Acta Tropica, 61(1996)137–144

ACTROP 00499

Community-based ivermectin distributors: onchocericasis control at the village level in Plateau State, Nigeria

Frank Richards Jr. [a,*], Carlos Gonzales-Peralta [b], Edwin Jallah [c], Emmanuel Miri [d]

[a] *Epidemiology Branch (MS F-22), Division of Parasitic Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, 4770 Buford Highway, Chamblee, GA 30341–3724, USA*
[b] *Plateau State Onchocerciasis Program, River Blindness Foundation, Jos, Plateau State, Nigeria*
[c] *River Blindness Foundation, Houston, TX, USA* [d] *River Blindness Foundation/Nigeria, Lagos, Nigeria*

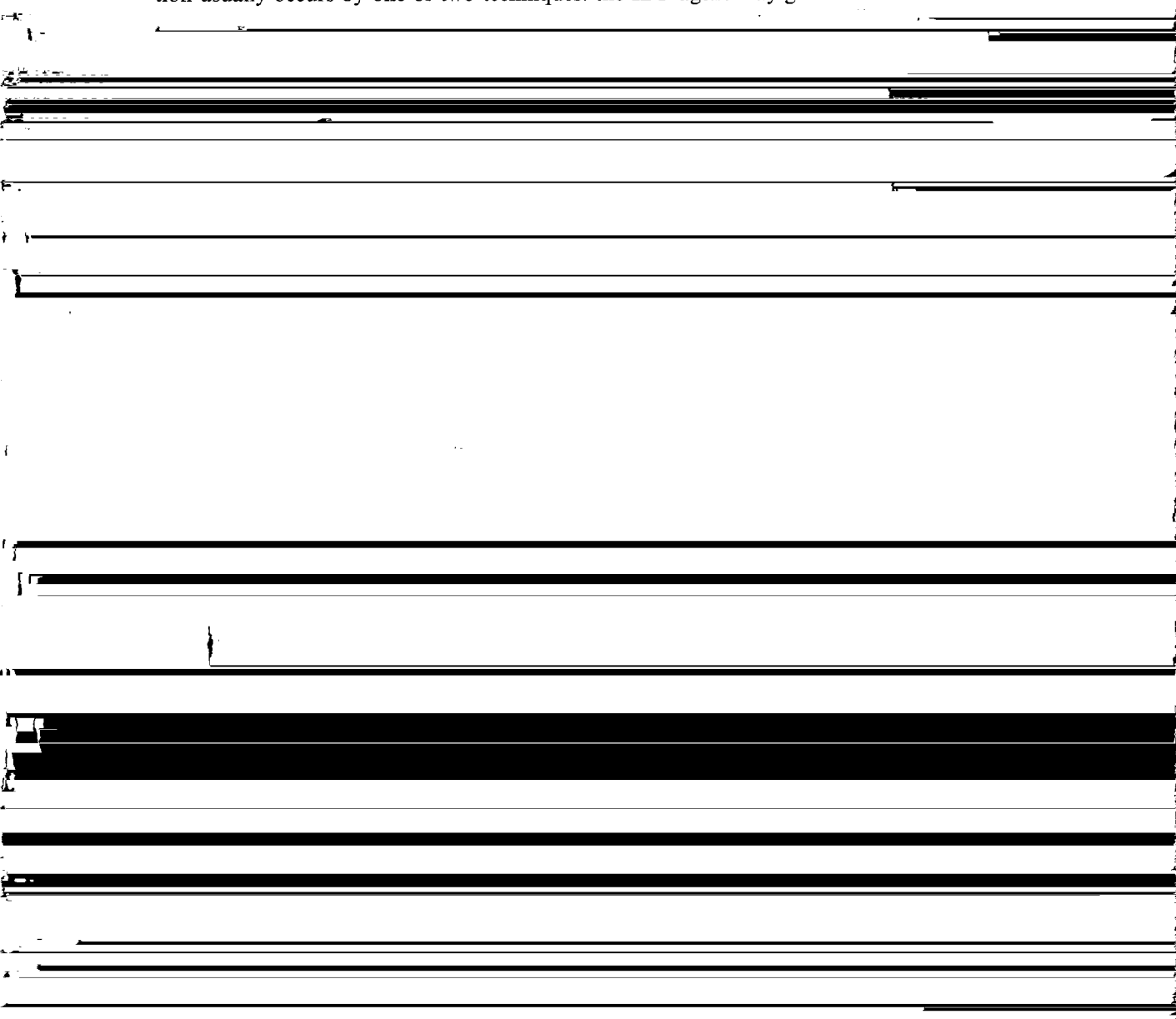
The use of community residents as agents for distributing mass ivermectin therapy for onchocerciasis provides a component of community participation absent from mobile team delivery methods. Community-based distribution, however, presupposes preexisting human resources in the endemic villages capable of fulfilling the essential functions of an ivermectin distribution process: mobilizing and educating the population, dispensing the drug, maintaining records, and monitoring and treating adverse reactions.

tion of the drug ivermectin (Mectizan^{R}). Periodic treatment with ivermectin prevents the severe manifestations of human onchocerciasis (Dadzie et al., 1987; Greene et al., 1985; Taylor and Greene, 1989; Greene, 1991). The drug acts by reducing the *O. volvulus* microfilaria present in the eye and skin. This decreases the risk of visual impairment, and may also alleviate for a time dermal lesions and pruritus. Although some persons who are infected with *O. volvulus* may experience reactions (body

who are pregnant or who are nursing babies under 1 week of age, and individuals who are seriously ill. Coverage is variably defined as either the percent of all eligible residents treated, or the percent of the entire population treated; IDPs strive to sustain the highest possible coverage for each round of therapy offered every 6 to 12 months.

Active vs. passive ivermectin distribution

Most IDPs are outreach programs that aim to provide maximum drug coverage to a community targeted for mass therapy in the minimum time. This campaign approach usually lasts about 1 week, during which time a maximum effort is made by distribution personnel to mobilize the population for treatment. Active distribution usually occurs by one of two techniques: the IDP agent may go from house to



to gather at a central location (such as a health center, central compound, or public square) to receive treatment.

that incorporate community members into the planning and implementation of drug delivery (Akpala et al., 1993a).

3. Case study: The use of community-based workers to distribute ivermectin in Plateau State, Nigeria

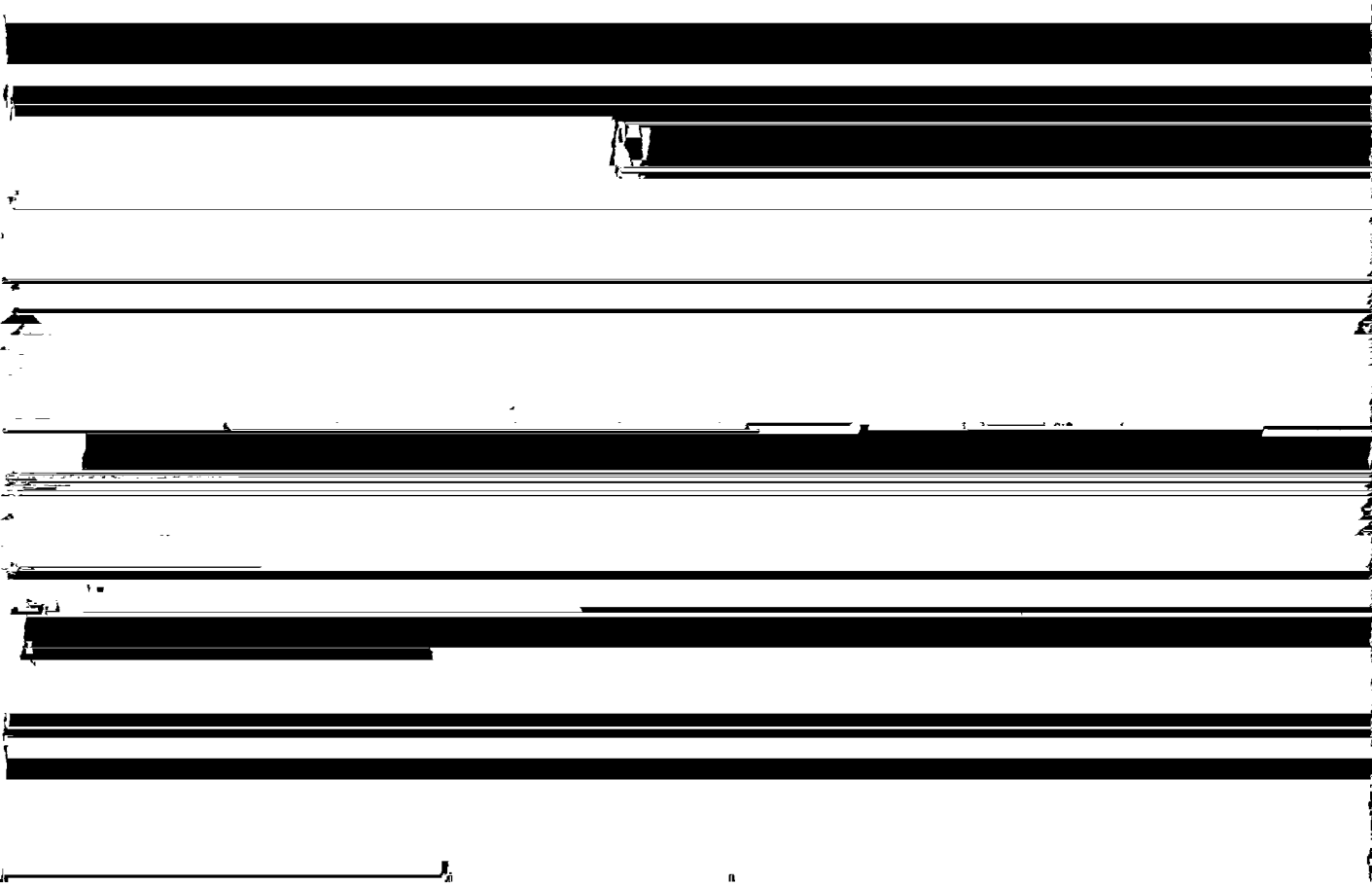
The seminal effort to establish state level IDPs in Nigeria was initiated in 1989 by Kwara State health authorities in collaboration with Africare and the International Foundation. This experience, summarized by Pond (1990, 1991) emphasized the enlistment of CBDs. Other IDPs in Nigeria followed, including the Plateau State/River Blindness Foundation (RBF) Onchocerciasis Control Program, which, by the end of 1994, had a CBD network in approx. 930 villages that treated a total population of about 750 000.

Plateau State is located in central Nigeria; its capital city is Jos (10°N, 9°W). As

first step, community chiefs and village leaders were asked to identify someone from the community who could serve as an ivermectin distributor (some larger communities were asked to nominate more than one CBD). The CBD was expected to be available to the program for about 5 to 10 work days just before and during the treatment period. Preference was given to existing VHWs, but it was discovered early on that there were very few village health workers present in the targeted communities, and many of them were illiterate. Therefore, the Plateau State program leadership began recruiting personnel for the sole purpose of ivermectin distribution. CBD candidates had to speak the local dialects, read, write, and perform basic arithmetic functions. Sometimes, only the local school teacher had the skills needed to perform the required tasks.

Remuneration

Monetary incentives for the CBDs quickly became an important issue. Initially, each LGA had the responsibility for providing the incentives to their CBDs. Payment was calculated on the 5–10 days that the CBDs were expected to be engaged in IDP



The negative side of this popularity was that it created a demand for more frequent than annual dosing, and thus a concern that the donated drug would find its way to the market place.

Training

[redacted]

program. Annual training and retraining sessions in Hausa and in English, supported

[redacted]

onchocerciasis control teams (the former mobile unit teams). Groups of approx. 30

rest on finding ways to sustain cost-effective distribution mechanisms. The use of community members to distribute ivermectin contains these elements of economy and sustainability, in addition to those of community ownership and self-reliance. Thus, the CBD strategy can have benefits that reach beyond onchocerciasis control to other development initiatives. However, challenges inherent to the CBD concept exist that must be addressed by both the local community leadership and the external advocates of the IDP in the donor community and government health structure. The Plateau State experience suggests that local community leadership must be

[redacted]

responsibility, and the communities' experiences were in the spirit of the Alma Alta

accords (WHO, 1978).

References

Agudelo, C.A. (1983) Community participation in health activities: some concepts and appraisal criteria.