AFRICAN PROGRAMME FOR ONCHOCERCIASIS CONTROL

REPORT OF EPIDEMIOLOGICAL EVALUATION IN KWARA AND KOGI STATES, NIGERIA.

KWARA/KOGI CDTI PROJECT

November/December 2013

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APPRECIATION

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LIST OF ACRONYMNS

ACRONYMS	MEANING
APOC	African Programme for Onchocerciasis control
CDD	Community Directed Distributors
CDTI	Community Directed Treatment with Ivermectin
LGA	Local Government Areas
LOCT	Local Onchocerciasis Control team
NGDO	Non-Governmental Development Organization
NOTF	National Onchocerciasis Task Force
SOCT	State Onchocerciasis Control Team

1.0 Introduction

A study in Onchocerciasis foci in Senegal and Mali with ivermectin treatment after seventeen years has generated the first proof of principle that Onchocerciasis infection and transmission can be interrupted and ivermectin treatment can be safely stopped. Following this, subsequent epidemiological evaluations have been done in a number of APOC supported countries including Nigeria to see if transmission has been reduced to an elimination level in communities with long history of treatment. Very encouraging results have been observed which showed similar outcome. At the elimination meeting held in Abuja in October, 2010 Nigeria endorsed the possibility of eliminating Onchocerciasis in some parts of the country and States that will be evaluated in 2011 were identified.

The long history of treatment with ivermectin of over ten years, 100% of Geographic Coverage,70% Therapeutic coverage and nodule prevalence of > 40 qualified Kogi/ kwara State for epidemilogical evaluation to determine the impact of ivermectin treatment. The evaluation provided the opportunity to advise the Government on the current level of infection and whether it is appropriate to stop ivermectin distribution in the projects.

OBJECTIVES:

- To access the impact of long-term Ivermectin treatment after several years of distribution in Kwara/Kogi project.
- To determine whether Ivermectin distribution can be safely stopped in the projects.

TRAINING

A 2 days training was conducted at Minna, Niger State on the 5th and 6th of November 2013.The 1st day was centered on classroom lecture on how to complete all the required forms, roles/responsibilities of each team member, familiarization with all the equipments needed for field trip followed by general discussion session with the trainees about possible challenges during the field activity.

A total of 16 communities were evaluated (12 in Kwara and 4 Kogi states). Total sampled population was 2734 (2013 in Kwara, 721 in Kogi). The total number of positive cases was 31 (29 in Kwara and 2 in Kogi).

2.0 Background information

2.1 Kogi State

Kogi State is located in the Middle Belt of Nigeria and shares boundaries with Niger, Nassarawa State and the Federal Capital Territory to the north, to the east with Benue State and to the South with Edo, Enugu, Anambra and Ondo States and to the West with Kwara State. The two largest rivers in Nigeria, Rivers Niger and Benue form a Confluence at Lokoja, the state capital. There are also several other fast flowing rivers namely Ofu, Anambra, Ubele, Inachalo, Okura and Oyi, which transverse the several endemic communities in the State. The main occupation of the people is farming, lumbering, fishing and trading. The vegetation is made up of rain forest in the Western part of the State, wooded savanna and grassland in the east, forest savanna mosaic to the south and guinea savanna in the north. Onchocerciasis was first reported in Nigeria in Kogi State in 1907 at Lokoja.

Kogi State is a multilingual State of about eight (8) ethnic tribes but three major languages viz Igala, Yoruba and Ebira are predominant. The topography of the State is highly undulating, while some parts are mountainous, some riverine and as such, 50% of the communities are hard-to-reach areas especially in rainy season, while the remaining 50% have manageable network of roads. However, all the 21 LGA headquarters are well connected with all season roads except one (Ibaji). The 21 LGAs have mass transit buses that ply their headquarters and the state capital. About 95% of the LGAs are directly or indirectly connected with mobile phone network. This has made communication easier and affordable to partners.

The administrative structure is a politically elected Executive Governor at the State level and politically elected chairmen in the 21 LGAs of the State. Several hierarchies of traditional institutions are in place to oversee the districts and communities.

About 1,038 primary health centres and health posts are in the state. These are fairly distributed in the CDTI communities. With this arrangement the collection points of mectizan tablets by CDDs is easily accessible and affordable to members of the community.

2.2 Kwara State

Kwara State was created on 27th May, 1967. It is located in the middle belt zone of Nigeria. The capital of the State is Ilorin, which is 306 km from Lagos and 594 kms from Abuja the Federal capital of Nigeria. It is located between latitude 8º and 10º 31' North and longitude 2º 45' to 6º 10' East. The state has an area of 32,500 sq. km. It shares an international boundary with the Republic of Benin to the West, and boundaries with five other states, Oyo, Osun and Ekiti to the South, Kogi to the East and Niger to the North. The state has two marked season of raining season usually between the month of April to October, and dry season between November to March. The southern part of the state is forested while the rest is of guinea savannah to the north. Major rivers in the state includes Niger, Awonga, Asa, Oyun etc

Population: activities, cultures, language.

Kwara State according to 2006 NPC is about 2.6 million people with a unique and cultural diversity. This is manifested in the ethnic composition of all the sixteen local government areas. The major ethnic groups are namely Yoruba, Nupe, Hausa/Fulani and Baruba. There are various traditional festivals held in the State that could be classified into religious and traditional. Christmas and Sallah seasons are usually festive periods for both Christians and Muslims respectively in the State. The traditional festivals are either rituals or social events. Such festivals include Awonga Festival in Shao. The festival day is set-aside for maidens between eighteen and twenty-two years to be joined in holy wedlock. Other festivals include Patigi Regatta in Patigi LGA, Epa festival celebrated by the people of Ekiti LGA and Onimoka, one of the paramount festivals of Offa LGA.

Communication systems

The State is well linked by a good network of roads to five neighbouring States. All the headquarters of the local government are well connected with all season roads. Most of the inter community roads are accessible throughout the year except those of Baruten, Kaiama , Moro, Asa, Edu and Patigi LGAs which are often impassable during the raining season. The state is also connected to all GSM network and NITEL. Water transportation can also be utilised on river Niger to connect to Niger and Kogi state. The electronics and print media are also veritable channels of communication in the state.

Administration structure

The state is divided into 16 administrative local government areas (LGAs) namely: Asa, Baruten ,Edu, Ekiti, Ifelodun, Ilorin East, Ilorin West, Ilorin South, Irepodun, Isin, Kaiama, Moro, Okeero, Offa, Oyun and Patigi .Each LGA is divided into 3-9 administrative districts and each district is further sub-divided into 10-18 political wards. Altogether there are 194 wards in the State. The state capital is located at Ilorin ----km south west of ABUJA and -----North east of Lagos.

Health system & Health Care Delivery

There is collaboration between the State Ministry of Health and the health department of the Local Government Areas in the implementation of health projects in the state.

Health care in the State is based on primary, secondary and tertiary health care delivery system. The health institution in the State include the University of Ilorin Teaching Hospital (UITH), Three specialist hospitals, Sixteen general hospitals, and over 800 basic health centres (BHC), dispensaries and private clinics are located in various communities in the State.

3.1. Methodology

The study was a cross-sectional survey to survey as much as available households possible with a minimum of 200 subjects. A total of 2,734 people were surveyed from 16 villages in nine LGAs of the States. The communities were selected either using skin-snip data, if these were already available, or by rapid epidemiological Mapping of Onchocerciasis based on the prevalence of palpable nodules done by APOC.

Using the Simple epidemiological evaluation Protocol prepared by APOC, individuals from 5 years and above was subjected to physical examination to identify different types of onchocercal nodules and a skin snip was taken from areas around iliac crest for identification of microflarial worm.

The examination which was carried out in good light and with privacy constituted the following:

- Nodules were looked for by both visual inspection and careful palpation
- The palpation was carried out with special attention to the commonest sites where nodules can be located as follows:
    - Iliac crest (hip) and neighboring areas;
    - Over and behind greater trochanters
    - Coccyx and natal cleft;
    - Around ankles, knees
    - Ribs (front and rear), chest wall and over the spine;
    - Scapula and shoulders
    - Elbows, wrists and arms;
    - Over the head, especially the brow, occiput and around the ears

Skin Snipping: A skin snip was taken from the left and right iliac crests of each subject and examined for microfilaria.

Data collectors and instruments

The instrument for data collection was entered by two enumerators. Each day quality of the data is checked for completeness (age, sex, biopsy numbering and serial numbers), consistency of results with laboratory form and family forms, and eligibility of the hand writing.

3.2: Table 1: List of communities visited

STATE	LGA	S/N	NAME OF COMMUNITIES VISITED	NO REG	NO OF PERSONS EXAMINED
KWARA	BARUTEN	1	BUDO-AIKI	306	168
		2	GWANARA	491	277

		3	SHEYEN	431	272
		4	ILESHA	419	177
		5	KOSUBOSUN	217	99
	KAIAMA	6	NUKU	425	217
	EDU	7	MAGANIKO-NDANAGI	184	134
	PATIGI	8	AGBORO	276	186
	IFELODUN	9	FAMOLE	194	130
		10	SULU	134	48
	OKEERO	11	AYEKALE	386	187
	MORO	12	YEREGI	188	118
KOGI	MUPA MURO	13	OKE - AGI	294	185
		14	OTAFUN	137	86
		15	ILAI	377	201
	YAGBA WEST	16	IDOFIN	473	249
				4932	2734

3.3: Table 2:Team composition

S/N	NAME	ROLE/RESPOSIBILITY
1.	BRUNO Ki	AP0C FACILITATOR
2.	AUDREY NYIOR	SUPERVISOR
3.	FOP OYINLOYE	ENUMERATOR
4.	Mrs DORATHY AMDIFE	ENUMERATOR
5.	Dr TEYIL WAMYIL	SKIN SNIPPER
6.	Mr VICTOR D CHACHAM	SKIN SNIPPER
7	Mrs DORCAS MERNYI	SKIN SNIPPER

8.	Mrs FRANCA OPARA	MICROSCOPIST
9.	DOMUNIC MOWANG	MICROSCOPIST
10.	TIMOTHY OGUNJIMI	DRIVER
11.	SULEIMAN ADEBAYO	DRIVER
12	TUNDE AYINLA	DRIVER
13	OLARENWAJU	DRIVER

4.0 Results & Findings

4.1: RESULT

STATE	S/N	COMM	CODE	LAT	LONG	NOREG	NOEXAM	POS	NODULES
KWARA	1.	BUDO - AIKI	0571	08.70659	02.76528	306	168	1	0
	2.	GWANARA	0572	08.89341	03.13531	491	277	0	0

	3.	SHEYEN	0573	09.00617	02.87860	431	272	0	0
	4.	ILESHA	0574	08.91445	03.41946	419	177	0	0
	5.	KOSUBOSUN	0575	09.55032	03.23158	217	99	0	0
	6	NUKU	0576	09.73910	04.14259	425	217	0	0
	7	MAGANIKO-NDANAGI	0577	08.76066	05.26368	184	134	0	0
	8	AGBORO	0578	08.52561	05.69688	276	186	6	0
	9	FAMOLE	0579	08.65441	05.01118	194	130	0	0
	10	SULU	0580	08.32278	04.77574	134	48	0	0
	11	AYEKALE	0581	08.21596	05.28964	386	187	21	0
	12	YEREGI	0582	08.74545	04.48056	188	118	1	0
KOGI	13.	IDOFIN	0042	08.26029	05.72187	473	249	2	0
	14.	OKE - AGI	0043	08.09453	05.83240	294	185	0	0
	15.	ILAI	0044	08.02261	05.82707	377	201	0	0
	16.	OTAFUN	0045	08.13306	06.07975	137	86	0	0

4.2 OTHER FINDINGS

- Inadequate mobilization in some of the communities sampled.
- Agitation for payment by some of the CDDs in the communities sampled.
- Many of the community members have not been taking mectizan regularly.

- Poor monitoring at all levels
- Drugs not regularly taken
- The three communities from kwara state Ayakale,Agboro and Bodu Aiki have rivers that has good bleeding sites for blackflies.

4.3 CONSTRAINTS

Inadequate mobilization in some of the communities

5.0 RECOMMENDATIONS

1. Intensive community mobilization and sensitization on treatment compliance, improved coverage and CDTI strategy.
2. Entomological surveillance should be carried out in three communities of Kwara state (Bodu-Aiki, Agboro and Ayekale).
3. There is need for proper record keeping at all levels particularly tracking of Mectizan usage.

4. There is need to allocate funds for CDDs and Health Workers that will be involved

5. Frequent postponement of activity date should be avoided