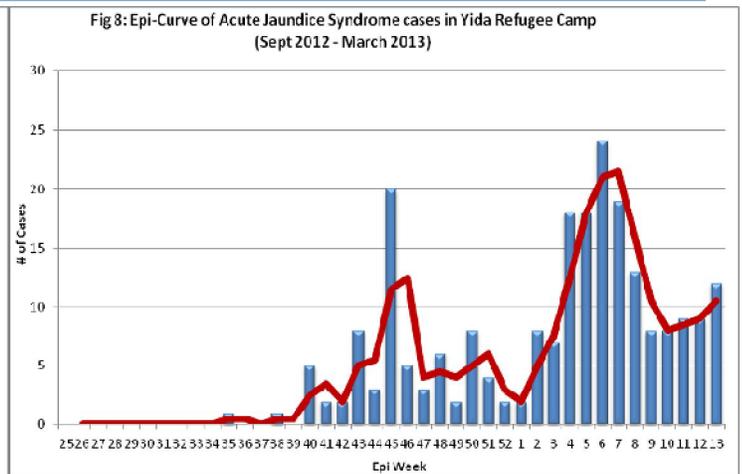
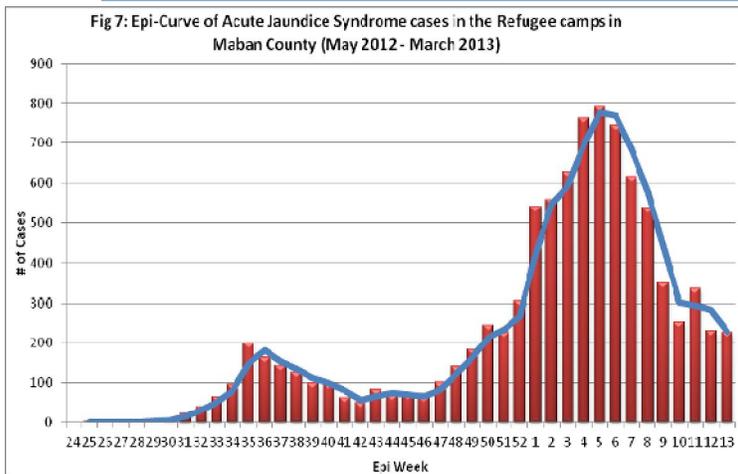
A total of two hundred and forty-eight (248) suspected measles cases (incidence rate of 3.00 per 100,000 populations) and four (4) deaths (CFR of 1.61%) were reported across the country through weekly surveillance reports. Of these reported cases, over 76.2% were in children below 5 years of age, with 100% deaths. Figure 6 shows that Western Equatoria state recorded the highest incidence rate of suspected measles cases followed by Central Equatoria state, while Upper Nile, Jonglei , Unity, Warrap and Northern Bahr el Ghazal states recorded the lowest incidence rate of measles cases in this reporting period. Surveillance officers and partners collected samples from suspected measles cases and sent them to reference laboratories in CDC-KEMRI and Juba measles reference laboratories for analysis. Some of the specimens tested positive for measles IgM.

Measles can be quite serious and highly contagious. It remains one of the leading causes of vaccine-preventable death among children globally. The national immunization coverage is below the international standards, and the immunization of thousands of children is not up to date in South Sudan. As a result, many children are not protected and yet are exposed to the highly contagious measles infection. Health authorities and cluster partners are highly concerned of the likely spread of the outbreak considering the South Sudan context.



#### e) Acute Jaundice Syndrome (AJS)

Acute Jaundice Syndrome (AJS) is one of the priority diseases currently included in the weekly reporting of IDSR surveillance system. One of the most common causes of Acute Jaundice Syndrome is Hepatitis E Viruses (HEV), followed by dengue, yellow fever and others. South Sudan has experienced a recurrence of hepatitis E outbreaks in the past ten years. Some neighboring countries have also experienced similar outbreaks. In the first



quarter of this program, a total of two thousand nine hundred and thirty-three (2,933) suspected AJS cases (incidence rate of 35.51 per 100,000 populations) and 20 related deaths (CFR of 0.68%) were recorded across the ten states of South Sudan. Of these cases and deaths, 96.3% of them and 90% of deaths were recorded in Maban refugee camps, Upper Nile State while the remaining 3.7% were reported from other states (Unity, Central Equatoria, Northern Bahr el Ghazal state, Jonglei, Eastern Equatoria and Western Equatoria). The two HEV outbreaks confirmed and declared by the MoH-RSS in Maban and Yida refugee camps are still ongoing.

During this reporting period the trend of AJS/HEV cases and deaths in Maban refugee camp significantly increased due to poor water and sanitation conditions in Batil, Jamam and Gendrasa camps. Nonetheless, UNHCR and other partners took steps to improve the water and sanitation situation in the camps in order to contain the ongoing HEV outbreak. Refer figure 7 and 8 for the AJS/HEV epi-curve in Maban and Yida.

### f) Viral Hemorrhagic Fever

There was no any case of suspected viral hemorrhagic fevers recorded during this reporting period (during the first three months of 2013).

### g) Influenza Like Illnesses (ILI)

A total of ninety (90) suspected cases of influenza like illnesses with zero deaths were reported from Upper Nile (Renk county), Eastern Equatoria State (Kapoeta East county), Jonglei state (Akobo county) and Unity state (Koch county). No specimen was collected for laboratory confirmation.

## 2.2.5 Challenges

- The ongoing economic austerity measures combined with the high inflation rate has negatively affected the basic social services. The state health authorities lack resources to support key health care services and other day to day operations. The high inflation rate and shortage of hard currency also impacted negatively on the availability of food, fuel and other essential commodities at all level.

- The rapidly evolving humanitarian context in South Sudan and the unpredictable population movements constituted major challenges to accurate and effective plans for project implementation, especially in high risk areas.
- High staff turnover at the health facilities, county and state levels negatively impacted on the continuity of health services and surveillance activities.
- Retention of qualified and highly trained health personnel became very challenging due to delayed salaries coupled with availability of highly paid employment opportunities with the UN, INGOs and other NGOs.
- Limited involvement of health authorities at the central level to monitor and supervise the ongoing disease surveillance activities at state or county levels.
- Lack of public health reference laboratory infrastructure and services at the central and state level.

### 2.3 Expanded Programme on Immunization/Polio Eradication Initiative

In the first quarter of 2013, WHO implemented activities aimed at maintaining the success achieved in the previous years to ensure that polio eradication and measles elimination goals are reached.

In order to reach the set targets, WHO worked in close collaboration with the

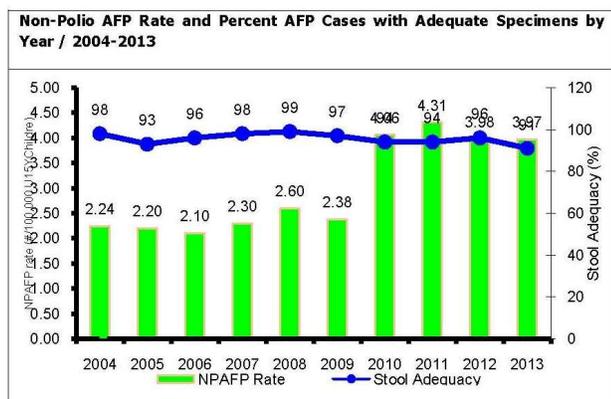
MOH-RSS, State Ministries of Health and other development partners (UNICEF, CDC, USAID, Rotary and other UN agencies) as well as several (I) NGOs, (eg. JPIGO, World Vision, etc. FBOs, CBOs, and local communities.

Disease	Confirmed	Unconfirmed	Inadequate	Total
Suspected Cholera	0	12	0	13
Suspected Shigellosis	1			
Meningitis				
N. meningitides	0	20	0	21
Strept pneumoniae	1			
Measles	22	17	0	40
Rubella	1			
VHF				
Ebola	0	217	0	318
Hepatitis E	101			
Yellow Fever	0			
<b>Total</b>	<b>126</b>	<b>266</b>	<b>0</b>	<b>392</b>

#### 2.3.1 Acute Flaccid Paralysis (AFP)

The Polio eradication programme that has so far gone for a period of more than 3 years without any case of wild polio virus being reported. The EPI/PEI focused on strengthening AFP surveillance in all the states. This is to ensure that all surveillance indicators are met to enable the country meet the certification standard. Adequate measures were put in place to ensure that any imported cases were quickly detected to prevent indigenous transmission. This was done by active search of cases in all health facilities and communities, investigation and collection of samples from all suspected AFP cases, collection of samples from three contacts of each AFP case and collection of samples from healthy children in silent counties. As a result, 87 samples of AFP, 231 contacts and 93 community children samples were collected from all the states this period. All AFP

surveillance indicators met the required standard



### 2.3.2 Annual Certification Update

In this quarter, WHO provided technical input in preparation for the annual certification update submitted to the Regional Certification Committee (RCC). The preparation is an annual requirement for the country in order to update Regional Certificate Committee to enable them assess the country for polio free certification. A national certification committee was also formed by the Ministry of Health to oversee certification activities in the country as part of the Regional Certificate Committee requirement.

### 2.3.3 Supplementary



WHO staff investigating a case of Acute Flaccid Paralysis

### Immunization Activities (SIAs)

WHO continued to provide funding and technical support to the Ministry of Health to conduct the first round of polio National Immunization Days in this period. The national exercise took place from 19<sup>th</sup> – 21<sup>st</sup> March 2013 covering all children less than five years. As a result, 3,460,452 children under five were immunized during this period, achieving 105% coverage of the target population. Other partners who participated and provided support during these campaigns include; UNCEF, USAID, and other NGO partners providing health services in South Sudan.

A summary of the results is shown in table 1 below.

	Admin Data		Post Campaign Evaluation			
	< 5 years	vaccinated	Coverage %	Chn Surveyed	Children Vaccinated(FM)	Cov % (FM)
South Sudan	3,303,050	3,460,452	105	35,661	33,672	94.4

### 2.3.4 Surveillance of Fever and Rash illness

Measles case based surveillance started in South Sudan in the year 2010 with the establishment of the Measles Control Room. The aim of the measles surveillance was to investigate all cases with fever and rash illnesses in line with the measles elimination strategy. In this reporting period, 105 suspected measles cases were detected through surveillance, 19 samples were collected and sent for further analysis. Out of these cases, 11 were confirmed as positive. Table 2 shows a summary of

measles cases classification, Jan – March, 2013, South Sudan.

Table 2. Summary of measles cases classification, Jan- March 2013

	Suspected Measles cases	Samples Collected	Final Classification				Pending
			Lab Confirmed	EPI link	Clinical cases	Confirmed Rubella	Pending Lab
Measles Cases	150	19	11	1	126	0	4

### 2.3.5 Routine Immunization

WHO continued to provide technical support to the Ministry of Health at all levels to improve routine immunization activities. This was done by updating of routine vaccination micro plans; further submission for financing was also done this period. Upper Nile and Jonglei states took advantage of the dry season window to conduct dry season campaigns. This was aimed at reaching areas that could not be reached during the rainy season.

### 2.3.6 Capacity building

In this reporting period, capacity building activities were conducted as strategy to improve team performance. These focused on training of frontline health workers at all levels in order to increase their performance. An estimated 21,865 volunteers and supervisors were trained nationwide on cold chain, vaccine management, vaccine administration, and communication for vaccine uptake.

### 2.3.7 Challenges

- Dwindling funding support for EPI/PEI program both from donors and government is a major concern to the program.
- Inaccessibility due to insecurity and bad road network creates difficulties in accessing most areas of the country, making it difficult to carry out planned activities.
- Lack of human resources both in numbers and mix is a major challenge facing the EPI/PEI program.

### 2.3.8 Way forward

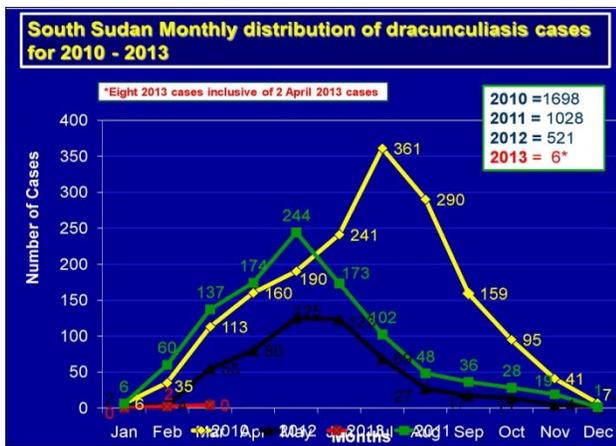
WHO EPI/PEI programme will;

- Continue to support MOH/RoSS and development partners to strengthen routine immunization activities as the backbone to the Polio Eradication Programme with more emphasis on monitoring and supportive supervision and communication programmes.
- Work with MOH/RoSS to implement supplementary immunization activities, routine immunization strengthening and highly sensitive AFP and other vaccine preventable disease surveillance to maintain South Sudan's polio free status.
- Collaborate with Integrated Disease Surveillance and Response (IDSR) to strengthen measles surveillance system and intensify response mechanisms for measles surge.

- Provide continuous support through training to achieve high quality AFP surveillance

## 2.4 Guinea Worm Eradication Programme

Progress towards the eradication of dracunculiasis continued in this period. Dracunculiasis incidence continued decreasing this quarter with transmission zones shrinking to limited geographical foci of Kapoeta East and Gogrial East counties only. The number of new Guinea worm cases reported in South Sudan dropped drastically from 62 cases between January and March 2012 to just six cases this quarter. One specimen was collected from one suspected case from Cueibet county and sent to CDC Atlanta for analysis but the results were negative for dracunculiasis medinensis.



As of this quarter, only two counties reported Guinea worm cases (Kapoeta East and Gogrial East).

Rank	County	Payams Rept. Cases	Cases 2013
1	Kapoeta East	2	4
2	Gogrial East	2	2
<b>Grand Total</b>		<b>4</b>	<b>6</b>

### 2.4.1 Capacity building

To enhance surveillance at the community and health facility level to ensure early reporting, the programme conducted trainings in various counties. A total of 129 community based surveillance volunteers, payam supervisors and health workers were trained in the counties of: Ayod, Wuror, Nyiror and Abobo county in Jonglei state. The second community based surveillance training was conducted in Terekeka county, Central Equatoria state where 206 volunteers and payam supervisors were trained.

Those trained will link community based surveillance structures to formal Integrated Disease Surveillance Response structures.

During this quarter, the WHO GWEP in collaboration with the Ministry of Health conducted assessments in several counties of South Sudan. To assess the availability and number of village volunteer networks of the GWEP and functional health facilities in formerly endemic payams of: Jur River county in Western Bhar El Gazel state, Malek payam, Yirol East county and five payams in Cueibet county Lakes state, Terekeka and Juba county in Central Equatorial states and the four counties of Northern Jonglei namely: Ayod, Wuror, Nyiror and Abobo West counties. In addition, the assessments were also conducted to identify actionable shot and long term recommendations for the implementation of a hybrid community based surveillance system linked to the formal primary health care.



*Community based surveillance volunteers, payam supervisors and health workers during a training in Lakes states*

In this quarter, the programme supported one national Guinea worm eradication program task force conducted in Juba. Some of the agreed upon areas in the meeting include;

County surveillance officer and volunteers trained during last week of March: Existing volunteers to be engaged. Former field officers to be engaged as payam supervisors. Training for all planned areas to be started by April 5 (CES, Cueibet, Yirol East, and Jur River)

All state field coordinators should spend a minimum of 14 days per month in the field, in endemic areas excluding the times when they are in towns or in workshops, if that does not happen, their monthly allowance will be cut in half. It was further agreed that the other 14 days be used in supervision in Guinea worm free areas.

It was also agreed in the meeting that;

All state field coordinators (SFCs) will provide monthly action plans to the SSGWEP director by 20 of previous month. The plans will have to include resources / support needed. WHO will provide support, including fuel, for state field coordinators to

support activities in Guinea worm free areas based on the supervision plan.

In addition, it was agreed that WHO would consult with the Integrated Disease Surveillance and Response (IDSR) to organize for a meeting between SSGWEP and South Sudan People's Liberation Army Medical Corps to discuss the role and support of South Sudan People's Liberation Army medical Corps and integration into the IDSR Integrated Disease Surveillance and Response (ISDR /GW surveillance in free areas.

South Sudan Guinea worm eradication program in Juba would work with South Sudan People's Liberation Army Medical Corps to train medical staff in Buma in order for them to assist with surveillance on Guinea worm disease. This will require a plan at the county level (SPLA Medical Corps in Juba) and the sub-county (Buma) level and that the plans for the training should be in place by the end of the 1<sup>st</sup> quarter.

## **2.5 Human Immune Deficiency Virus (HIV)**

The achievements made during the first quarter of 2013 were a good indication of a promising year after a very challenging period of 2012. A lot of progress was made during this quarter in terms of financing the response, developing plans and strategies for ending the treatment crisis, revitalization of activities for HIV treatment and care, generation and dissemination of information on the HIV epidemic. WHO worked in collaboration with the Ministry of

Health and partners to plan and implement interventions for HIV prevention, care, treatment and support. The activities supported or conducted with WHO involvement in the first quarter included; a retreat for UN Joint Team (UNJT) on HIV/AIDS, HIV Treatment Crisis meeting at the regional office, dissemination of results for HIV surveillance, participation at a regional training workshop of HIV & AIDS estimates and projections, rapid gap analysis of blood transfusion services in South Sudan, implementation of early infant diagnosis for HIV, mentorship and monitoring of HIV services.

### **2.5.1 Access to treatment and care**

WHO continued with its routine efforts to support implementation, monitoring and evaluation of HIV care and treatment services in the country. With the disbursement of funds from UNDP/ Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), WHO supported the mentorship of clinicians on comprehensive HIV clinical services delivery, supervision on support functions for HIV including human resources, infrastructure and equipment, medicines and commodities, laboratory services and information systems. During the mentorship, the team found major progress in HIV clinical services in the majority of health facilities; however challenges still exist in some other health care facilities like; lack of skills in the management HIV related of complications, monitoring and evaluation and drug stores management.

During this quarter, WHO also conducted a cohort analysis study to establish HIV

treatment outcomes. Data obtained during the study indicated an improvement in the retention rate for treatment from 62.5% to 70.8%. During the same period, the Multi Donor Trust Fund (MDTF) a World Bank project, also donated a consignment of drugs worth \$1m. This fund complimented support from GFATM Continuity of Services grant which will expire at the end of 2013.

### **2.5.2 Capacity Building**

#### **a) Planning retreat on HIV treatment crisis**

South Sudan remains among the countries with lowest coverage on HIV treatment (ART) at less than 10%. This is mainly associated with the failure and weaknesses of the treatment cascade in identifying the infected persons, linking and engaging those diagnosed to treatment and care programs, providing uninterrupted quality treatment and ensuring adherence and retention of people on ART and in chronic care. During this quarter, a meeting was organized by Regional Office EMR, and attended by WHO staff from countries contributing to the largest burden of HIV in the region (80% of PLHIV): South Sudan, Sudan, Pakistan, Djibouti, Iran and Somalia. The meetings aimed at gaining an understanding of the root causes, underlying factors and discuss possible responses for addressing low coverage in the five countries. The teams from the country offices, contributed to the regional strategy and the development of national plans. The meeting was instrumental in initiating discussions on the development of South Sudan national plan for ending treatment crisis. Catalytic funding and technical assistance from EMRO will enable

South Sudan conduct a rapid assessment on the 'causes of low coverage' and the development of national scale up plan to address the crisis.

### **b) Planning retreat on UN Support to AIDS Response in South Sudan**

WHO participated in planning a retreat for the UN Support to AIDS Response in South Sudan, held between 24 – 27 January 2013. The meeting that was organized by United Nations Joint Team on HIV&AIDS for all UN focal points on HIV, was intended to familiarize participants with the Investment Framework. It also intended to familiarize participants with the High Level Meeting (HLM) political targets, validate the 2012 United Nations Joint Team Report (JPMS), develop one year operational plan 2013, agree on reporting format, cycle and mechanism. The UN Joint Team is a strategic partner in the development of scaling up and improvement of the national HIV Response. The Joint Programme Support 2012 – 2013 focuses on supporting, gathering and using strategic information to inform policy and strategic planning; strengthening health and community systems for service delivery; resource mobilization and ensuring an enabling environment for sustainable responses. The Joint Programme Support works in three thematic areas for which WHO is a lead for treatment, care & support. During the two day retreat, the finalization of United Nations Joint Team work plan for 2013. Following the meeting, WHO took lead of implementing activities outlined in the plan like the development of

a plan to scale up HIV care, treatment and support; training, development of tools and monitoring and evaluation of the response.

### **c) Regional training workshop of HIV & AIDS estimates and projections in South Africa**

In this period, WHO participated in a regional training workshop of HIV & AIDS estimates and projections in South Africa, 13 – 16 March. The meeting was jointly organized by UNAIDS and partners including its co-sponsors like WHO. The workshop on estimates and projections brought together participants from over 12 countries in East and Southern Africa, aimed at updating countries on new methodology for estimating needs of HIV, alert programme managers of potential changes in treatment needs and generally understand the impact of the HIV epidemic on the demographics in the country. The estimates and projections are used to advocate for resources, focus prevention activities and used to set national strategic plan targets. The estimates are also used for strategic planning for prevention and care services including ART treatment programmes, PMTCT programmes and orphan support. The South Sudan estimates will be important for advocacy, providing direction for the investment in the response of HIV and in addition these estimates will be used to monitor the 2011 Political Declaration on HIV. The estimates are currently being used to provide data on Global AIDS Program Report and in developing national operational plans on ART and PMTCT in South Sudan.

### 2.5.3 Dissemination of results for HIV surveillance

South Sudan is regarded as a country with a low generalized HIV epidemic, with an estimated HIV prevalence of 2.7%. During this quarter, a dissemination of ANC survey and mapping and population size estimation studies was conducted by Ministry of Health in collaboration with WHO to provide better information on the HIV epidemic in the country. The mapping and population Size estimation study was conducted by the University of Manitoba Canada – Pakistan through technical assistance and financial assistance from WHO. The study helped the HIV programme in South Sudan to develop local capacity to conduct mapping studies for key population groups, develop national estimates of population sizes of at risk populations, and to describe the operational typology and organization structures of key populations in each location where the study was conducted.

The findings of South Sudan sentinel surveillance study 2012 were also disseminated. The primary objective of ANC sentinel surveillance study was to determine the prevalence of HIV and correlate HIV to syphilis among pregnant women attending antenatal care in South Sudan; to assess temporal trends in HIV and syphilis in pregnant women attending antenatal care in South Sudan; to understand the geographical spread of HIV infection and to identify emerging pockets. Results indicated an overall prevalence of HIV and syphilis of 2.6%, 95% CI [2.3-2.8] and 8.3%, 95% CI [7.7-8.7] respectively. The survey findings also revealed that, location/site, level of education, marital status and gravidity are important risk

factors in the assessment of the HIV and syphilis infections. The results of the study will be essential in providing information for advocacy, HIV/AIDS program planning and evaluation.

### 2.5.4 Rapid Comprehensive Gap Analysis of Blood Transfusion Services

WHO in collaboration with CDC initiated a project to provide technical assistance to South Sudan for blood safety? As a result a rapid comprehensive gap analysis was conducted by consultant hired by WHO in this quarter. The study aimed at describing the blood transfusion services and practices in the country, to ascertain the existing blood safety policy, organizational and coordination structures of the national blood transfusion services, and to identify gaps and priority needs of the blood transfusion services (BTS). The gap analysis assessed the BTS infrastructure and practices in five major hospitals. It also covered desk review of existing national policies, guidelines and reports. The gap analysis identified gaps and priorities that need to be systematically addressed. Priorities were summarized into immediate and long term priorities. The results of this gap analysis will be instrumental in developing a national policy and 5-year strategic plan.

### 2.5.5 Early Infant Diagnosis

WHO in collaboration with UNDP, MoH and UNICEF recruited a consultant to assist establish Early Infant Diagnosis (EID) and

care of exposed and infected children in South Sudan. The consultant was recruited against a background of low coverage at 1% of exposed infants receiving ARVs to reduce the risk of mother to child transmission (MTCT). This technical assistance will help establish and rollout of EID strategy for South Sudan, train and follow up health providers to enable EID implementation at facilities, and work in collaboration with laboratory to establish a system for collection, handling and processing of polymerase chain reaction (PCR/Deoxyribose Nucleic Acid (DNA) samples.

### **2.5.6 Challenges**

The major challenges faced this quarter were on the quality of care provision. Supervision reports of services from a few facilities indicate a gap in human clinical skills, irregular drug supply, weak records management and reporting and frequent breakdown of CD4 machines.

### **2.5.7 Way forward**

WHO will continue to support MoH and work with other partners to ensure commitment and effective response in combating HIV in the country.

The organization will also continue to work in partnership with the Ministry of Health and CDC, to organize continuous capacity enhancement, quality of care, monitoring and reporting, forecasting and quantification of HIV medicines and ensure effective use of available technologies.

## **2.6 Tuberculosis**

World Health Organization supported the Ministry of Health, Republic of South Sudan with information, education and communication (IEC) materials (2,500 t-shirts and 500 caps) for the commemoration of World TB Day on 26<sup>th</sup> March 2013 and printed 3,000 copies of TB brochures to be distributed to the TB management units. These brochures are meant for dissemination of TB information through the health education sessions, aiming to raise awareness among the communities.

## **2.7 Health Systems Development**

The health systems development team implements activities that contribute to the attainment of WHO strategic objectives 10 and 11. This report outlines major activities carried out between January to March 2013.

### **2.7.1 Leadership and Governance**

During this quarter, WHO continued to participate in and conduct activities that contributed to the strengthening of leadership and governance in the health sector of the Republic of South Sudan.

### **2.7.2 Donor Coordination and collaboration**

WHO continued to participate in the Health Development Partners monthly meetings convened by the Joint Donor Team. During this period the HDPs focused on exploring options for improving national governance and oversight for global health initiatives

especially the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) as well as Global Alliance for Vaccines Initiative (GAVI). It was agreed that program managers from the principal receipts regularly update donor partners on the progress/status of these programs.

WHO also proactively participated in the monthly Health Sector Working Group (HSWG) meetings convened by the central MOH Directorate of Planning and Donor Coordination. During this period the HSWG dialogued on options for improving overall health sector stakeholder's collaboration. To this end WHO hosted a consultative meeting chaired by the Undersecretary and facilitated by WHO EMRO regional advisor for Health Policy and Planning that agreed to conduct a two day national dialogue to foster coordination and collaboration within the health sector.

In addition, WHO hosted a GAVI mission to South Sudan that consisted of representatives from EMRO and GAVI secretariat. After wide consultation with several stakeholders, a clear plan of action for implementing activities under the second tranche of funding from the GAVI Health System Strengthening grant was agreed on and terms of reference (TOR) and the schedule for developing the next application for the GAVI Health System Funding Platform (HSFP) for South Sudan were drafted.

The Organization further participated in the GAVI Health System Coordination Committee (HSCC)/Interagency Immunization Coordination Committee

(ICC) meeting during which a plan of action for the implementation of the second tranche of GAVI Health System Strengthening funds was developed and the schedule for development of the Health System Funding Platform endorsed.

### **2.7.3 Development of Policies, Strategies and reports**

During this reporting period, WHO hosted an inception mission from WHO- HQ on the European Union (EU)/WHO Universal Health Coverage Partnership: Strengthening Policy Dialogue on National Health Policies, Strategies and Plans and Universal Coverage Project. Following broad dialogue with several stakeholders in South Sudan, a succinct road map for implementing the project in South Sudan was developed. Focus areas for this project will include: institutionalization of the Joint Annual Review Process, strengthening operational planning at sub national levels, reviewing and revising the national health policies and development of a more realistic short term plan for human resources for health in South Sudan.

WHO initiated the process of developing the inaugural Country Cooperation Strategy (CCS) for South Sudan. This entailed consultations with partners as well as internal consultation within the WCO which contributed towards the development of the first draft of the CCS. Further dialogue and engagement with stakeholders under the auspices of WHO HQ, AFRO and EMRO will contribute to the completion of this document.

## 2.7.4 Strategic Information

WHO proactively participated in the monitoring visit for the health systems strengthening activities implemented under the Global Fund to Fight AIDS, Tuberculosis and Malaria health system strengthening grant round 9. During this visit WHO provided technical guidance in assessing the appropriateness and functionality of health facilities renovated and or constructed in Central Equatoria state.

As part of the process of contributing towards the development of the civil registration and vital statistics (CRVS) in South Sudan, WHO leads the rapid assessment of the CRVS. The results were reviewed during a WHO EMRO regional CRVS workshop and incorporated into a regional strategy for strengthening CRVS. Furthermore WHO presented its planned activities towards CRVS during a national consultative CRVS workshop for South Sudan.

## 2.8 Onchocerciasis Control Programme

The African Programme for Onchocerciasis Control (APOC) continued to support the South Sudan Onchocerciasis Taskforce (SSOTF) in a bid to establish effective and self-sustainable community-directed ivermectin treatment (CDTI) throughout the onchocerciasis endemic areas. Onchocerciasis is endemic in 9 out of 10 states in South Sudan. The CDTI strategy relies on community participation for the distribution of ivermectin to the targeted population. Project coordinating officers, county OV supervisors, staff from front line

health facilities (FLHF) facilitate the CDTI process by organising communities to participate in CDTI activities. Community selected community drug distributors (CDDs) conduct community censuses, provide treatment with ivermectin and keep records of the households treated.

### 2.8.1 Preparation of the onchocerciasis Re-launching Road Map Document

Following meetings held and missions conducted in the 2<sup>nd</sup> quarter of 2012, it was agreed that the South Sudan Onchocerciasis Program needs to be re-launched. Following the recommendation, WHO South Sudan worked closely with APOC headquarters to compile a road map document detailing activities and costing for the Onchocerciasis Control Program for 2013 – 2015. The roadmap document is complete and has been circulated to partners that have shown interest in implementing onchocerciasis and preventive chemotherapy (PCT) neglected tropical diseases (NTDs) in South Sudan.

A stakeholders meeting is planned to be held on 24 and 25 June 2013, aiming at building consensus from partners and commit funds to the South Sudan roadmap document.

### 2.8.2 Budgeting for 2013 CDTI activities

In this quarter, WHO in collaboration with the national coordinator for onchocerciasis control worked with the different CDTI project coordinating staff and health authorities from the 9 states endemic for onchocerciasis to prepare individual 2013

onchocerciasis control plans of action and budgets (PABs). These were completed and submitted to APOC management for final approval and disbursement of the required funds for 2013 activities.

### **2.8.3 Compilation of 2012 Mass Drug Administration (MDA) data**

WHO worked with the different state level project coordinators to compile data for the Mass Drug Administration (MDA) for the 2012 community directed distributors (CDDs) training. In addition to taking the inventory of balances of mectizan in the different states. Once the process is complete, data will be compiled and used to prepare the 2012 annual technical reports due for submission to APOC HQ at the end of June 2013.

### **2.8.4 2013 Mectizan Supply**

In this quarter, the South Sudan 2013 mectizan application was approved and shipping documents sent to Juba. The drug consignment was due to arrive Juba at the end of the 1<sup>st</sup> quarter, however due to some delays with the shipping company, the drugs have not arrived. The distribution plan for mectizan from Juba to the states has already been prepared and shared with logistics team; this will be followed up as soon as the mectizan consignment arrives.

## **2.9 Maternal and New-born Health (CEmONC)**

The CEmONC project is intended to contribute to the reduction of maternal mortality ration in South Sudan by ensuring

access to quality delivery services in South Sudan. This is the second year of the projects implementation in South Sudan.

### **2.9.1 Capacity building**

During this period, on job training of health workers on handling of maternal and new-born emergencies continued. Medical officers, community mid-wives, clinical officers and nurses were trained. Two nurses from Bor Hospital were trained by the WHO Consultant anesthesiologist to offer anesthetic services. One of the trained nurses is currently providing anesthetic services without supervision.

In the same period, the Organization recruited seven additional United Nations Volunteer mid-wife trainers to boost training of mid-wives, participated in community dialogues and prepared ground for the maternity wards in the three new sites namely; Malakal, Yambio and Wau. Three obstetricians were also recruited and deployed to the three new sites where the project will be rolled-out to.

### **2.9.2 Construction of the New Maternity in Bor Hospital**

The construction of a 40 bed capacity modern maternity ward was completed and handed over to the State Ministry of Health in this period.

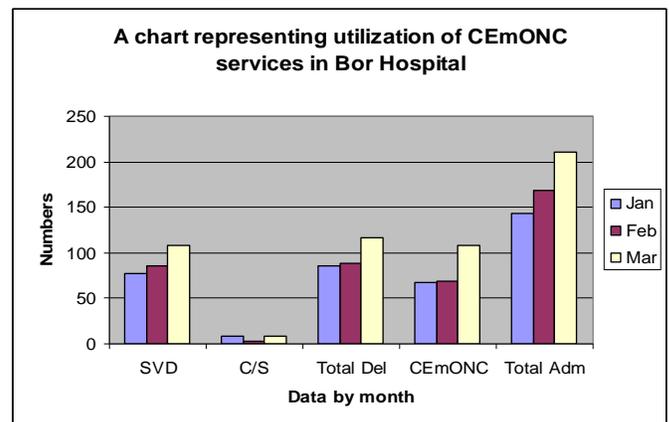
The architectural drawings for the operating theatres in Wau and Yambio as well as a complete maternity unit with a theatre were

also completed and currently under review and approval. The drawings for the maternity waiting homes were ready by the end of this quarter, the bidding process completed and is equally awaiting approval before construction work commences.



THE NEWLY CONSTRUCTED MATERNITY WARD IN BOR STATE HOSPITAL, JONGLEI STATE

Following the construction of the new maternity wing and community dialogues, an increase was seen in the number of mothers occupying beds in the maternity wing registered at 90% bed occupancy rate. The community dialogue created awareness of the availability of services, and the existence of a modern and attractive facility.



### 2.9.3 Community Dialogue

As a means to improve on the utilization of CEmONC services, the project embarked on dialogue with community leaders and women to discuss and address barriers to access and utilization of services by the women and their new-born babies in Jonglei state. As a result, existing barriers have been broken evidenced by the increased numbers of mothers accessing services, more so, from the payams and blocks that were visited.

The project concentrated its efforts in communities within the catchment area of the CIDA project that contributed to the least bulk of mothers accessing maternal and new-born services.

The above chart shows the trend of utilization of CEmONC services in Bor Hospital. More patients accessed services during the month of March 2013 compared to the first two months of the quarter. There were 244 CEmONC cases treated in Bor State Hospital as opposed to 189 cases during the same period last year, this represents a 30% increase. This was attributed to the new attractive maternity ward, whose utilization started in mid February 2013.

### 2.9.4 Challenges

- The security situation was volatile with a number of tribal clashes and armed conflicts in parts of Jonglei with populations moving from place to place seeking refuge within the state. The

insecurity caused by these conflicts impacted negatively on some aspects of the project, namely; outreach programs by the CEmONC team to the communities as well as access to services by those in need.

- The trained staff in Bor Hospital is still sluggish in responding to emergencies due to poor pay of health workers.
- Lack of blood transfusion services poses a challenge as the prevalence of anemia is reportedly high among pregnant mothers.
- There are very few mid-wives offering maternity services, thus the gaps are filled by traditional birth attendants (TBA's) conducting deliveries in the health facilities. This means that, much as we are advocating for facility deliveries, we still have deliveries by unskilled attendants in the health facilities.
- There was a strong storm that blew off 16 out of the 32 solar panels at the end of the quarter; this disrupted the 24 hour power supply to the new maternity, but plans were under-way to have them replaced.
- Most of the hospitals do not have qualified administrators which has made it difficult to institute project related issues that require in-puts from the hospital administration.

### 2.9.5 Way forward

- Deployment of the newly recruited obstetricians in the three hospitals mentioned above.
- Construction works in the three new sites mentioned above.
- Continue engaging the state ministries of health of the four states where the project is currently being implemented to recruit more qualified staff to work in the hospitals to improve the quality of care.
- Continue community dialogues with communities on how to improve access and utilization of maternity services in the states where the project is currently being implemented.
- Identify partners in the three states where the project has been rolled to, to improve referral net work, especially for mothers and their new-born babies.

### 2.10 Neglected Tropical Diseases

WHO South Sudan mainly focuses on two neglected tropical diseases namely; human African trypanosomiasis (HAT) and visceral leishmaniasis (VL). The WCO supports seven (7) treatment centers for human African trypanosomiasis activities, i.e Yei, Yambio, Lui, Juba and Nimule Hospitals and eighteen (18) treatment centers for Visceral Leishmaniasis. The human African trypanosomiasis is common in the areas of Central, Eastern and Western Equatoria states while visceral leishmaniasis is

concentrated in Eastern Equatoria, Unity, Upper Nile and Jongolei states.

During this quarter, a total of 392 cases of visceral leishmaniasis (VL) were reported, 302 (77%) new cases were reported this quarter alone, 73 (18.6%) relapses, 17 (4.3%) PKDL, 15(3.8%) defaulters and 8 (2%) deaths, this was however lower than the same period in 2012, where a total of 2,322 cases were reported, 2052 (87.87%) were new cases, 154 (7.32%) relapses, 116 (4.82%) post kala azar dermal leishmaniasis (PKDL), 51 (2.56%) defaulters and 27 (1.36%) deaths). The graph below shows the trends of visceral leishmaniasis reported in the same period of 2011, 2012 and 2013.

as compared to 2,596 people screened, 1,657 actively screened and 939 passively screened in 2012 same period from the 5 treatment centers. Two (2) relapses were reported in this quarter.

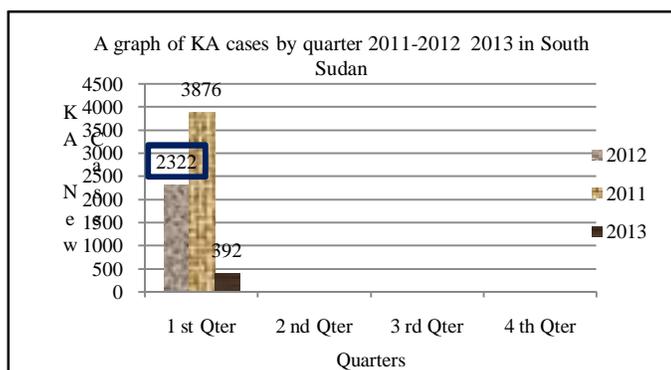
The graph below shows the new number of human African trypanosomiasis cases reported in South Sudan in 2011, 2012 and 2013 in the same quarter.

### 2.10.1 Capacity building

The programme conducted two trainings for visceral leishmaniasis (VL) ambisome in Kapoeta and another for human African trypanosomiasis (HAT) in Yei. A total of 75 health workers were trained, of these 54 were trained on visceral leishmaniasis while 21 were trained on human African trypanosomiasis management and diagnosis. Those trained included; clinical officers, nurses, laboratory personnel, and community health workers.

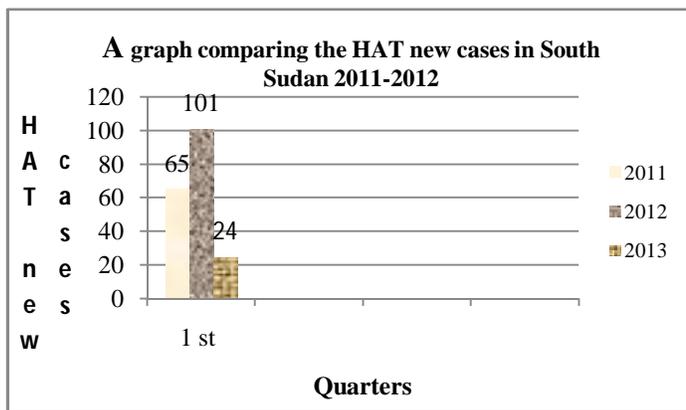
### 2.10.2 HAT-VL Drugs and Supplies Distribution

The neglected tropical disease programme has adopted a system of issuing HAT- KA drugs twice in a year. During this reporting period, 8,413 vials of sodium silbo gluconate) SSG, 12,500 vials of Paromomycin, 9,100 strips of rK39, four direct agglutination test (DAT) kits (antigen, positive and negative controls) a bottle of 250 2-Mercapto-ethanol distributed to KA treatment centers and five kits of NECT, 150 vials of Melarsoporal and 230 vials of pentamidine distributed were distributed to human African trypanosomiasis 7 treatment center.



A total of 24 new cases of human African trypanosomiasis, 6 of them in stage I and 18 stage in II were diagnosed in the 7 treatment centers this quarter. These were lower compared to the same period in

2012, where 101 new cases, 20 stage of them in stage I and 81 in stage stage II were diagnosed from the 7 treatments. In this quarter, 8,020 people were screened, 7,005 actively screened and 1,015 passively screened from all the seven (7) human African trypanosomiasis treatment facilities



### 2.10.3 Active screening

The programme supported MSF-H to conduct human African trypanosomiasis active screening. This was done providing the Organization with human African trypanosomiasis drugs used for the treatment of HAT patients diagnosed during the screening exercise. The screening exercise was conducted in Tambura and Mundri counties of Western Equatoria state.

### 2.10.4 CHALLENGES

- Weak surveillance system hence delays in reports.
- Lack of qualified human resources at the health facilities continues to be a challenge in most areas of South Sudan.
- Logistics constrains like few vehicles to facilitate all activities within the country.

### 2.10.5 Way forward

- Conduct frequent number of support supervision visits to the field.

- Conduct more joint trainings with the Ministry of Health to improve the quality of the services and reporting.
- Procure two vehicles and designate them for HAT-VL drug delivery and other HAT-VL related activities like active screening and support supervision visits.
- Actively involve state surveillance teams in compiling of weekly epidemiological reporting of HAT-VL to improve the reporting of the two diseases.
- Encourage all NGOs and government health facilities to use the South Sudan national guidelines and protocols for HAT and VL in diagnosis, treatment and when reporting on two the diseases.
- Donate solar refrigerator to Koch Hospital to keep ambisome vials and DAT samples.

### 2.11 Health Promotion and Prevention and, Advocacy and Communication

During this reporting period, WHO together with Ministry of Health and UNICEF conducted a visit to Maban county to make an assessment of health promotion interventions and device ways to improve support towards hepatitis E. The visit followed increasing numbers of hepatitis E cases in the county. As a result, six meetings were held with partners working in hygiene and promotion activities in the four camps in Maban to map communication interventions and approaches being used with an aim of improving the existing communication

channels and modes so as to lower the levels of the disease.

In addition WHO supported the Ministry of Health to develop a communication strategy for hepatitis E in Maban county. Information, education and communication messages were designed and shared with the Ministry of Health.

The Organization further provided technical and financial support to the Ministry of Health to conduct visits to two states of Western Equatoria and Northern Bahr el Ghazal states to support the State Ministries of Health to strengthen health education and promotion structures at the state levels. The teams held discussions with the state health authorities and partners and as a result, the state health authorities in Western Equatoria state appointed an officer to take responsibility of health education and promotion activities at the state level.

### 3.0 Conclusion

Despite challenges experienced in the country like insecurity in many states, WHO will continue with its commitments of supporting the Ministry of Health at the central, state and county levels in order to improve the health status of the people of South Sudan. And work closely with the Ministry of Health at the national and sub national levels to realize this goal.

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