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AN ASSESSMENT OF THE TRAINING AND SERVICES OF COMMUNITY-BASED DISTRIBUTION (CBD) WORKERS IN 0YO STATE

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DEDICATION

This work is dedicated:

- To God Almighty, who sustained me throughout the period of this degree programme.
- To my lowing husband, Dr. Michael Adeleke Adedoyin whose encouragement made the successful completion of this programme become a reality and who combined hectic official work with domestic assignments

and

To my dear children, Toyin, Tayo, Tolu and Temi who endured my absence in the home with love and patience.

ABSTRACT

The study attempted to assess the effectiveness of the Community Based Distribution (CBD) programme of low-cost Family Planning, Maternal and Child Health Services. This was established in 1979 by the Fertility Research Unit of the Department of Obstetric and Gynaecology, University College Hospital, Ibadan in collaboration with Oyo State Ministry of Health; the Pathfinder Fund of Boston; and the Centre for Population and Family, Columbia University both in the United States of America.

The C.B.D., an innovative programme, consists of the training and utilization of Traditional Birth Attendants (TBAs) and Voluntary Health Workers (VHWs) to provide Primary Health Care to the door steps of the rural communities who live on the out-skirts of the main stream of sophisticated health technology.

The pilot project site was Akinyele Local Government, a rural area, North of Ibadan with a population of 85,900. It was found that the programme was successful because within two years of its implementation, the population served increased from an initial 85,900 to 238,696 and the number of Zones from one to five. At the request of the Oyo State

Ministry of Health officials, the project was extended to other Health Zones in Oyo State: Oyo, Oshun, Ife/Ijesha Health Zones.

The study assessed the training of the CBD workers with particular emphasis on the educational components of the training curriculum and also the educational activities of the CBD workers and their impact on their client community.

The CBD training curriculum findings indicate that as designed presently, has enough contents which are relevant to the training objectives. However, it will be more useful, if it is developed into a standard training manual with clearly stated objectives, training methodologies and an evaluation instrument which will set an acceptable level of attainment for a trainee to qualify as a CBD worker.

In relation to the application of the training, most of the CBD workers to a large extent were found to perform well on what they were taught to do - knowledge of educational tasks, performance of educational task and effectiveness of educational task.

The response and support of the community members especially the clients, to the educational activities of the CBD workers was found to be positive.

However, the CBD workers advocate that the government should re-introduce the monthly incentives because the CBD workers in carrying out their activities, incur tangible and intangible cost.

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I appreciate and acknowledge the cooperation of all the CBD agents, their clients and the community members interviewed for their cooperation and hospitality during the visits to their villages.

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CHAPTER ONE

INTRODUCTION

Nigeria with a population of over 80 million of which 75 per cent live in the rural and suburban areas, is the most populous black nation in Africa. One of the most significant health care problems in Nigeria, as in other parts of the developing countries is the fact that the provision of health services is in reverse proportion to the population, that is, about 75 per eant of health services are situated in vities and towns and therefore utilized by about 25 per cent of the populace (Williams and Omishakin, 1983). Consequently, mobility is continuing in the direction of major cities in search for jobs and better lives. Compounded with these are the serious endemic problems of malaria. regarded as the mation's number one killer, and other major preventable communicable diseases. According to Williams and Omishakin (1983), the poor rural dwellers face disparities on a number of social and demographic measures as compared to the rest of the population. These disparities, together with poor road conditions and other communication systems, play a major role in determining the health status of the poor/rural population and their accessibility to existing health services.

It is disheartening to note that in Nigeria, like many other developing countries, maternal and infant mortality rates are higher than those in technologically advanced countries.

These rates are often considered indices of public health status (Williams and Omishakin, 1983).

In developing countries like Nigeria, Gambia and Kenya, infant and maternal mortality as high as 200 per 1,000 live births and 300 per 100,000 births respectively have been recorded (Gamble 1952, Grounds 1964, WHO 1971, Oduntan and Odunlami 1974). Unfortunately, these children and the women are the most vulnerable groups of the world's population (Ademuwagun et al 1977, Ladipo, 0.A., 1985).

In view of all these, the World Health Assembly in 1977 decided that the main social target of governments and WHO should be the

Attainment by all the people of the world by the year 2000, a level of health that will permit them to lead a socially and economically productive life.

At the International Conference on Primary Health Care (PHC) held in Alma Ata, in 1978, various governments, (WHO member States) were urged to develop strategies for attaining the goal of health for all by the year 2000 A.D. through a health system based on Primary Health Care (PHC).

Of the major components of PHC, perhaps one of the most important is the improvement of reproductive health care through a well articulated system that ensures integration of maternal and child health and family planning services (Ladipo, O.A. 1985). Health programmes that focus on maternal and child health will go a long way to make Health for All by the Year 2000 A.D. a reality.

BACKGROUND TO THE STUDY

Community-Based Distribution (CBD) Programme

Progress towards the goal of "Health for All by the Year 2000" requires new approaches. One of such approaches is the establishment of Community-Based Distribution (CBD) programme of low-cost family planning, maternal and child health services established by the Oyo State Government of Nigeria. The CBD, an innovative programme, consists of the training and utilization of Traditional Birth Attendants (TBAs) and Voluntary Health Workers (VHWs) to provide PHC with minimal day to day reliance on clinics, professional medical personnel, or complex diagnostic screening and record keeping procedures (Population Reports, 1982).

This programme ensures active participation and involvement of consumers in the delivery of its health services thus implying that health systems are not regarded as "baskets to accommodate consumer demands."

The Oyo State CED Programme was established in 1979 as one of the strategies to bring health care to the door steps of the rural communities. In 1979, the Fertility Research Unit of the Department of Obstetric and Cynaecology, University College Hospital (UCH), Ibadan, under the direction of Professor C.A. Ladipo, in collaboration with Oyo State Ministry of Health; the Pathsinder Fund; and the Centre for Population and Family Health, Columbia University both in United States of America (U.S.A.) embacked on the CBD programme. The main objective was to demonstrate that village level workers including TBAs could be organized and trained to effectively provide simple health care services.

emphasized in the sense that the programme cannot be overemphasized in the sense that the programme acts as a stopgar between the urban people who enjoy 75 per cent of the
health services and the disadvantaged rural communities.

The programme is also advantageous in the sense that it is
easily accessible to them because the services are rendered

by the community members who live among the people. Moreover, the programme is low cost, the poor/rural community could afford the health services. The CED programme thus helps to increase the health manpower and provide health care at little or reasonably affordable cost to both health providers and consumers.

The pilot project site for the Oyo State CBD programme was Akinyele Local Government, a rural area North of Ibadan with a population of about 85,900 (Figure 1). There is a clear evidence from preliminary results of the CBD operations research project that the project is expanding and gaining a lot of popularity (Community Based Distribution Project Summary, January, 1984, Reyes and Jinadu, April 1984).

The project is providing five types of services, namely:

- illness treatments (malaria, diarrhoea, cough, vorms, anaemia and wounds)
- /contraceptive disbursements
- deliveries
- health talks
- pre-natal pill disbursement i.e. care of pregnant women.

Map of Oyo State Showing the Health zones, Pilot Area, CBD Headquarter and Study Areas.



FIGURE-I

In Akinyele pilot area alone where 158 CBD workers were trained, a total of 100,730 of such services: illness treatment, family planning, ante-natal care and delivery were rendered between 1982 and 1983 with each CBD worker averaging 27 services per month. Within two years of its operation, the population served has increased from an initial 85,900 to 238,696 and the number of zones from one to five (Table 1).

Because the pilot project was very successive in the first two years of its implementation, an expanded programme was initiated at the request of the Ministry of Health officials to satelite sites in Oyo, Oshun, Ife/Ijesha Health Zones (Figure 1). The number of trained CBD workers per health zone is highlighted in Table 1.

Certain unique aspects of the project call for special attention because just as they constitute its strength, they are also potential sources of weakness. Some aspects which must be considered are that:

- 1. It is designed to serve already underserved rural communities and to supplement government efforts;
- 2. It is low-cost;
- 3. It is served by trained locally recruited volunteers;
- 4. It involves community participation;
- 5. It focuses on some pre-determined priorities such as Oral Rehydration Therapy (ORT), Family Planning and activities of TRAS.

- 6. It enjoys State Government Support;
- 7. It involves the use of Local/State Government health personnel in supervisory roles over informal traditional health care providers and volunteers.

Theoretically a number of issues and problems are posed by a project of this nature. Some of the issues that need to be addressed include:

- balancing between cost and quality in a low-cost programme;
- 2. filling the gap between knowledge and skills acquired by volunteers during training and their actual performance in the field;
- 3. reconciling project priorities and community needs;
- 4. ensuring that the training curriculum meets the needs and characteristics of the trainees;
- sharing of time between routine daily cares
 and occupations of volunteers and the CBD duties
 assigned to them;
- resolving conflicts between daily routine activities of volunteers and project demands;

- identifying the most appropriate areas of corpetence of volunteers;
- 8. determining the socio-cultural relevance of CBD services and the level of acceptance.

From these issues, a number of hypothetical assumptions can be made and tested. For example, it can be hypothesized that:

- 1. the characteristics of the volunteers (education, age, sex, etc) who are being trained will have implications for the type and quality of services they will be able to provide in their respective communities; and
- community members will depend to a large degree on the extent to which CBD project priorities are in line with community health priorities and methods are consistent or compatible with their socio-cultural norms and values.

Therefore the study was set out to assess the effectiveness of the CBD programme in a number of dimensions in three stages as listed below.

Stage 1

Assessing the training of the CBD volunteers in order to find

- out: (1) the adequacy of the curriculum contents in relation to training objectives;
 - (2) the appropriateness of the training methods, and
 - (3) the knowledge/skills acquired during training.

Stage 2

Assessing the effectiveness of the training that is, to find out:

- (1) whether the CBD volunteers are performing according to the expectations of the coordinators of the programme;
- (2) what could hinder effective performance of their educational tasks, and
- (3) the impact of educational activities in the community being served.

Stage 3

To assess the part played by the Government, the community and the Agency in the management of CBD Project.

Table 1

Number of Trained CED Workers Per Population in Each Health Zone

Health Zone	Population	Trained CBD Workers
Akinyele	85,900	158
Oyo	25,500	101
Oshun	28,296	100
Ife/Ijesha	99,000	104
Total	238,696	463

Statement of the Problem

In developing countries, there is lack of awareness of the tremendous benefits derived from evaluation/assessment and particularly assessment of training and its application. In the health sector in particular, because of a number of factors, assessment/evaluation has not been a regular feature of important programmes. These factors include poor record keeping; poor patient compliance; inadequate trained staff; material and facilities that and facilitate assessment. Also many a time clients are suspicious of the purpose for which information are being collected with the result that either the answers are false or incomplete. The fear of using such information for taxation purposes is also common. This tends to make it difficult to know what impact the programme is making in in the community. Whether the programme is useful to justify its continuation or there is a need to modify it or even cancel it usually remains unknown.

The afore-mentioned factors could be overcome by a careful planning and determination to make the best of the prevailing circumstances.

Justification of the Study

All programmes in health sector need one form of evaluation or another because such evaluation will give the authorities an idea of their loof success. Without evaluation/assessment, the continuation of a programme cannot be justified since these programmes consume money, and/or affect the health of the people. The study is therefore justified. The stud will help to answer such questions as "Is the programme cost effective. Is the level of training adequate to perform the desired functions? Is there any need to modify the training method and/or the content of the training? Has the programme influenced the community? It is only through a car ful assessment that these questions can be answered. The answers to these questions and many more, are so crucial to the decision to continue, modify or cancel the programme. Hence, the study is justified.

In addition, the study is imperative as a fulfilment of the requirement of the modified sub-contact 1982 of the UBD project between the TOH and funding agencies. It was spelt out in the contract that there should be a number of special studies focusing on the qualitative characteristics of the programme that could enswer questions like:

"What are the field workers doing: How well are they performing their roles? What problems do they have? etc. The feedback from such studies, (this study being one of them) will result in corrective actions in programme services. To this and, the Fertility Research Unit of the Department of Obstetric and Gynaecology, UCH, Ibadan requested two Health Education Specialists and a post-graduate student, the writer, from African Regional Health Education Centre, Department of Preventive and Social Medicine to assess the educational effort of the project. The Purpose of the Study

The purpose of this study is:

- (1) To assess the training activities of the CBD workers.
- (2) To assess the efficacy of the workers in relation to the skills acquired and their impact on their client community.

The Scope of the Study

The study will critically examine and assess the curriculum and the training of the CBD volunteers with regard to five areas of services: malaria treatment, diarrhoea/ORT, Family Planning, Pregnancy and Delivery. The study will also assess the CBD workers in relation to:

- (a) Knowledge of educational tasks;
- (b) Performance of educational tasks, and
- (c) Effectiveness of educational tasks.

In addiction, the study will assess the part played by the management, supervisory staff and the community leaders in the implementation of the CBD programme.

CHAPTER TWO

LITERATURE REVIEW

The literature review covers three areas:

- (a) Evaluation
- (b) Training
- (c) Evclution of the Concept of Primary Health Care (PHC) Delivery

A. Evaluation

Evaluation and information feedback should be an integral part of any programme be it health or otherwise. Unfortunately, evaluation is an exercise that is rarely carried out in the developing countries. Is non existence (Kleczkwoski and Nilsson, 1984). This neglect means that little, if any, time or resources are set aside to find out how facilities, staff or personnel, etc. are actually functioning. The lack of suitable staff, financial and material resources may reduce or prevent evaluation of any programme. This means that mistakes that might have been revealed during evaluation process remains undiscovered, resulting in added expense or wasted resources.

Although it might be impossible to determine the cost of a particular evaluation process, but it might be possible that savings resulting from the recommendations of the

evaluation teams might out-weigh the training operational costs of the teams.

The benefit derived from evaluation studies cannot be over emphasized. For example, the result of one evaluation study could affect the legislation and policies at all levels of government administration (Kleczkwoski and Milsson, 1984). Therefore evaluation is not an end in itself but a tool whose purpose is to measure the success or other wise of a programme and thereby enable the administrator to do a better job.

According to American Medical Association 1961:

Evaluation is merely a stepping stone to improvement starting point for continued or redirected effort.

However, Daniel Stufflebeam, (1973) in relation to evaluation advocated a system analytic view of evaluating a programatic activity at four stages:

- 1. The Context Stage which is supposed to answer the question whether there is a need for the training programme;
- 2. The Input Stage which is to answer the question
 as to the fecsibility of the training programme
 in terms of availability of adequate resources
 for planning, design, implementation and
 evaluation;

- 3. Process Stage which involves a day to day monitoring and analysis of the training activities in order to determine whether the training programme proceeded as planned.
- 4. Product Stage which analysis the impact of the training on the trainees (intermediate outcome) as well as the community client system (final outcome). In other words, the product stage is interested in finding out the result of the training programme or its achievements.

Green et al (1980) on the other hand see and define evaluation as the comparison of an object of interest against a standard of acceptability. For example, the object of interest in health education, according to Green et al (1980) include the long range goals of improved quality of life or health and social benefit; the activities, methods, materials and programme of health education. They advocated three levels for evaluating a health education programme. These levels are:

Process Level: At this level, the standards of acceptability are defined, both professionally and administratively and are derived chiefly by means of concensus among the health education specialists.

- 2. <u>Impact Evaluation</u>: This refers to the evaluation of the immediate effect of the health programme on knowledge, attitude and behaviour of the client.
- 3. Outcome Evaluation: This deals with the assessment of health practices or behaviours that have been hypothesized to show up over the long term.

B. Training Process

History of Training

Training is an age long process. According to Steinmetz (1976), as man invented tools, weapons, clothing, shelter and language, the need for training became an important ingredient in the match of civilization. The early man, Steinmetz ascerted, was able to pass to others the knowledge and skills gained in mastering circumstances. The ability to pass on this knowledge and skill was done either by deliberate example, by signs and by words. Through these devices, the development process called training was administered and when the message was received by another successfully, we say that learning took place and knowledge or skill was transferred.

Training process has improved over decades from the ancient method of deliberate examples to formalized system of training.

Trainings that existed and probably still exist include: craft training, factory schools, industrial training association, the

job instruction training, management training, etc.

Training is not carried out in vaccum. It functions in an environment of policies, procedures, standards and institutional objectives and has intimate relationship to other strategies of management. (A Handbook of Health Care Institution, 1970). For example, establishing performances standards is a prerequisite to any successive training effort.

Laying emphasis on how skill and knowledge are transferred in order to prepare the trainee to master a set of job function; five essential processess were identified by Bloom (1956).

- 1. Knowledge: This is the simplest class of learning which requires that the trainee should acquire and recall information, ideas, facts and terminology.

 The primary behaviour required involve memorising and being able to recall information.
- 2. Comprehension: is the grasping of meaning by relating the new information to prior knowledge or experience.

 This requires the trainee to re-phrase information in his own words, to provide examples or analogy to interprete the meaning of information.
- 3. Analysis and Synthesis are processes of organising or re-organising materials to achieve a particular purpose: Such as simplifying a problem into meaningful

points for clarity and examine relationship between them, or putting points together to form a meaningful whele. These processes require reasoning, discrimination, concept formation, problem solving and creative thinking.

- Application which implies the possession of knowledge and skill and consists of the ability to apply them to new situation or to the solution of a problem.

 This requires some analysis of the new problem, sufficient comprehension to identify the knowledge and skill appropriate to solve the problem and also ability to implement them in a practical way.
- 5. Evaluation: This process refers to appraising the extent to which a good or desired outcome is being achieved. It could also refer to judging whether the method used is the best one available.

It is at the completion of these processes, Bloom (1956) concluded, that assessment functions of the system can take over to evaluate the effectiveness of the training in the context of the needs of the larger health system.

Havelock and Havelock 1973 describe a training programme as a system with goals, a division of labour (trainer-trainee), a temporal sequence and a definable set of training activities or experiences, etc. They identified at least nine indicators of a good training design which are described below:

1. Structure:

This indicator include exhaultation with sponsoring communities, setting criteria for selection of trainee, timing, training the trainers and training design. Others are definition of objectives in behavioural terms and sequencing training activities to logically lead to the accomplishment of training objectives.

- 2. Relevance: This could be measured in terms of:
 - (a) relevance of training objectives to felt needs of the trainee.
 - (b) relevance of training to the social needs of the communities represented by the trainees.

- 3. Specificity and Generality: Specificity refers to the extent to which different elements of the training which have similar behavioural or operational specifics were identified and discussed together so as avoid misunderstanding. But generality refers to the opportunities afforded the learners to think through as to how a newly acquired skill or experience can be adopted for use in different localities and under different situations.
- 4. Reinforcement: This refers to the extent to which
 the trainer was able to present the new knowledge
 and skills as beneficial to the trainees.
- 5. In-Process Evaluation: This is the extent to which
 the structuring of training activities allow
 evaluation of programme elements while the
 training is still going on.
- 6. Synergy: Refers to the extent to which different inputs or stimuli from different sources converge on one point of discussion during training.

The sources may be different individuals, different media sources such as films, newsprint, folklores demonstrations or actual life experiences when appropriate and feasible.

- 7. Presentation: This refers to how the subject being taught is presented to the trainees to aid assimillation whether the environment where the training is done is appropriate and necessary facilities are adequate.
- 8. <u>Linkage and Involvement</u>: This is the extent to which opportunities were provided for inter-personal contact both outside and within the training period.
- 9. <u>Incentives</u>: This refers to a type of stimulus given to boost the trainees' ego.

While Havelock and Havelock 1973 provided indicators to look for corder to determine whether a training design is good or bad, Bloom (1956) provided a framework of how skills and knowledge are transferred in order to prepare a trainee to master a set of job function.

In order to evaluate a training programme, a combination of Bloom's compensation of Havelock and Havelock will complement each other.

The goal of training is to increase educational knowledge and skills as well as influence attitudes about educational process (W.H.O. Technical Report Series, 1973).

Evolution of the Concept of Primary Health Care (PHC) Delivery

About 80% of the developing world live in the rural areas and it is alarming to find that 75% of these rural dwellers have little

or no contact with health technology that relieve their health burden (Newell, 1975). Health has become an expensive luxury to them!

A number of reasons could be attributed to the neglect of the rural dwellers as far as health service coverage is concerned:

- (1) Health resources tend to be concentrated in the urban areas which accommodates only 20% of the total population (Bannernman, 1983). These facilities are even so expensive that only the elite and wealthy people in the cities can afford the specialized services. Furthermore, whereas, the urban masses are easily noticed by health planners, the rural population continue to remain in the shadow because of distance. Thus the planning process continues to be centred in the urban sector with its ease of access to labour, capital, commerce, power supply, and industry not to talk of political pressure. These health facilities absorb a major part of the total health budget.
- (2) The so called orthodox and conventional health care services devised for the third world population remain culturally unacceptable and economically unobtainable.
- (3) The number of professionally trained medical personnel are so few that they could not provide total health coverage to the populace, for example the ratio of physician per person is 1:22,000 (Ojamuga, 1980).

Put this is a ratio falling short of WHO stated goal for developing countries - 1:10,000 (Ojanuga, 1980).

The shor'age of medical doctors is further aggravated by the poor geographical distribution of the physicians.

Most of them flock to urban areas and prefer to practice there.

Having recognised this disparity in health service coverage and with less than 15 years to reach the goal of Health For All by the Year 2000 (WHO/UNICAF Alma Ata Declaration, 1978), positive efforts and measures have been taken to ensure total population coverage of health services. A number of positive measures to ensure total population coverage include the use of Bar foot doctors in China, Village Medical Helpers in Tanzania and the system of Community Based Distribution of Family Planning with on without Maternal and Child Health Services (Newell, 1975). At the Alma Ata Conference, it was stated that Primary Health Care (PHC) is the key to attaining the target of Health For All (HFA) by the year 2000 A.D. Primary Health Care (PHC) is essential health care made universally accessible and affordable to the people or family through community participation. (Alma Ata Declaration, 1978).

In practice, however, the application of PHC differ from country to country. In developed country, the approach may be to promote an alternative to the present high cost system of care through programmes such as self-care and in developing

countries, the approach will be concerned with the development of alternative to the inadequate or none existent of conventional health services at "he front line level (WHO 1977).

Newell (1975) identified three alternative approaches in which PHC has been successfully implemented in developing countries:

- (a) National Change (China, Cuba, Tanzania). In this case, the starting point was a national political decision to change the overall health care delivery system as part of the medium and long term national goal.
- (b) Extension of the existing system (Iran, Niger, Venezuela) accepting that there were a large group of underserved people and that a national effort was required to provide them with health services. Rey persons in each country considered some of the alternative methods used in other accurries and then evolved a national, individual solution.
- (c) Local community development approach (Guatemala, India, Indonesia). In this group, there was not only difference in scale but also a difference in objective, Each leader entered his community with

the intention of providing a direct health service.

No decision were made at the political or administrative level to change either goal or the social order of the society.

Inspite of the differences, weaknesses and strengths, Newell (1975) pointed out that all have shown some degree of success with an indication that health development as part of rural development is possible if one goes about it an acceptable manner. However, Newell concludes that it cannot be an exaggeration to say that countries that started the process of national change by a political process have a clear advantage in speed and coherence.

In relation to policy and planning, the translation of PHC concept into action depends on establishment of government policies, preparation of national plan and the setting of targets and priorities including the establishment of levels of service.

The concept of PHC, aiming at the improvement of the state of health and the quality of life, calls for the formation of a comprehensive policy which considers health in

in all its dimensions, "philosophical, cultural, sociocoonomic, nutritional, environmental, educational, preventive
and curative" (report of a study group, India, 1981). Such
policy should encourage the participation of all relevant
government ministries, including health ministries. It
also implies that such a policy should respond to the needs of
people.

The full implementation of this policy into action and the realization of the goal "Health for All by the Year 2006" would call for the preparation of time-limited programmes, the creation of the needed administrative personnel and provision of the needed funds on the basis of priority (Study Group, India, 1981). From the point of view of planning, objectives have to be set in a measurable and defined terms, the needs of the population determined and the tasks of the members of the health team defined (Bryant, 1969).

In general, policies and plans should ensure that provision is made for health and other agencies to be staffed at various levels so that they are supportive to community-based activities. It should not be imposed on the communities but provide for their improvement in the planning and implementation of activities (King, 1966).

Included in the concept of Primary Health Care (PHC) is the community involvement and participation in health care delivery. Mahler (1981) defines community involvement as a process in which health and social awareness go hand in hand and each reinforcing one another. He further states that such involvement requires communities to assume greater responsibilities defining their needs, identifying solution, mobilizing local resources and defining necessary local organisation. This involvement and participation was stressed at the World Assembly so as to provide the needed base for PHC.

Newell (1975) agreed with other researchers that a large number of illnesses such as malaria, gastro-enteritis (and distribution of contraceptives, etc.) can either be prevented or remedied by simple measures that can be provided by the community health workers if given proper guidance and training.

Moreover, there is a need for community participation in the recruitment, training of community health workers, and for the establishment and maintenance of an effective health care service at the peripheral level (Levin, 1981).

The system of community-Based Distribution (CBD) of health services was reported in Brazil as early as 1973 (Gorosh et al, 1979). The CBD programme in Brazil was developed by BEMFAM project to extend Family Planning (oral contraceptives) to Brazil rural

areas. Brazil has an estimated population of over 100 million (Encyclopedia Britannica 1978).

CBD is a system which utilizes indigenous non medical but locally trained personnel to render health care. CBD programmes have been implemented in more than 30 developing countries (Bertrand et al, 1984). CBD of Family Planning has been the commonest health service delivered in most countries. Only a few of the countries have included maternal and child health services to their programme (Population Report Series, 1978).

Countries with well established CBD programme include
Thailand, Colombia, Sri Lanka, India, the Philippines, Brazil and
Egypt (Kleinman, 1980).

In some countries like Zaire (Bertrant et al, 1984), CBD programme of Family Planning was integrated with other health services. In the rural areas of the Republic of Zaire (with an estimated population of 36 million Encyclopedia Fritannica, 1978), the programme was combined with the delivery of drugs to combact malaria, intestinal parasites and dehydration from diarrhoea. It was discovered in Zaire that the integration of the programme with child health services and the promotion of contraceptives as a method of child spacing were believed to be prerequisites to the acceptance of family planning in a society where infant mortality is high and pronatalist attitudes prevail (Bertrand et al 1984).

Kleinman (1980) asserted that the usefulness of CBD is not limited by lack of professional skill or lack of physical facilities. In other words, though the CBD agents are not trained professionally nor are there physical facilities like modern hospitals from where they can operate, they bring health care to the door steps of the rural people. Moreover, CBD programme is cost effective, easy to replicate and in some cases moves towards partial or substantial financial self-sufficiency.

Other countries have employed the services of locally trained indigenous people for PHC. In Tanzania with a current estimated population of 21 million (Encyclopaedia Britannica, 1978) "Village Medical Helpers," gave broad range of preventive and curative services including nutrition and health education. These people were given 3-6 months of training in basi preventive and curative health care. Mobile clinics were supported by rural health centre (Gish, 1975).

In isolated villages of Afghanistan with estimated population of 23 million (Encyclopaedia Britannica, 1978) "Friend of Health" provide health services. The worker is not salaried but lives by selling the pre-packaged drugs for small profit. The effectiveness of this approach can be questionned but is shown here only to indicate the existence of such possibilities for promoting community participation within PHC (Miazad, 1978).

A community centre built by the people in Senegal (a relatively small population estimated at 4 million, Encyclopaedia Britannica, 1978) "Matrine Rural" was run on a cooperative basis to provide pre and post natal care services to 36 villages within a radious of six kilometres (Ling, 1978). The health centre is staffed by 25 traditional birth attendants called "Matroness."

In China with an estimated population of one billion (Encyclopaedia Britannica, 1978) a large part of PHC is given by the "Barefoot doctors" (Harrison, 1980). Here modern and traditional medicine co-exist in the medical school at national, regional and social levels.

With the above examples, it is obvious that requirements for sound PHC can be fulfilled by different approaches depending on variables such as population densities. - small or rege population and resources such as human and material. However, according to Stephens (1981), PHC programmes should be characterized by availability, accessibility, acceptability and continuity with adequate facility. His studies in Sweden, U.S.A., U.K. and U.S.S.R. also show that the use of auxiliaries could be successful without any fall in standard.

Because the CBD training is performance-oriented, the trainees were supposed to apply or practice their skills among the community members under conditions as similar as possible

to the predetermined job situation. The practice on the field enables the trainees (CBD workers) to relate conceptual knowledge to real practical problem to help develop work skills and to test their own competence and gain self confidence.

According to W.H.O. Technical Report 1973, the impact that training has made on programme effectiveness has rarely been evaluated. This is partly because it is extremely difficult to measure performance effects that can be attributed solely to training apart from other variables. Moreover, the report continue, it is also because of a tendency to assess training (learning) merely during and at the end of training without pursuing evaluation beyond that.

This study fulfils the conditions laid down by Daniel Stufflebeams concepts of evaluating a programatic activity at four stages. Although the answers relating to the context and input stages had been provided by the coordinators of the CBD trainers, the impact and outcome evaluations are the foci on which the assessment of the CBD programme is based.

The process stage could be applied to the assessment of the training sessions where there was participant observation by the researcher as to the adequacy of the curriculum contents, appropriateness of training methods and evaluation of knowledge/skills acquired during training.

The intermediate outcome of the product stage would be related to the post training activities of the CBD workers and their impact on the client community. However, since the existence of CBD programme is of short duration (18 months) the assessment of the final outcome of the product stage would not be relevant for the present study.

Green et al, 1980 seem to be concerned with a defined or pre-set standard of acceptability on which the result of an evaluation will be based and compared. But unfortunately, because the CBD programme is innovative, there are no pre-set standard on which the result will be compared. Howbeit, both Green et al 1980 and Stufflebeam et al 1973 are concerned on the impact of the programme on the consumer.

However, Daniel Stufflebean's concepts of evaluation was employed in this study.

The CBD programme of Oyo State, Nigeria could be said to fulfil Stephens' concept of PHC that is characterized by availability,
accessibility and acceptability. The health services of the CBD
programme are easily available, accessible and acceptable to the
community members by the fact that the services are being rendered
by CBD volunteers who reside within the community and whose nomination involved the community members themselves.

Although the CBD volunteers in the straight sense may not serve as auxiliaries because of the level of their education and training but in the same way, the proponent of CBD programme envisage that these people could render a number of health services which traditionally belong to the professionals without any fall in standard.

CHAPTER THREE

THE STUDY

The study which is mostly descriptive in nature, is concerned with the assessment of the educational efforts of the Oyo State CBD programme established to augement the inadequacy of the existing health services in the rural areas.

3.1. The Objectives of the Study

For the purpose of this study, the following objectives were formulated:

- 3.1.1. To assess the training of the OBD workers with respect to the adequacy of the curriculum content, the appropriateness of the methods used, the know-ledge and skills they acquired during the training.
- 3.1.2. To assess the performances of the trainees that is, assess how the trainees applied the knowledge and skills acquired during the training on their client community.
- 3.1.3. To assess the impact of the trainees that is, their effectiveness on the communities that have benefitted from the services of the CED pregramme.
- 3.1.4. To/assess the part played by the officials that is, the agency/community leaders/government in the management of the CBD pregramme.

3.2. Theoretical and Conceptual Framework

The assessment of a training programme done as an outsider is, in the opinion of experts be-set with a number of problems. Experts believe that the task of evaluation is made difficult if

evaluators were not originally involved in the definition of programme goals and objectives. The evaluator is also at a greater disadvantage if the programme is innovative, in that there may not be a basis or acceptable standard to be used for comparison. In the absence of well developed programme to be used as a standard of acceptability, the evaluator will have to contend with using theoretically derived standards in carrying out his evaluation.

Unfortunately, the CBD programme is being evaluated by _n outsider and the above mentioned problems can be expected.

Daniel Stufflebeam and in his associates (1973) advocated a system analytic view of evaluating a programmatic activity at four stages as described in the literature review.

According to the reports of previous research s (Wray J. 1985, and Ladipo, 0.A., 1985) the answers to the context and input stages had been satisfactorily provided by the coordinators of the training programme prior to its commencement. Joe Wray, 1985 in his study confirmed that the existing health services were accessible to only a small proportion of people in need, therefore a better way of getting services out to the people was needed - through the services of the CBD volunteers established in Oyo State, Nigeria and 120 other countries. The Pathfinder Fund of Boston and Centre for Population and Family Health in Columbia University have provided financial assistance in making the training of the CBD volunteers a

reality. Therefore, the evaluation of these two stages were considered cutside the scope of this study. In other words, the rationale, objectives and the design of the training were taken as "given."

The logical question which one should ask in a situation like this is - "is this a good training design?" The first condition to be met in answering the questions is to determine what constitutes "a good training design" or what are the indicators of a good training design. Once again, theoretical standards were resorted to by choosing indicators of a good training design from those indicators enumerated by Havelock and Havelock, 1973.

3.3. Selection of Study Areas

Ifewara and Tonkere villages in Ijesha and Oshun Local
Government Health Zones of Oyo State were selected for stage
one of the study, that is, assessment of the training of CBD
workers, because these were the training sites that fell within
the study period.

For stage 2, six centres, that is, Ilera, Awe, Akinmorin, Fiditi, Federal and State Farm Settlements in Oyo Lecal Government Health Zones were used for the assessment of the educational activities of the CBD workers and their impact on the client community. Progress of the project in this health zone was necessary because it is an expanded area of the project.

Moreover, it is the only zone, apart from Akinyele, the pilot project area, that had completed the three phases of the training of CBD workers and had commenced health services.

Oyo Zone, the stage two study area and Ibadan, the headquarter of the CFD programme, were used for stage three which involved the interview of Senior Project/Ministry of Highth responsible staff, supervisors and community leaders involved in selecting the CBD volunteers.

3.L. Study Period

The study was undertaken between May 1984 - August,

May - July, 1984:

- Review of training curriculum and manuals.
- Assessment of the training of CBD volunteers et Sun and Tjesha Health Zones.
- Interim Report.
- Design of questionnaires.

August 1984 - March 1985:

- Assessment of the educational activities of the CED workers and their impact on the client community.
- Interim Report.

April - May, 1985:

- Interview of Senior Project/Ministry of Health
 responsible staff, sample of supervisors and community leaders involved in selecting the CBD volunteers.
- Interim Report.

June - August, 1985:

- Analysis of data
- Preliminary report.

3.5. Study Design

The CED programme recognised the important role of health education strategy in gaining community acceptance as well as ensuring active participation and involvement on consumers in the delivery of its health services. Therefore, a number of educational tasks were identified for the CED workers alongside the medical (curative and preventive) tasks in respect of each of the five types of services (diarrhoea management, malaria treatment, treatment of minor ailments, family planning, antenatal and deliveries) covered in the CED programme. Following a review of the training curriculum (Appendix A), the educational activities to be performed by the CED workers under each type of service was extracted from the curriculum and are described in (Appendix B).

According to the programme plan, the CBD trainees were expected to:

- (i) Receive training in the performance of their educational tasks,
- (ii) Acquire proper and adequate knowledge and skills during the training; and
- (iii) Apply the acquired knowledge and skills in their respective village communities covered by the CBD programme (Diagram 1).

These three objectives of the training programme provided three main stages for assessing the effectiveness of educational efforts of the CBD workers. These were:

Stage 1

An assessment of the educational component of the CBD training programme with particular reference to:

- (i) the adequacy and relevance of educational content or specific educational tasks to the needs of the CBD trainees.
- (ii) the adequacy of the preparation of the trainers to effectively transfer needed knowledge and skills to the CBD trainees for an effective performance of their educational task.

Stage 2

An assessment of how appropriate and efficiently the CBD workers have utilized the knowledge and skills acquired during their training and how these were being reflected in the types of educational activities which they carried out in their respective communities. And also assessing the behavioural outcome of educational activities of the trainees from the level of impact on the client community (Diagram 1). These involved:

- (i) describing how the trainees perceived or defined their educational tasks and reles;
- (ii) identifying the points of educational contact between CED workers and their client communities that is, What, When, How, and to Whom health education was given;
- CBD workers (TBAs versus VHWs status, age, sex, literacy, relative community status) and their relationship to the educational effectiveness.
- (iv) finding out if previously treated or served clients have learned anything new related to the management of health problems covered under each of the five services provided by the CBD workers;

(v) finding the extent to which newly a quired health knowledge and practices of clients have resulted from the educational efforts of the CBD workers or from other sources.

Stage 3

This part of the study was to find the part played by the management, supervisory staff and community leaders (involved in selecting the volunteer workers) on selected organizational and implementation aspects of CED project.

3.6. Methodology

Stage 1: The CBD training programme was carried out in three phases. Phase 1 is a basic training in simple anatomy and physiology with emphasis on the female reproductive system, personal hygiene, care of the haby and treatment of common diseases and minor ailments.

After the training, participants were given a kit containing drugs including syrups; tablets such as anti-malarials, anti-histamines; dressing; contraceptives; (oral pills, condoms, foam tablets and delivery equipment given only to TBAs). In phases II and III - trainees received instructions on family planning, immunization, registration of vital data, control of endemic communicable diseases (especially those that are associated with poor standard of personal hygiene

and environmental sanitation), first aid, prevention of home accidents, record keeping and the use of referrals. Phase I lasted three weeks while phases II and III combined lasted one week. Evaluation of phases II and III was done in Tonkere - a village located 90 km. South east of Ibadan between 4th and 8th. of June, 1984 while that of phase I was carried out in Ifewara (another village located about 130 km. South- east of Ibadan) but with another group from June 18th to July 6th, 1984. Twenty (20) trainees (10 TBAs and 10 VHWs) and two trainers participated in the Tonkere phases II and III training, twenty six trainees (17 TBAs and 9 VHWs) and three trainers participated in the Ifewara phase I training. All the trainers had received training prior to their participation in the training of CBD workers.

impact on their client community was carried out in Oyo Zone one of the expanded areas of the CBD programme.

Oyo Zone consists of six centres: Awe, Akınmorin,

Ilora, Fiditi, State and Federal Farm Settlements.

The CBD supervisors based in Ilora were invited to help the investigator locate the randomly selected CBD workers for interview in their scattered hamlets and

villages belonging to the catchment areas of the six centres. Selection of the CED workers was designed to ascertain knowledge of educational tasks, educational performance, effectiveness of educational tasks; "strengths" and "weaknesses" of TALs and VHWs in performing their educational tasks.

To assess the impact of the workers' educational activities, some community members who benefitted from the services of the CBD volunteers were also selected for interview.

- Stage 3: The methodology used here involves collecting information in relation to:
 - (a) Selection of CBD workers and supervisors.
 - (b) Organizational aspects of the project.
 - (c) Perceived strengths and weaknesses of the project.
 - (d) Suggestions for improvement.

the programme were to be interviewed to collect informations on the above mentioned aspects of the project.

Diagram 1

Assessing the Transferability of Knowledge and Skills

Evaluation Techniques	Levels	Interface		Flow of Communication
1. Training the trainers	Imparting	Trainers	TBAs VHWs	TBA TBA VHW
2. Curriculum	Acquiring	TBA VHW	Trainers	TBA————————————Trainer
3. Training Process	Applying	TBA	Community	TBA Community
. Outcome	Using	Community	Health Worker VHW and TBA	Community Health Worker VHWs and TBAs

3.7. Data Collection Methods

Three investigators: two lecturers in Health Education and the researcher carried out the evaluation exercise. The reliability of the data was enhanced through inter-observer discussion. There are three stages to the study. Therefore methods of data collection are divided into three stages as well.

Stage 1: Methods of data collection used were participant observation during which the process of training and the ongoing activities were recorded in writing and on tapes.

The tapes were later played back to improve reliability of the written records. The data were collected during three "selected" phases of the CBD training programme in the expanded areas - Ifewara for phase I and Tonker for phases II and III. These were training programmes which fell within the period of study. These two villages are within Oshun and Ijesha Health Zones.

workers and the impact on their client community, interviews were carried out in a sample of villages in Oyo Zone.

The respondent were CRP workers (TBAs and VHWs) in these villages and a sample of community members who have benefitted from the CBD activities. Four CBD workers (2 TBAs; and 2; VHWs) were randomly selected from the list

of CBD workers in each of the six centres, resulting in 24 CBD workers. Two clients of each of the CBD workers were also interviewed thus resulting in 24 community members interviewed

- A structured open-ended interview schedule was used based on the content of the educational components of the CDD training curriculum and a review done on observations and impressions contained in periodic reports previously submitted by project members (Ladipo et al, 1982; Weiss, 1984; Reyes and Jinadu, 1984; Randels and Adekola, 1983).
- Two of the Nursing Sisters (CBD supervisors based in Ilora)
 helped the investigator to locate the CBD workers in their
 scattered hamlets and villages belonging to the catchment
 area of six centres.
- Stage 3: Eight officials representing management, supervisory staff and community leaders (involved in selecting the volunteer workers) were interviewed using a structured openended interview schedule to collect informations on:
 - (a) Selection of CBD agents and supervisors.
 - (b) Organizational aspects of the project.
 - (c) Perceived strengths and weaknesses of the project.
 - (d) Sugestions for improvement.

The eight people interviewed include:

- The Director and Assistant Director of the project in University College Hospital (U.C.H.), Ibadan, the head-quarter of CBD programme.
- Four field supervisors: Two of them were from the Fertility Research Unit, U.C.H., Ibadan because they participated in the training of the Oyo Zone CBD workers and because they are field supervisors attached to that Zone. The other two supervisors were from Oyo Zone, the study area. They too are in charge of the trainees in this Zone.
- The Coordinator of CBD programme from Oyo State Ministry of Health, Ibadan.
- Some community leaders involved in the selection of CBD volunteers.

3.8. Method of Analysis

The data set is both qualitative and quantitative. The quantitative aspect is discreet in nature therefore, Arithmetic counts and percentages were used to express the proportions.

The qualitative data were described in detailed,

3.9. Limitation of the Study

- 1. Due to the fact that the assessment of the training sessions was conducted during the lecture hours of the investigator, it was impossible to attend all the training sessions: Phase I of the training conducted in Ifewara took fifteen working/lecture days (consecutively). While Phases II and III conducted in Ponkere village took five working/lecture days.
- 2. Cccasional lateness of the investigator to the training site was unavoidable for a number of reasons:
 - (a) Public transports to the training site were irregular and hard to come by
 - (b) The roads to these villages are rough and almost impassable which made the journey longer "han necessary.
 - (c) The CBD vehicle responsible to transport the investigator and the trainers from Ibadan had to undergo bureaucratic system of release from the vehicle depot of the Ministry of Health.
 - (d) There are no public accommodations like hotels, motels, etc. near the training site that the

investigator could reside in for easy and early access to the training sites.

- 3. Due to time constraints, the investigator had to start with any on-going training programme(s) during the period of the assessment and it was therefore not possible to follow the three phases through with the same group of trainees which could have been ideal.
- 4. All the trainers had received training prior to their participation in the training of CBD workers. But the investigator was unable to watch any of the training of the trainer sessions because they had been completed before the study started. It was therefore not possible to assess the efficacy of the training curriculum.
- 5. It was observed that the educational component of the curriculum was fully integrated into the whole body of training, i.e. there were no separate health education sessions. Therefore, the investigator had to evaluate the training programme as a whole by focusing on the process of the transfer of information

from the trainer to the trainee. In addition, the researcher had to assess whether the methods used would lead to the creation of the new set of desired behaviours in the CBD workers. Thus, hoping that the acquired knowledge and skills could be effectively transferred to the client communities.

CHAPTER FOUR

FINDINGS

In this chapter, the findings obtained from the three stages of the study are presented separately as follows:

Stage 1: Assessment of the training of the CBD Workers

As mentioned earlier, theoretical standards were used for this assessment because the CBD programme is an innevative programme. A number of indicators were selected as elements of a good training design (Havelock and Havelock, 1973). These indicators A-I as discussed under literature review provide a frame of analysis for the findings and are as follows:

(a) Structure - It was discovered from project reports, Delano,
G.E., 1985; Abiona et al 1985; Ladipo, O.A., 1985; Weiss, E.
1985; that client communities were adequately consulted prior
to the commencement of any of the training programmes and they
were also involved in the selection of trainees. The trainees
were found to be adults who occupied a relatively higher social
status in their various communities.

It was observed that many of the TBA trainees had not been practising as TBAs prior to the training. Sessions were conducted in the morning hours and refreshments and lun•h were always provided. It appeared that because of the difficult communication links between the villages, there could not have been a better time for the training although it was considered that the evenings would not have clashed as much with the daily routine duties and cores of participants as the mornings. It was not possible to witness the training of trainers but the trainers exhibited an excellent mastery of their subject matter; they were lively, enthusiastic and committed. The sequence of training activities as planned in the curriculum was logical. For example, "Anatomy and Physiology of of the Reproductive System" preceeded the "care of the pregnant women" and environmental sanitation" was taught before "home delivery of babies."

(b) Relevance - In a training session relevance to the trainee could be assessed by answering the questions, "what was the interest level of the trainees during the presentation of each topic?" Another question could be "What other types of interests and concerns were expressed by the trainees in the cause of training?" At Tonkere where twenty trainees participated (10 VHWs and 10 TBAs) a daily record was kept of those who asked questions (Appendix C).

It was observed that women dominated the questions especially on topics relating to child care and home economics.

For example, on the 5th, 6th and 7th of June, eight out of ten of the TBAs representing 80% asked questions as opposed to four (40%) out of ten of the VHWs who asked questions.

Men did not exhibit special interests on any topic.

They were reserved but always timing their contribution to show a "superior" knowledge. One of the men at Ifewara wanted to know why having received the same training with the women, the men were not allowed to take deliveries. The trainers explained to the VHWs that is is not customary for males to take deliveries except in well established hospitals like University Teaching Hospital (U.C.H.) where male medical doctors take deliveries.

Trainers ensured that the trainees focused on the subject of each lecture and that all questions revolved around the subject. It is difficult to say from these observations whether the training actually addressed the felt and social needs of the client community, but the interest shown by the women suggested that the problems addressed were obviously among those that were considered to be important to them as mothers.

(c) Specificity and Generality - To assess these indicators a further analysis was made of the types of questions asked by participants under each topic. The questions were classified

as seeking clarification, giving additional information or or making new contribution to a subject under discussion.

Majority of the questions were those that were making new contribution to a topic. In doing so, the questioners were observed to have brought in new knowledge and experiences which were known to them or they heard about but not mentioned by the trainer. At this point, it was noted that the training was a little "rushed" and as such, enough time was not allowed to enable the trainees to think through and discuss the practicability or feasibility of their newly acquired skills in the realities of their practical in the communities.

It was noticed that:

- (i) role play highlighted practical issues and problems. These include cultural resistance, religious issues economic considerations and personal safety.
- fi) lecture involved exhibition of traditional methods of family planning but without adequate opportunity for trainees to discuss the need to change from traditional to modern methods and how this could be effectively done.

- (iii) Trainees on their own were not immediately able to perceive the benefits of family planning when asked, urtil they were suggested by the trainers. Some of these advantages like limiting the size of the family conflict with social values. It was observed that there was no adequate opportunity given for the resolution of such conflicts. It was also observed that the use of condom by men was treated by non trainees as a "light" laughing subject and not with the seriousness such a subject deserves. The men and women enjoyed the humour but one figured the seriousness was lost.
- (d) Reinforcement This was given at the beginning of the training exercises at Tonkere and Ifewara. It was observed that trainers led the discussions stating what the individual trainee stood to gain and the advantages to their various communities. Trainees always expressed their expectation during prayers and in specially composed songs.

Trainees on interview were sceptical about how their new status and role would be recognised or legitimized since they were volunteers and their services virtually free.

(e) <u>In-Process Evaluation</u> - Each day's lecture commenced with a review of past day's activities with the trainer giving

the lead. It was noticed that this type of review was invariably usually dominated by a few trainees. This, in addition to questions and answers during each lecture, constituted the only form of evaluation. It was difficult to assess non-participant since participation in theory was voluntary (by show of hands).

(f) Presentation - It was observed that the pace of the lectures was too fast thus allowing a minimal use of audio-visuals.

Some trainees took notes which they could revise at home while others did not. Space was rather small for the group and the writing boards were remotely located. Not much attention was paid to ensuring that important points were accurately and correctly jotted down especially that majority of the trainees could read and write Yoruba, the local language.

Only 10 (41.7%) of the trainees are illiterates, the remaining 14 (58.3%) had undergone at least elementary education (Table 2).

Farming, sewing and petty trading were the commonest occupations among the trainees. Their ages ranged between 25 and 60 years (Table 2a).

TABLE 2

Educational Status by Age

Educational Status	Male	Female	Total
Illiterate	2	8	10
Home lesson	2	0	2
Primary 5 and below	4) 1	5
Primary 6 completed	3	3	6
Above Primary 6 Modern III	0 1	0	1
Total	12	12	24

TABLE 2a

Age and Sex Distribution of Trainees

Age Range	Male	Female	Total
25 - 29	1	2	23
30 - 34	0	3	3
35 ~ 39	3	5	8
40 - 44	3		4
45 - 49	2	M	3
50 - 54	0	0	0
55 - 59		0	1
60 and above	2	0	2
Total	12	12	24

The structure of the training was continuously responsive to the unanticipated needs of the trainees and circumstances. It was noticed that the trainers were very flexible, open and careful in handling most of the catching questions raised by the trainees. Even when questions which "appeared" to be out of place were asked, attempts were made to relate them to the subject matter under discussion. Trainers openly and freely asked about the past experiences of the TBAs who seemed to appreciate the acknowledgement of their past services. Songs and local proverts were effectively used to aid memory. Trainers followed the syllabus but did not keep a record of teaching notes prepared for each topic.

- Linkage and Involvement It was noted that sufficient opportunities for inter-personal contact outside the classroom between groups of trainees were not provided during the training. Though, it was understood that serving CBD workers always discussed their problems together during the monthly evaluation meetings. As already mentioned, it was also observed that the involvement provided during questions and answers was limited to the active ones.
- (h) Synergy All training was done under a classroom setting. There were no opportunities for the application of knowledge and skills on a trial basis in practical settings during

the training. Visual aids were used occasionally.

(i) <u>Incentives</u> - Good food was provided during training. Trainees appeared to enjoy the socialization provided by the training.

But by far, the most important incentive has been the pride of a certificate and of being accorded a honour during the much publicised and elaborate graduation ceremonies.

Attendance at the training sessions were generally very high.

The few defaulting trainees or late comers were those from the more distant villages because of transport difficulties.

Criteria for Graduation

It was detected that participation or regular attendance at the training sessions was the sole criterion for graduation and not the evidence that adequate knowledge and skills have been transferred to every successful trainee with which he is expected to be able to perform the tasks of a CBD worker.

Stage 2: Findings on the Assessment of the Educational Activities of the CBD Workers and their Impact on the Client Community

The findings and analysis presented here pertain only to both categories of CBD workers (TBAs and VHWs) in relation to

- (a) Knowledge of educational tasks,
- (b) Performance of educational tasks, and
- (c) Effectiveness of educational tasks.

(a) Knowledge of Educational Tasks of CBD Workers

1. Diarrhoea/ORT

The educational tasks of CBD workers on diarrhoea/ORT include educating on the causes, prevention and treatment of diarrhoea, how to prepare and when to use ORT (see Appendix B for details.

Of the twenty-four (24) CBD workers interviewed, it was detected that 21 of them (that is, 87.5%) named at least one cause of diarrhoea namely: filth, contaminated water and/or food, spread from known cases, poor personal and environmental hygiene. The other three workers suggested reasons that are not related to the afore mentioned causes. A VHW who suggested that hot food alone causes diarrhoea had not been practising in the villages for over 6 months because of ill-health (said to

be hospitalized for about 6 weeks) and had missed the monthly meetings where refresher courses are given and wrong ideas are corrected. He did not disclose the cause of his ill-health.

All the CBD workers knew that Oral Rehydration Therapy (ORT) should be used at their own level to treat cases of diarrhoea and that it should be introduced as soon as diarrhoea starts. Most of the workers (22 of them) were conversant with the preventive measures required for diarrhoea and also with the signs and symptoms of dehydration. They all thought that ORT is medicinal, that is, it is an anti-diarrhoea, and usually stops the diarrhoea within a short time whenever there is a case of diarrhoea.

Diarrhoea is said not to be rampant as other ailments, such as malaria, howbeit, the oralyte is said to be in short supply. It was gathered that very few cases of infant diarrhoea were brought to them for treatment, even though gastro-enteritis (diarrhoel diseases) is said to be one of the major health hazards of infants in Nigeria like other developing countries (Ademuwagun et al, 1977) but the findings seemed to be contrary to this. However, it could be that diarrhoea is under reported, especially that mild diarrhoea is considered normal for children. For example, uneducated mothers believe that teething is usually associated with

diarrhoea, and might not consider cases of diarrhoea serious enough to seek for medical assistance especially if such children do not show signs of dehydration.

It was detected that majority (91.7%) of the workers were conversant with the preparation of oralyte. The few (8.3%) who were unable to recollect details of how to prepare cralyte were VHWs. This could be attributed to the fact that TBAs tend to specialize in maternal and chill health care but not to the exclusion of other treatments. This situation was also observed by Reyes and Jinadu during a field study of the performance of CBD worker in the pilot and expended areas in March, 1984. One of the VHWs, was able to enumerate the causes of diarrhoea but did not know the correct steps to take in preparing the pre-packed ORT.

2. Malaria

For this aspect of training, the CBD workers were expected to educate the community members on the causes, signs, symptoms, prevention, control and treatment of malaria. They were supposed to educate them on environmental sanitation, the acceptance, use of modern antimalaria drugs and on the management of high temperature and convulsion cases (details in Appendix B).

Of the 24 CBD workers interviewed on the treatment of malaria, everyone of them knew how to diagnose malaria.

Examples of signs and symptoms given included fever, rigors, patient covered up in the room with doors and windows closed, etc.

Nineteer (19) out of 24 (79.2%) said categorically that
the bites of mosquitoes result in malaria. All others did
not relate the cause of malaria to mosquito bite, rather
filth, poor environmental sanitation, excessive exposure to
sunlight were given as the causes of malaria.

Almost everybody interviewed is conversant in employing the standardized antimalaria treatments according to their standing orders (Appendix D). They appeared to be better in the treatment of adults and school children's malaria which involves the use of tablets than that of infants where syrups had to be used. A few of the agents could not remember whether the Nivaduine syrup should be given twice or thrice daily.

on the prevention of mosquito bites in homes only one of the CBD workers included the use of mosquito nets among the methods given to prevent mosquito bite. This particular agent from the farm settlement is the only one whose educational background is above primary six (i.e. Modern III) (Table 2). All the others placed emphasis on the shaking of mosquitoes off the walls of the rooms at night. All of the workers interviewed agreed that modern medicine is more effective in the treatment of malaria than traditional medicine. The difference being that the former works faster; it is "ready made" and does not require time to buy or gather the ingredients required to produce the finished product as is the case with traditional herbs. Moreover, it is prepared hygienically and has specified measurement according to the age-range of the patient. Therefore, possibility of under or overdosage is remote as is the vase with traditional herbs.

Concerning the treatment of high temperatures, majority of them knew at least one method of bringing the temperature down. Examples given included exposure, tepid sponging, giving of anti-pyretic and/or anti-malaria drugs.

Although cases of convulsions had not be brought to any of them for treatment (a condition; they perceived as being very serious) everybody agreed that cases of convulsions should not be managed by the CBD worker at home, rather they should accompany such patient to the nearest health centre where appropriate.

treatment will be given. Although they all agreed that a padded spatula was to be inserted in between the teeth of a convulsing patient, none of the workers interviewed knew why this should be done.

3. Family Planning

The CBD workers are expected, for this aspect of training, to educate families to accept family planning, to make appropriate choice of contraceptive methods and inform them of the advantages of family planning to their family, community, and the nation at large (details in Appendix 1).

of the 24 workers interviewed only about 20% of them agreed that they would advice a pregnant mother to consider family planning after her present pregnancy. The others did not feel it was necessary until after delivery.

Concerning whom to introduce family planning topic to, almost all the workers interviewed said that they would only introduce family planning topic to their counter parts i.e. males versus males and females versus females. About three-quarters of the workers interviewed would rather introduce the topic

by story telling. It was observed that a woman would only talk about family planning if her client, out of curiousity asks about the intentionally displayed family planning device.

It was detected that all the TBAs but one, feel that acceptance of family planning usually comes from the female before the male. The reason being that the women are the ones really involved in "child-rearing," that is, the burden of child-rearing is usually heavier on the women side than on the men. But the lady who said that men usually accept family planning before the women felt so because in some homes, men usually take decision for their wives especially in family affairs. On the other hand, three quarters of the VHWs said that the men usually accepts to subscribe to family planning from them before the women on the ground that they usually introduce the topic to the men first,

would carry out a general examination in order to screen for who should use what type of contraceptive methods. For example, a prospective "pill" user would be examined to exclude contra-indications such as variouse veins, goitre, obesity, women 40 years and over. However, none of them mentioned referring such a prospective "pill" user to the health centre for the measurement of her blood pressure to

exclude hypertension before disbursement of the pill. In addition, none of them knew the reason why the afore mentioned conditions are contra-indicated to "pill" users. But people with such condition will be referred to the health centre for possible I.U.D. An example of stories used by CBD workers to introduce family planning is described below:

"Mr. and Mrs. Z had eight children within a space of ten years. Two of them died of malnutrition. When the rest grew up to school age, they were all in the school system about the same time. But the parents could not contain the cost of feeding nor that of educating the six children. They were only able to send two of them to secondary school but one had to wait for the other to finish. On the long run, none of the children was independent financially and therefore, became liabilities to their parents and covernment. So take cue from this couple."

They all agreed that they would show the prospective family planning acceptor all the available methods before guiding him or her to make an appropriate choice.

The "pill" seemed to be the most popular family planning method in demand. This was confirmed by fifteen of the CBD workers interviewed as majority of their family planning acceptors are "pill" users.

4. Ante-natal Care and Delivery

This aspect of the study is directly related to the TBAs even though all the workers (TBAs and VHWs) had the same training. The VHWs were therefore not interviewed on antenatal care and delivery.

The TBAs should educate the mothers on personal and environmental hygiene, importance of protecting pregnant mothers against malaria and its effect on both the mother and the unborn child. They should educate the mothers on the importance of eating balanced diet and also to send for the CBD workers at the slightest sign of imminent dangers such as dizziness, oedema of legs and or face, "ohaha" (diabetes), etc. (see details in Appendix B).

All the 12 TBAs interviewed knew that the mothers with the following conditions should not be under their care: previous caesarean section, grand multips, mothers with hunch back, tothers with previous post partum haemorrhage, etc.

Such cases, they agreed needed to be referred to the health centre for midwives' management. Their "cases" have to be started on pre-natal capsules and prophylactic anti-malaria drug once diagnosed as pregnant. Their "cases" also had to be registered in a health centre for regular measurement of the women's blood pressures.

Emphasis is placed on eating balanced diet, prevention of malaria, observing personal and environmental sanitation. Concerning balanced diet, 10 of the 12 TBAs (83.3%) knew groups of food under animal protein: like meat, fish, carbohydrate such as yams, eba, pounded yam; fats such as red palm oil; vegetables - okra, ewedu; fruits - mango, oranges, pineapples. In order to reduce cost and ensure adequate intake of those, their clients were usually advised to eat variety of food that are cheap and locally made. To prevent malaria attack which is said to be common, eleven of the TBAs (91.7%) agreed that they would encourage their pregnant clients to use the supplied prophylactic antimalarial - Daraprim tablets.

All the 12 TBAs being mothers and having gone through labour pains before could recognise at least two signs and symptoms of true labour. Eleven of the TBAs knew how to prepare for and take deliveries. All of the 12 TBAs were aware of the langer inherent in child delivery and therefore knew when to seek for medical help at the three stages of labour. They agreed that they would seek for medical assistance in situations like prolonged labour (labour more than 8 hours), abnormal or multiple presentations, haemorrhage at any of the stages of labour, retained or incomplete placenta, etc.

Only five of the twelve TEAs (41.67%) interviewed have actually taken deliveries and they agreed that they would educate their clients on the care of their babies: encouraging breast feeding, regular cleaning of feeding utensils and immunization.

(b) Performance of Educational Tasks of CBD Workers

Are the CBD workers practising what they learnt during the training on the field? What are the impediments to rendering the services as expected? This aspect of the study therefore relates to how the workers are performing on the field in relation to the four areas of study: malaria treatment, diarrhoea/ORT, family planning ante-matal care and delivery.

1. Diarrhoea/ORT

Even though 22 of the CBD workers (91.7%) agreed that filth among others causes diarrhoea, only a half of them was observed to be personally or environmentally clean. Criteria used in checking whether a worker was clean personally or environmentally include: evidence that the surrounding was swept at the time of interview, absence of unwashed dishes or pots, presence of clean clothing on the worker at the time of interview (especially when the worker is not just arriving from his/her farm, and other dusty works). Those who were observed to be personally and environmentally clean were

the TBAs of child bearing age and the VHWs whose educational background was primary six and above. One could explain the reason for the personal and environmental sanitation in two ways. Knowledge of the training aside, the TBAs of the child bearing age probably have fewer children to cater for and would be used to the daily routine of cleaning their younger siblings, their clothing, feeding utensils, etc. and are therefore likely to clean their environment as well. Secondly, in Yoruba culture, women are solely the house keepers/cleaners and so the TBAs are likely to be sensitive to personal or environmental hygiene.

The problem of inability to recollect details of how to prepare ORT was more prevalent among the VHWs than the TBAs. This could also confirm that the TBAs tend to be better in maternal and child health care than the VHWs.

Although diarrhoea is said not to be a problem in the rural areas, among the infants, there has not been regular supply of the Oralyte packet. A VHW in the absence of Oralyte had to prepare salt-sugar solution to treat some diarrhoea cases although he was not sure of the exact measurement.

2. Malaria

The commonest illness besieging the people in the rural areas is said to be malaria infection. But unfortunately, all workers complained that they were never given enough antimalaria drugs to go round their clients. Although they could go for re-supply of drugs in between the monthly supply, the cost of transportation and the extra time spent away from their own means of livelihood tend to discourage them.

A VHW interviewed did not see any danger in the use of herbs or cows-urine on the ground that these were used by "our forefathers." Howbeit, he has not used any of them for any of his clients or children since receiving training as a CBD worker.

Although, 21 of the CBD workers (83.3%) agreed that they advised their elients on environmental sanitation such as cutting bushes around, cleaning gutters and disallowing stagnant water around, it was observed that most of the community members who process "gari" had stagnant water from their cassava fermentation.

Even though only five of the workers mentioned that the use of mosquito nets, mosquito proof windows and doors would prevent mosquito bites (among other methods of prevention)

in the house, the high cost of these items will not allow the community members including the CBD workers themselves to subscribe to any of the above items.

3. Family Planning

Of the 24 CBD workers interviewed, 22 (91.6%) of them are promoting family planning actively (discussing and dispensing its drugs). The other two, a VHW and a TBA because of their secondary infertility are silent about it unless closs relatives inquire about it as prospective acceptors.

Story telling and discussion are common methods that most workers employ to introduce family planning to prospective acceptors on individual basis and usually during treatment or home visit. An example of stories used by CBD workers to introduce family planning is illustrated below:

"Two couples, A and B got married about the same time. Couple A spaced their children and had few - 3.

They were able to feed them well and educate them to

University level. The three children eventually became important and responsible people in their neighbourhood.

Couple B, who did not space their children had many - seven. Because they are many, their parents could not educate all of them. Moreso, because of inflation and dwindling Nigerian's economic situation,

the most educated among the children only had three years of secondary education before withdrawal because of funds. Couple B subsequently learnt of the achievements of couple A's children and felt very unhappy about their own plight, so be wise friend."

A TBA confessed that she only discussed the topic if and when clients see any of the contraceptive methods in her kit during her rounds and inquire about it out of curiosity.

The VHWs find it easier to talk about family planning to their male clients first, on the ground that it is unethical in Yoruba culture to approach another man's wife on the issue (people right think he is trying to start a sexual relation with her or trying to make her promiscuous).

The TBAs too prefer to talk about family planning to their female counterparts.

It was observed that out of the 12 VHW workers interviewed, ten (83.3%) have used or presently using one form of contraceptive devices, one is practising abstinence and the other one is "silent" (Table 3) because of secondary infertility. All of the 10 acceptors are using modern family methods (i.e. "pills," foam tablets and condom) Table 4.

Of the 12 TBAs interviewed, half of them have used or presently using family planning devices, four are practising abstinence while two are non acceptors because of secondary infertility (Table 3).

Abstinence as a method of family planning is more common among the females than the male (Table 3). CBD services commenced in Oyo Zone about 18 months ago, so all the acceptors within this time are "new acceptors."

Fifteen of the CBD workers (5 TBAs and 10VHWs) are modern family planning acceptors (Tables 4 and 4 a). Ten of them accepted after receiving the CBD training while the other five accepted before the CBD services commenced.

Three of the acceptors stopped for various reasons: one of the CBD (VHW) family planning acceptors stopped because the method employed (foam tablets) failed - that is wife became pregnant (Table 4a). Another one (TBA) stopped because she lost her 2 year old (last) child and would want another child right away. (Table 4). The third lady had her I.U.D. removed (which she had before the CBD training) because she lost her husband and would not want to re-marry or have any other sexual partner (Table 4).

It was of interest to note that half of the VHWs (family planning acceptors) use condoms on their girl friends

irrespective of whether their wives are family planning acceptors or non-acceptors (Table 4a).

Even though one of the meanings of family planning is helping infertile people to be fertile (as taught during the CBD training) none of the three CBD workers (2 TBAs and 1VHW) detected to have secondary infertility sought for help from the trainers in Oyo Zone. One would wonder why the trainees concerned did not avail themselves of the opportunity. It was found that two of these sub-fertile workers - (A TBA and VHW) are using native medicine for their infertility while another TBA, though has a living child is receiving treatment in Ogbomosho Baptist Hospital about 50 km. away. The two CBD workers in question confessed that it is rather difficult for them to promote family planning education since they have not got any living issue of theirs. Moreover, people will blame their unfortunate condition on the promotion of family planning.

Ante-natal Care and Delivery

This aspect of the training concerns only the TBAs even though both the TBAs and VHWs received the lectures together. Howbeit, it was gathered that if there is a labour case where there is no TBA, the VHW will remain with the labour case for observation until the TBA (usually from the near by area)

arrives. Of the 12 TBAs interviewed, only 5 of them (about 1,2%) have taken at least one delivery. However, most of them said that the mothers usually call on them (TBAs) only after the babies had been delivered unassisted. Even though they did not take such deliveries, they usually give post-natal cares such as bathing the babies, cleaning the mother up, and making sure that both the babies and the mothers are comfortable before departure. Follow-up visits are usually carried out too. One of the "practising" TBAs recollected that she had taken over 20 deliveries since she has had the training. One was not sure whether she had been taking deliveries before she went for CBD training.

Among the CBD workers interviewed, she was the only TBA who confessed that CBD work takes too much of her time. She said that at times she had to be with a labour case throughout the night and had to check cases up regularly at her own expense irrespective of distance. If she has had so many deliveries, no wonder she is complaining of too much time being spent on CBD work and wanting to be remunerated. She commented, "I hardly have time to do my own thing."

TABLE 3

Age Distribution of TBAs and VHWs in Relation to Family Planning Practices

	\4e		Acce	ptors	Abstinence		Non-acceptor (Secondary Infertility)		Total
II.	ang	3	TBA	VHW	TBA	VHW	TBA	VHW	
25	-	29	1	1	2	-		-	4
30	-	34	-	-	1	-) -	-	1
35	_	39	2	2	1	(2)	2	1	8
40	-	44	2	3	4	-	-	-	5
45	-	49	1	1	O,	1			3
50	-	54	i —	\ - \	-	-	_	-	-
55	-	59	-C	1	-	-	-	-	1
	and bov		3						
Ī	ota	1	6	10	14	1	2	1	24

TABLE 4

TBAs! Methods and Duration of Family Planning Practices

Age	Types	s Duration	
40	Traditional Ring	5	vears
45	1. U. D.	10	years
35	I. U. D. (removed after spouses death)	3	years
35	I. U. D.	3	years
45	I. U. D.	6	years
25	Pills (stopped after child's death)	1	month
25	Abstinence	14	months
32	Abstinence	18	months
25	Abstinence	1	year
38	Abstinence	2	years

TABLE 4a

VHWs' Methods and Duration of Family Planning Practices

Age	Types	Duration
42	Condom (on girl friends)	6 months
1.1	Condom (on girl friends)	6 months
55	Pills (by wife)	1 year
60	Condom on girl friends	8 months
40	Pills (by wift)	6 months
35	Condon (on girl friends)	1 year
35	Foam Tablets (by wife) - failed	8 months
46	Condom on girl friends	6 months
60	Pills by wife	2 months
28	Condom on girl friends	5 months
45	Abstinence	2 years
36	Non acceptor secondary infertility	5 years
9		

C. Effectiveness of Educational Task of CBD Workers

This aspect of the report deals with how effective the CBD workers applied the acquired knowledge and skills to their client communities.

Of the 24 clients that were interviewed. 11 of them were for family planning, 7 for malaria, 3 for delivery and 3 for diarrhoea/ORT cases (Table 5).

During the earlier part of the study, there were no Camily planning acceptors interviewed as clients. Since the CBD workers selected their clients (by themselves) to be interviewed, it was difficult to say whether the family planning acceptors refused to be selected for interview (for fear of being "detected openly") or it was just by chance that they were not presented for interview.

Subsequently, the CBD workers were persuaded to "search" for and select for interviews cases of family planning (both acceptors and non acceptors). As a result, more cases of family planning than maternal and child health cases were interviewed as recorded in Table 5.

It was observed that the CBD workers are well accepted by the villagers Randall and Adekola (April, 1983).

They are better equiped to render PHC to the community members than health personnel in static clinics because the former are part and parcel of their client community. Due to their involvement and participation in the health care services, the CBD workers were found to be committed to the consumers! requests. Since they live in the community, they could identify with the community members freely, attend to their health problems promptly and ensure confidentiality where need be. As one client put it, "their presence here has savedus from running round to find transport to take sick people to the cities for treatment especially during the night."

They were found to be respected individuals and perceived as nurses, doctors or health workers. At the same time, both the villagers and the workers have high regard for the supervisors and the University College Hospital (UCH) Family Planning staff. They regard them as "our people from the centre or UCH." Even though none of the workers or villagers had seen the investigator before, warm reception was given as soon as they learnt (from the health sister who accompanied the investigator) that she is from UCH.

TABLE 5

Types of Services ever Received by 24 Clients Interviewed

Ser	vices Received	No. of Clients		
1.	Family Planning	17 (10 acceptors, 1 non-acceptor)		
2.	Malaria treatment	7		
3.	Diarrhoea treatment	3		
4.	Delivery	3		
K	Total	214		

They appreciated the investigator's visit and were very generous and hospitable in all the villages visited.

This type of gesture is usually bestored to people they know are connected with CBD programme. This is not unconnected with the appreciation of citing the project in their area for everybody's advantage.

All the seven patients treated for malaria remembered that they were treated with medications called "aporo iba" and "tonic" that is Nivaquine and iron tablets. The minimum number of days (remembered by the clients) for taking the anti-malaria regimen was two days. Three of the clients confessed that they never completed the anti-malaria regimen once they felt better. The left-over medications were usually kept for future use especially when there is a shortage of such drugs from the workers. The other four clients agreed that they completed the medication even if they got better because they were instructed to do so by the workers so that the malaria would not recur within a short time.

Most of the clients interviewed agreed that there were medicine hawkers around but very few have bought

medications from them since the existence of the CBD workers especially because the latter is low-cost and affordable by most people.

Of the seven patients treated for malaria, five of them were adults, one school child and an infant. The parents of the school child and the infants were interviewed on behalf of their children. Five of the patients (71.43%) treated for malaria remembered being health educated on environmental sanitation to prevent and reduce the incidence of malaria attack. Examples given include: cutting bushes around, disallowing stagnant water around, making the gutters clean thus allowing free flowing of water, etc. One of the patients was advised on improvement of agricultural production to boost food production and three were advised to consider family planning. One of the clients whose child was treated for malaria and who was advised to consider the use of family planning confessed that she would not buy the idea because, according to her, she does not get pregnant "easily". There is usually a gap of about three years or four years before another pregnancy would come. This particular woman from Ekewa village is 38 years old with three

children. It would appear that the CBD workers do not inform their clients that family planning could help people with infertility as well and this might be true of this client. The CBD worker could have referred that client to UCH family planning unit for further investigation although it could not be ascertained whether the client presented her problem seriously to the CBD worker. Propably the CBD workers were not taught how to handle such a case - secondary infertility.

The three mothers mose deliveries were taken agreed that they could have delivered their babies in the centre if their labour had started during the day. All of them had their babies between 3:00° a.m. and 5:00° a.m. Although all of these mothers agreed that they were advised on personal and environmental hygiene and also on the care of the babies and their feeding utensils, this advice was not taken to as observed during the visit to the clients homes. One particular client who is semi-illiterate and a civil servant (government poultry attendant) was observed to be dirty environmentally. She was visited at about 10.00° a.m. and by then her surrounding had not been swert.

Another mother from Aba Elesu was observed to be dirty both personally and environmentally. She was visited at about 12.00 noon and none of her two-children had had a bath including the mother herself. Her apartment too had not been swept at the time of visit. No wonder the baby had septic spots all over his head. She agreed that she was advised to boil her baby's drinking water but because her custom forbids the use of hot water, she did not take to the advise rather, she adds allum to the water. The same woman confessed that the was advised to consider family planning but because she is young (25 years) and has only had two confidence, she could not buy the idea yet...

The clients (one adult and two infants) whe were treated treated for diarrhoea remembered that they were treated with a powdered form of medication mixed with boiled water and called "ogun idagbe" (anti-diarrhoea). They were all advised on personal and environmental sanitation to prevent further attach of diarrhoea. None of them was taught to prepare the ORT but were visited daily in order to prepare a fresh ORT. The oralyte was said to be effective as all the cases treated recovered within three days of use.

Family planning education is likely to be accepted through the CBD workers because the prospective acceptors are likely to trust and confide in people they are familiar with (ensuring not being exposed) than go to trained health professionals. Some of the acceptors interviewed confessed that they had heard about family planning through the mass media but hesitated to buy the idea because they could not undergo the rigors and protocols of hospital system. Others said that they could be "detected" by relatives in the clinics or health centres. But, then availability of the workers at their door steps has motivated them to subscribe to family planning. Moreover, the family planning acceptors could have their contraceptives reimbursed at anytime without having to wait for family planning clinic days in the hospital setting.

Peoples' attitudes towards family planning is rather negative among the fairly young (30 years and under, and who have had less than five children. For example, one of the delivered mothers interviewed confessed that she was advised on family planning but because she is "young" (25 years old) and has only two children. she

could not buy the idea yet. Another client from Jobele although has had 5 children but young (25 years) objected to family planning on the ground that because she is the only surviving child of the parents, there was pressure on her to have more children as the mother is prepared to take care of them. It was noticed that she had the five (5) children within the space of 5 years that she was married but none of the children, except the one delivered at the time of the visit, live with her. Since the mother has taken the burden of child rearing from her, she is left to just "donate" them to be reared by somebody else. No wonder her negative attitude towards family planning.

The older clients, 35 years and above and who have had more than 5 children did not seem to object + family planning. Most of the male clients interviewed would subscribe to family planning to prevent pregnancies arising from extra-marital relations and also as a protection from contacting sexually transmitted diseases (STD). Contacting such a disease will not augur well to them if their wives got to know about it. Moreover, most of the men will not allow their own wives to use contraception for fear that they may became promiscuous.

The older women 35 years and above would use contraception to postpone the birth of their next child.

It was observed that a few of the women have the superstitious belief that if women stop the procration of children purposely, what is left unborn will cause such a woman to be obese! God who gives and allows the children to be born will provide the means to cater for them!

Of the eleven prospective family planning clients, ten of them were acceptors and one, a non-acceptor is the wife of a VHW. She was interviewed as a non-acceptor because she had earlier turned down her husband's advice on the use of a contraceptive. She did not go to the CBD worker for "service" but the CBD agent went to advertise family planning service to her. She refused on the ground that she is too young (30 years old and that her child who is 2 years old is still breast feeding. It was observed that she has had six deliveries but five children alive. At this point, the investigator explained to her other advantages and use of family planning at the end of which she agreed that she would consider the issue but would prefer to go through the TBA in her village. The TBA in question was hinted about this issue before the investigator's departure. Seven of the ten family planning acceptors (clients interviewed) were on pills

(representing about 70%), one on foam tablets and the other two on condoms (See Table 6). The minimum length of time of usage was 4 months and the maximum one year. This shows that acceptance of family planning took off about six months after the CBD training. The training was conducted about eighteen months ago.

The minimum number of pregnancies each family planning acceptor had, was six and the maximum eleven. The number of children alive of any of them is four while the maximum is seven. The age distribution of the acceptors was 3C - 60 years (see Table 6). These findings seemed to confirm the peoples' saying that family planning should be directed to and encouraged among those with many children and middle age. No wonder the woman from Aba Elesu who was delivered by a TBA refused to consider because she has only had two children and besides she was "young" 25 years old. Another woman (a VHW's wife) discussed earlier refuse accepting family planning because she is young, 30 years though she has had five children alive.

It was observed that the youngest of the family planning acceptors interviewed was about 30 years old who has had six deliveries: five children alive and one dead.

TABLE 6

Family Planning Clients Showing their Ages, Sex,
Types Used, Duration of Use and Obstetric History

Age	Sex	Obstetric History	Type	Duration
45	F	Gravida 7, Parity 6, 1 abortion, 2 died, 4 alive	Pill	5 months
35	F	Gravida 8, Parity 8, 1 died, 7 alive	Pill	5 months
35	F	Gravida 8, Parity 8, 3 died, 5 alive	Pill	8 months
40	F	Gravida 9, Parity 7, 2 abortions, 1 died, 6 alive	Pill	4 months
33	F	Gravida 6, Parity 6, 1 died 5 alive	Pill	1 year
50	M	Not Applicable	Condom	9 months
60	M	Not Applicable	Condom	1 year
1,0	F	Gravida 8, Parity 8, 2 died,	Foam Tablets	1 year
40	F	Gravida 11, Parity 9, 2 abortions, 3 died, 6 alive	Pill	4 months
140	F	Gravida 8, Parity 6, 2 abortions, 6 alive	I.U.D.	6 months
30	F	Gravida 6, Parity 6, 1 died, 5 alive	Non	Acceptor

TBA Versus VHW

Most family planning ecceptors employ modern contraceptives instead of the traditional methods. Family planning is not a topic easily talked about in this area. Its communication between a TBA and a male client on one hand and a VHW with a female client on the other hand is very difficult. However, TBA communicates very well with female clients and also VHW relates well to male clients.

Most of the men interviewed (80%) said that they use contraception to prevent pregnancies from arising out of their extra-marital relations. All the male clients interviewed confirmed the earlier report that an important reason for husbands abjecting to their wives' use of contraception is the fear of their wives becoming "premiscuous."

The VHws are among the early acceptors of family planning, while one third of the TBAs are non-users. Pill tablets were popular among female acceptors and condom among the male acceptors. This corresponds with Reyes and Jinadu's Finding (1984).

Promoting Family Planning Acceptance

It is obvious that the TBAs and VHWs are conscientiously and successfully fulfiling a need in the Oyo Zone by providing family planning education services. These services have been useful to the CBD workers themselves as 15 out of 24 CBD workers (62.5%) are modern family planning acceptors, (Tables 4 and 4a). Of these 15 acceptors, 10 of them are new acceptors (66.7%) that is acceptance since the inception of CBD services.

The active CBD worker, as far as promotion of family planning is concerned, can create enough awareness and motivation among his or her immediate contacts or peer groups to recruit individuals or couples into family planning. His influence on friends and neighbourhood groups will have a "multiplying effect," thus bringing more people into family planning. TBA workers can also dispel incorrect notions about family planning such as wrong belief that people who have used the "pill" might find it difficult to become pregnant subsequently (Kleinman, R.L., 1980).

Nevertheless, it is imperative to be cognizant of the fact that a family planning education or any health information may not necessarily lead to a desired action. In most cases, the consumer receives and interpretes the health information according to his needs and desires (Knutson 1965). This was the situation observed

during the study among some CBD workers/clients. The limitations identified against family planning acceptance are highlighted below and the case studies illustrate examples of the limitations:

(1) Parental Pressure on an only child

Case I: Woman, Age 25, with 5 children

At Jobele village in Fiditi centre, a TBA took the writer to one of her clients who had just delivered a baby. The said delivery was taken by this TBA. The new mother confirmed that she has had five children, she is 25 years and has been married for five years. Asked why she is not practising family planning, she said that she is the only daughter and child of her parents and consequently, she is under constant pressure to have more children. One might hypothesize that family planning education may not achieve the desired goal in the case of this woman.

(2) Personal experience of childlessness by the TBA resulting in lack of motivation to promote family planning

Case II: Woman (CBD Worker) 38 years, no children

Family planning is integrated into the CBD services and is promoted by the CBD workers (TBAs and VHWs), often through their own use or by members of their families. One of the TBAs has been married for 17 years but no living issue of her

own. She said that it is rather difficult for her to promote family planning since she has not got an issue of hers. She suspects that people think she is using one of the family planning devices and this may be responsible for her problem.

(3) Competition among wives for the greatest number of children (especially male children in a polygamous setting

Case III: Man CBD Worker, 45 Years, 27 Children

A VHW with 5 wives and 27 children was interviewed.

His first 3 wives are family planning acceptors (oral contraceptives). However, the other two junior wives bluntly refused to subscribe to any form of family planning because they want to have their own children like the VHW's senior wives.

Stage 3: Information on Selected Organizational
Aspects of CBD Project from Management,
Supervisory Staff and Community Leaders

The findings described here pertain only to the selected organizational and implementation aspects of CBD programme.

(a) Selection of CBD Agents and Supervisors

This involves the criteria used in the selection of the TBAs, VHWs, and supervisors including their job lescription.

The criteria used for the selection of the TBAs and VHWs with their job description were jointly discussed and agreed by the funding agencies, the UCH staff from Fertility Research Unit, the supervisors and the community leaders of the village involved. Following are the criteria used:

- (i) The trainees should reside in the area they are to operate in.
- The personal qualities should include honesty,
 willingness and interest to do volunteer work
 and respected member of the community.
- (iii) Those chosen need not be literate since Yoruba, the local language was to be the medium of instruction for the training.
 - (iv) Equal geographic representation is needed to ensure adequate population coverage.

(v) Two-thirds of the trainees were to be female TBAs while the other one-third were to be male VHWs.

The CBD agents were to render primary health care with particular emphasis on malaria treatment, Diarrhoea/Oral Rehydration Therapy, Pregnancy, Delivery and Family Planning to members of the community according to their standing orders in the areas assigned to them.

The criteria used in selecting the local and State government field supervisors including their job description were agreed upon by the Ministry of Health staff, the funding agencies and the staff of the Fertility Research Unit. They are as follows:

- (i) Most of the health workers selected were already in the Health Centres as government employees.

 However, a few hardworking health staff were deployed from their primary working places to the CBD programme.
- (ii) Irrespective of where such people were working before selection, they were to be responsible and trustworthy people with interest in rural health services.

(iii) Howbeit, the Local Government Authorities were imployed not to transfer their employees working as supervisors for continuity and stability purposes. The field supervisors are to dispense drugs to the CBD workers, conduct monthly meetings, give refresher courses and supervise their work on the field by conducting home visits with the workers.

(b) Organisational Aspects of the Project

This involves the selection of the pilot project area and the integration of the project into the existing health services at the Local and State levels.

The Cyo State Moulth Council was said not to be involved in the selection of the pilot area so the staff interviewed were unaware of the criteria used.

However, from the UCH point of view (funding agencies and staff of Fertility Research Unit), the criteria used include:

- (i) Akinyele Local Government was said to be a virgin territory where no related research had been carried out before.
- (ii) Its proximity to Ibadan, the Headquarter of the project will ensure easy supervision.

(iii) The Deputy Director of the project from U.C.H. being Secretary to the Midwives' Association (Oyo State Branch) was able to detect the midwives interest in Family Planning, which is an aspect of CBD.

According to the State Health Council staff, the project has been integrated into the existing health services both at the Local and State levels by incorporating all the four health zones in the project. At least, one Local Government in the health zones has the CBD project. In addition, the existing health centres manned by the Local Government staff form referral centres for the CBD agents thus making use of the staff and the facilities of the Local Government.

(c) Perceived Benefits and Shortcomings of the Project

This relates to the strengths and weaknesses of the project.

In relation to the strengths, the following were highlighted as beneficial both to individuals and to the group or community as a whole.

(i) To the senior officials, the programme is both unique and the only option for extending health services to the grass root.

- (ii) To the supervisors, the programme has been particularly useful in that they felt that the programme has brought them closer to the rural people more than ever before and has made them feel proud to participate and get involved in extending health care to the less priviledged rural community who live outside the main stream of sophisticated health technology. A supervisor felt that the efforts of the workers in the community has reduced the number of minor ailments being brought to the health centre.
- (iii) Although, the supervisors gained nothing in cash but, some of them consider it a privilege to receive gifts from the community farm products.
- (iv) Modern family planning is gradually being embraced by the rural community since the inception of the IBD programme as evidenced by "new" acceptors.
 - (v) To confirm the primary objective of the CBD programme, the community leader ascerted that the programme has been able to extend health care to the remote areas that normally would not have enjoyed the services of static clinics because of distance. He believed that the agents'

prompt attention to the sick people has reduced a number of serious illnessess that would have occurred had there not been such services.

(vi) Some people felt that the obstetric care given and early referral to the health or maternity centres has reduced obstetric emergencies. Others felt that because it is low cost and affordable, most people patronize the CBD workers' health services better than the private clinics or buy drugs at expensive prices from the medicine hawkers around the villages.

The Problems Identified by CBD Agents and Supervisors

These include:

(i) Inadequacy of Drugs: Shortage of essential drugs impeded
the smooth running of the programme. Availability of
drugs is an important motivating factor for community
participation as observed in this study.

It was observed that the drugs used are being supplied from U.S.A. Augmentation of this as promised by the Oyo State Government would have reduced shortage.

- (ii) Finance: Since there is no separate account for CBD programme in the State Health Council, emergency situation that requires monetary expenditure tends to suffer e.g. petrol into CBD vehicles or vehicle repair. The supervisors have incurred some financial cost on themselves, the refund of which will pass through bottle neck of bureaucratic protocol. The Ministry of Health only supports the programme in principle but not capable financially!
- (iii) Transport Difficulties: The Local Government staff
 supervisor who does not have CBD vehicle for
 supervision has to share with the State Health
 Council supervisor. Moreover, poor road condition,
 made worse during the rainy season, make commercial
 vehicles to the villages less frequent and difficult
 to come by. All these tends to retard supervision.
- (iv Lack of Adequate Incentives/Remuneration: Some of those interviewed felt that there should be incentives given to the workers, though not monetary.

Some suggested self-help projects. Others felt that incentives should not have been introduced at all as is the case with Akinyele pilot project area which was eventually cancelled. The incentives were said to have accounted for about 50% of the expenditure.

CHAPTLE FIVE

DISCUSSION OF FINDINGS

Stage 1: Access ont of the Training of the CBD Workers

Havelock and Havelock 1973 suggested four ways of analyzing a training programme. These are:

- (a) Breadth of goals;
- (b) relationship of training to the on going life history of the trainees;
- (c) psychological wholeness; and
- (d) transferability.

(a) Breadth of Goals

Before evaluating any training activity the issue of goals of training is of paramount importance. It is necessary to answer the question WHY of the training before one moves to WHO and MOW. The question of WHY of the training has been answered. In next question is who? and how? The pertinent question is whether the CBD training programme was intended to create a cadre of professionals with a new set of knowledge and skills or whether it was to improve on the one already possessed by the same. Here it may be true to say that while the training of village health workers amounted mainly to creating a new cadre of professionals the training of traditional birth attendants amounted to improving their already possessed skills. Therefore the

use of the same training design for both groups was hardly justifiable.

The knowledge and skills to be acquired should a clearly defined in behaviours terms. These functions could be specified singly or in sets of related functions. Those to be performed in the short run or in the long run and where they are expected to be performed must be stated. It is equally important to organize the functions in a way that they can fit into old roles of the trainee. For example, the new skills might demand a new set of behaviours which conflict with the existing ones. As useful as role plays might be (which were used to highlight practical issues) one feels that a single role play might not be sufficient to explain all the issues and problems which a OBD worker would have to face in actual practice.

Training a VHW may be far more difficult than training a TBA.

There is the need to develop a new identity within his or her community prior to training.

If a training is to serve a useful purpose, it must be assertained that the trainee is subsequently accepted and able to function in his new role. In introducing the topic of family planning, the trainers started by showing that the practice was not alien to traditional communities. Examples of such devices were shown but the trainees were not opportuned to discuss the need to change from traditional to modern methods. It would have been more effective

to spend sometime reinforcing the old practice and then introduce modern family planning devices as better replacements to traditional ones which were dangerous and unreliable.

The VHW might face more difficulty than the TBA because he is returning to communities with long established traditions of role relationships such as traditional doctors, traditional birth attendants, religious priests, etc. Therefore, careful and extensive planning and preparation are necessary both in recruiting the trainees and in preparing their community work settings. This has led some theorists to say that the training in individual skills may not produce desired results without changing at the same time the total social organizational context in which the trainees will operate. They therefore advocated a "whole-system" training. It can be postulated here that the approach to the CBD programme approximates a continuum beginning with specific skill learning and ending with a whole system development. In the short run, the training curriculum of the CBD programme which provided individual skills on pre-determined priorities in understaffed rural communities might be adequate; in the long run sustaining it would depend on the successful reorientation of the attitudes of rural communities to a low-cost service provided by locally recruited volunteers, and of the health personnel to a programme that supplements their own efforts. The training included record keeping and referral and assumed that Local and State Governments health staff would give the necessary

supervision. Periodic monitoring of the performance of the CBD workers is initially justifiable as a way of collecting data for an improved training curriculum. The CBD workers would also benefit from periodic short in-service training programme while the popularisation of the CBD programme in the rural areas can be pursued through the mass media and other traditional channels of communication.

(b) Relationship of Training to the On-going Life History of Trainees

According to Havelock and Havelock (1973), there are three points that should be considered in formulating training goals that would relate to what already exists in the trainee. The first might be to provide entirely new attitudes, knowledge or skills - inputs that are largely unique and original as far as the trainee is concerned; the second might be to provide reinforcement or additional support to existing attitudes, knowledge and skills of the trainee while the third might be to eradicate or redirect already existing attitudes, knowledge and skills which are deemed to be inimical to the desired change.

The first dimension is usually referred to as de-nove learning. It is usually believed that it is easier on the part of the trainer to conceptualize and explain a new role or function than to present it as an adaptation or alteration of something already existing. On the part of trainee it is said that a trainee is likely to be enthu-

siastic in learning something new particularly if it is seen as an <u>add-on</u> items which does not challenge his existing state of knowledge, skill or concept. In practice and as in the case of the CBD training programme it is unlikely to find a de-novo learner. Any trainee recruit would inevitably have come for training with some past experiences and attitudes which might stand in the way of learning anything new.

As to the second dimension of reinforcing existing attitudes. knowledge and skills in the trainee, behavioural learning theory has shown that the most promising approach to training is positive reinforcement whereby a person is rewarded for doing what he is doing "right" but it has been noted that this approach is very difficult to plan or organize because of the difficulty in determining vat individual trainee is already doing right and when he is likely to exhibit such behaviours. Such a training requires the provision of adequate opportunities during the training sessions that will allow every trainee to respond freely and participate in the process of training. Then trainer on the other hand might be able to observe the trainees and reward the behaviours that are consistent with the goals of the training. This approach no doubt requires that the

trainers are very skillful and alert.

As to the third dimension of eradicating existing attitudes, knowledge and behaviours in the training, this has been considered to be the most difficult sort of training to undertake. It is highly threatening to the trainee because it might make certain negative assumption about him and the past. The trainee might be defensive thus impeding subsequent learning of new attitudes, knowledge and skills particularly if they are offered by the same trainer. This difficulty, notwithstanding, many training programmes prefer to start with this approach. Examples—the group mensitivity training which involves exposing and clearing of behaviours which might inhibit the development of an ideal group relationship.

It was detected that although these three dimensions were present in the process of training, there was little sensitivity on the part of trainers as to how each dimension affected the progress of the training.

(c) Psychological Wholeness

This refers to the problem of reconciling what trainees do (behavioural outcomes of training) with what they say.

In other words, verbalizable thoughts which are associated with behaviours (phycho-motor) and actions (cognition) must be reconciled with what people feel (affect).

In simpler terms it means the consistency between words and deeds. It is believed that training is most effective or satisfactory when all these three psychological elements are present in the trainee in some degree. A trainee who adopts a new behaviour should also be able to articulate and justify it. When this condition is met, the trainee will be able to fully integrate the new skills in this everyday life and most importantly he will be committed to imparting the new skills to others. The trainee will also be able to develop positive attitudes towards the skills and thereby maintain them. Although a trainer may want to emphasize one or more of these three psychological elements it is usually suggested that it may be more rewarding to work on all the three levels.

It was observed that trainers were devoting more time to west and when to do than why they are done especially in the management of malaria, diarrhoea and wounds.

Probably in adult group in which most behaviours are already fixed explaining why should receive more emphasis.

(d) Transferability

At the level of the trainee the goal of a training programme may be defined as the growth or self-fulfilment

of the trainee while at community-client level where training is applied the goal may be defined as the re-making of the social order. Training therefore involves two types of transfer

- (i) the transfer from the trainer to the trainee;
- (ii) the transfer from the trainee to the society as a whole (Diagram 1).

Assessing transferability in the CBD training programme means whether the training made in difference to the VHWs: and the TBA's and whether their return made a difference when they got back to their respective communities in the trainee should be able to retain and use what he learned for a significant period of time in his community. The first type of transfer can be measured through concurrent and terminal evaluation at the end of training. The second type of transfer can be measured only after the trainees have practised for a reasonable period of time. This shows that transferability involves a more elaborate analysis of the contractual arrangements that exist between the trainee and as community.

Stage 2: Application of the Training of CBD Workers

Community Based Distribution programmes have been established in more than thirty developing countries (Bertrand et al, 1984).

Most of the programmes are family planning oriented except in a few countries like Zaire and Nigeria (in Oyo State) which combined illness treatment, maternal and child health services with family planning. The Oyo State CBD programme utilizes trained volunteers to render family planning, maternal and child health services to the remotest part of the State. It has minimized services delivery cost and eliminated some of the barriers controlling potential clients under the clinic-based systems - barriers such as distance, cost and administrative problems e.g. waiting lines, red tape.

The findings showed the educational activities of the CBD workers and the impact on their client community. The discussion will focus on selected illness treatment practices, family planning, pregnancy and delivery and also community response to Community Based Distribution (CBD) programme.

(a) Selected Illness Treatment Practices

The CBD workers were found to be competent in employing the standardized treatments according

to their standing orders. Diagnosing and treatment of malaria (especially adult malaria) by the workers did not seem to be a problem. Because it is the commonest illness in the rural communities and likely to be treated more frequently, mastery of diagnosing and treatment is possible. Age, sex and educational background did not play a role in the knowledge of the workers' educational tasks. One may speculate that one does not need to be educated to carry out health services of this nature that is, CED.

Diarrhoea was not identified by the CBD workers as a health problem in the rural areas especially among young children and infants. This finding is contrary to that of Ademuwagun et al (1977). The workers' supply of Oralyte was mainly used to treat school children and adults and its preparation was done by the CBD workers themselves. It would have been ideal if the workers taught their clients how to mix Oralyte during their first encounter with a diarrhoea case. Time needed to prepare subsequent daily Oralyte mixture would have been directed to other important health matters.

Besides, treatment would be unbroken since the time of

waiting for fresh Oralyte to be prepared would have been eliminated. Since regular supply of Oralyte could not be guaranteed, the CBD workers might not be willing to leave the Oralyte sachets with the clients.

(b) Family Planning

The CBD workers' knowledge of educational tasks in relation to family planning did not appear doubtful. However, the measurement of blood pressure for a prospective pill user which most of the workers did not mention during interview could be interpreted thus: since this procedure would not be carried out by the workers on the field, there is possibility of forgetting to mention it during the interview. To confirm that this was just an omission, the clients interviewed (pill users) confessed that their blood pressures were measured at the clinic before the use of the pill. Howbeit, further screening in relation to contra-indications for prospective pill users were observed.

Family planning education remains a sensitive matter to be discussed beenly" in Nigerian setting (Reyes and Jinadu, March 1984). Its communication between the opposite sex is rather difficult. Although, it is accepted that men may seek sexual relationship outside of marriage, women on the contrary do not want others to know that they are practising family

planning (Randall and Adekola, April, 1983; Reyes and Jinadu, March, 1984).

In addition, an infertile or sub-fertile individual should not and would not be willing to propagate family planning. For instance, two of the three CBD workers with secondary infertility felt reluctant to propagate family planning. One would advocate that such people would not be selected for future CBD programme. Despite the negative attitude of the fairly young people (with fewer children) towards family planning, the use of contraceptives is gradually being embraced by some community members through the CBD programme. The use of modern contraceptives by most of the CBD workers themselves have created enough awareness and motivation among the community members thus recruiting more people into family planning. For instance, most of the modern contraceptors among the clients are "new" acceptors, that is, accepted contraceptive use shortly after the CBD services commenced.

(c) Ante-natal Care and Delivery

All the TBAs interviewed performed well in recalling how
to care for pregnant women and delivery process. However,
appropriate action in real situation cannot be guaranteed in the
sense that those who could recite the process involved in delivery will actually perform well especially when only a few of

them are actually taking deliveries. This implies that periodic refresher courses will by necessary to help those who are not active TBAs.

(d) Community Response to CBD Work

The community members appear to embrace the CBD programme. They feel priviledged that they are able to enjoy health services at their door steps with minimal cost to them. However, they appreciate regular supply of drugs. This finding shows that the CBD programme is providing valuable services to the communities at reasonably low cost. This corresponds to the findings of Reyes and Jinadu (1984).

The CBD workers themselves complained that the work is taking a lot of their time off their source of livelihood and advocate some form of incentives to offset the cost incurred on themselves especially the cost of travelling to and from monthly meetings and cost of transporting their clients to the clinics or hospitals. This implies that a form of incentive is required to ensure continuous commitment to the CBD work.

Stage 3:

Information Collected on Selected Organizational Aspects of CBD Project

The findings from the study showed the involvement of the agency, community and government (Oyo State Ministry of Health) in selected organizational and implementation aspects of the CBD programme as listed under (research purpose and methodology).

The discussion will therefore focus on the three categories of people:

- (a) the agency the staff of the U.C.H. Fertility
 Research Unit.
- (b) the government Oyo State Ministry of Health through the State Health Council,
- (c) the community members enjoying the services.

(a) The Agency

It was discovered that the agency in collaboration with the government and the community members including the funding Agencies (Pathfinder Fund of Boston and Centre for Population and Family Health, Columbia University, New York, U.S.A.) jointly decided on the criteria needed for the selection of the CBD volunteers. And because the project was based on the health needs of the people, hence the

cooperative attitudes of all the people involved in the running of the CBD programme. The supportive and supervisory role of the U.C.H. staff in the expanded areas of the project has motivated the dedicated hardworking attitudes of the State and Local Government supervisors which was discovered during the study.

(b) The Government - State Health Council

Although the CBD programme has been officially transferred to the Oyo State Government, U.C.H. staff still assist in the supervision of the CBD programme. It could be postulated that this system encourages the government bureaucracy of "clogging the wheel of progress" of the programme. It would have been ideal if the government had been involved in the initial planning especially at the siting of the pilot project. The government was found to have supported the programme only in principle but responsibility of augmenting the supply of drugs has not been fully supported.

(a) The Community Members

It was discovered that the community members were fully involved in the planning, implementation and evaluation of the programme. Hence the acceptability of the programme and the appreciative attitudes experienced from the villagers during the study.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

Conclusion

The CBD programme which involves the training and utilization of Veluntary Health Workers (VHWs) including Traditional Birth Attendants (TBAs) to render family planning, maternal and child health and also selected illness treatment was found to be valuable and useful to the rural community.

The training curriculum as designed presently was found to contain enough contents which are relevant to the training objectives. The trainers were found to be competent in their subject matter but the absence of a clear definition of training objectives in behavioural terms for each topic did not augur well for a uniformity of style among the trainers.

In the application of the training, most of the CBD workers were found to perform well on what they were taught to do in relation to family planning, maternal and child health and illness treatment. Although family planning education remains a sensitive topic to be discussed in the public but its services were found to be promoted by the

CBD workers through personal use and by influencing other members of the community.

The response and support of the community especially the clients to the educational activities of the CBD workers is very positive. This is not unrelated to the ways and manners the workers carry out their assignments.

All the CBD workers interviewed said that they want the government to re-introduce the monthly incentives because the CBD activities take too much of their time. However, Reyes and Jinadu (1984), concluded in their study that monthly incentives are not needed to promote effective valunteer CBD work. One might postulate that the change in their attitude is not unconnected to the fact that they have come to realize their level of commitment, and would like to be compensated in reciprocate. Moreover, the high cost of living coupled with dwindling economic situation in Nigeria might "push" them to desire some incentives.

In the management of the CBD programme, the field supervisors in the expanded areas were found to be devoted and hardworking in their supervisory role. This finding corresponds to that of Randalls and Adekola (1983). The programme was found to be beneficial both to individuals, management staff and the community as a whole. Apart from the participation of the management staff in extending health services to the grassroot, the programme also brought them closer to the rural community more than ever before.

However, some short comings in the CBD programme were discovered to be: insufficient drugs, financial constraints inadequate transport facilities and lack of clear cut decision as to whether an incentive will or will not be given to the CED volunteers.

The services of the CDD programme could be improved by solving the problems or short-comings highlighted above.

Recommendations

The following recommendations are made on the basis of the findings of this study to enable improvement of the services of CED programme.

Training: For future CBD training, the authority and community concerned should agree on a centrally located training site that will be easily accessible to all the trainees. For instance, some of the trainees from Ifewara had to travel long distances

and start off as early as 5:00 a.m. in order to get to the training site by 8:30 a.m.. Despite this inconvenience, the trainees still turned up for the training sessions as they were highly interested in the programme.

In cases where future training site will be too far from the trainers and where public accommendations are scarce, arrangement should be made with the community members to provide living accommodations for trainers to prevent lateness.

As there were many topics to be covered for phases two and three of the training, the time alloted for these phases did not seem to be sufficient (five working days for both) as evident by the haste with which so many of the topics were taught. Therefore, for future training one advectates an extension of training days for phases two and three of the CBD training programme.

It is advocated that the training curriculum should be developed into a standard training manual with clearly stated educational objectives for the trainers and behavioural objectives for

The trainees, training methodologies and also an evaluation instrument which will set an acceptable level of attainment for a trainee to qualify as a CBD worker.

Visual Aids: Appropriate visual aids and teaching materials should be provided for use where necessary to assist the understanding of the topics. Adequate space to accommodate the trainees and trainers during the training sessions should be available. In Tonkere, for example, space was rather small for the group and the writing board, which was of poor quality, and inadequate was remotely located. During the discussion on food science, variety of food items should have been shown or a visit to the market place to see the variety of food items recommended would have been ideal.

For the Workers (TBAs and VHWs): To ensure continuous commitment of the workers to the CBD work, a "self-help" agricultural project should be established in the expanded areas of the project just as it operates in the pilot area. This might be able to offset the expenses incurred on the CBD workers. For example, the CBD agents tend to bear the cost of transporting their clients.

In the selection of potential CBD volunteers for future training, their family history among other criteria should be considered so that those with any form of infertility - primary or secondary should not qualify to be selected. Such people were found not to be good promoters of family planning. For family planning education to achieve its desired goal it may be necessary to effect prior diagnosis of potential and prospective acceptors, because a family planning education programme may not be applicable to all concern. For instance, the woman from Jobele (discussed earlier) who is 25 years old, had five children within five years of marriage. She confessed that she could not subscribe to family planning yet because there is constant pressure from her mother to have many children as he is the only surviving child of her parents.

For the Government: Since the CBD programme is now being managed by the Ministry of Health and only supported by the staff of University College Hospital Fertility Research Unit, the State Government should embrace it whole heartedly, that is both in principles and financially. Therefore, adequate budget and separate account should be provided for the smooth and continuing running of the programme.

The government should recruit personnel capable of sustaining and expanding the programme. The fees collected from the services rendered by the CBD workers should be used to service the project. There should be a cut down on the bureaucracy of the civil service which is a major impediment to the smooth running of the project.

The government should device means by generating money that can be internalized into the project rather than be diverted to the government pool. This also will help to sustain the project. However, regular evaluation of the programme to justify its cost effectiveness is advocated.

The CBD programme is fulfilling an important role in the rural community. It is a unique and laudable programme and its replication is highly recommended for other States of the Federation.

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APPENDIX A

COMMUNITY-BASED DISTRIBUTION OF MATERNAL CHILD HEALTH AND FAMILY PLANNING CURRICULUM FOR TRAINING PROGRAMME OF TRADITIONAL BIRTH ATTENDANTS/VOLUNTARY HEALTH-WORKERS

1st Week PHASE 1

Day	Lectures				
Monday	Introduction				
	a) Welcome address b) Warm-up Exercise c) Introduction of CBD Project d) Aims and objectives of CBD e) Criteria for selecting TBA/VHW f) Job description of TBA/VHW				
Tuesday	Elements of Anatomy and Physiology a) Female Reproductive System. b) Male Reproductive System.				
Wednesday	Pregnancy a) Menstrual Cycle b) Conception				
Thursday	Ante-Natal Care a) Growth of the baby. b) Examination of the pregnant woman. c) Diet in Pregnancy. d) Common discomfort during pregnancy. e) Danger signs during pregnancy. f) Patients at risk. g) Advice to the pregnant women.				
Friday	Intrapartum Care a) Content of Kit. b) Management of Labour. c) Signs of impending labour d) Normal changes in the women in Labour. e) Preparation of women in Labour				

Day -	Normal Delivery a) Labour - First, Second & Third stages b) Management of separation and expulsion of the placenta. c) Examination of the placenta.				
Menday					
Tuesday	a) Identify deviations from the normal during labour and emergency treatment. b) Control of bleeding.				
Wennesday	Care of the new-born a) Resuscitation Procedure b) Cyanotic baby c) Care of the umbilical cord. d) Care of the eyes. e) High risk baby.				
Thursday	Care in the Puerperium a) Breast feeding b) Proper feeding practices c) Engorged breast i) Minor discomfort of mother and management e.g. sore nipples, after pain, etc. c) Complications e.g. Puerperal infection, delayed bleeding, retention of urine, etc.				
Friday	Infant Care a) Normal child growth. b) Needs of Infant. c) Childhood Ailments and Management e.g. Convulsion, fever, etc.				

PHASE 1

Day 2013	Lectures
Menday	Management of Minor Ailments
	a) Malaria - Role play
	b) Cough - Role play
	c) Parasites - Role play
Tuesday	a) Diarrhoea - Role play
) How to use and mix Oralyte
Wednesday	a) Anaemia - Role play
	b) Standing Order for Treatment
Thursday	C.B.D. Wit (Management)
	a) TBA/VHW - Content of the Kit
	b) Drug supply/resupply
	c) Tally sheet - Role play
Friday	a) Record keeping
	b) Referral Card
	c) Home Visit

COMMUNITY-BASED DISTRIBUTION OF MATERNAL CHILD HEATTH AND FAMILY PLANNING CURRICULUM FOR TRAINING PROGRAMME TRADITIONAL BIRTH ATTEL DANDS/VOLUNTARY HEALTH WORKERS

2ND PHASE 1 Week

Day,	Lectures				
Monday	Family Planning				
	a) What is Family Planning (F/P)? b) Advantages of F/P. c) Traditional Methods of Birth Control (B/C)				
Tuesday	a) Modern Methods of B/C Methods b) Advantages of each B/C Methods(B/CM) c) Side effect of B/CM) d) Complication of B/CM.				
Wednesday	Contra-indication of B/CM				
	a) Motivation, Counselling, In				
	Interviewing of clients. b) How, where and when to get B/CM. c) Referral System				
Thursday	Health Education				
C	a) Personal Hygiene				
18-	b) Nutrition c) Immunization Programmes and Needs				
Friday	a) Birth Registration b) Importance of well-baby clinic				

COMMUNITY-BASED DISTRIBUTION OF MATERNAL CHILD HEALTH AND FAMILY PLANNING CURRICULUM FOR TRAINING PROGRAMME OF TRADITIONAL BIRTH ATTUNDANTS/VOLUNTARY HEALTH WORKERS

3RD PHASE

3 - DAYS

Nay, Lates	Lectures				
Menday	Prevention of Infection				
	a) Prevention of communicable diseases.				
	b) Environmental Sanitation.				
	c) Parasite.				
	d) Prevention of House Accident.				
	e) First Aid Treatment (Wound Dressing)				
	f) Home Economics				
Tuesday	Management of C.B.D. Programme				
	a) Identification of Problem/Solution				
	b) Evaluation.				
	c) General Discussion.				
	d) Per-Diem Payment.				
C					
Wednesday	Graduation				
	a) Group Presentation - Role play.				
) Award of Certificates/Kits.				
	c) Party.				

APPENDIX B

Description of Educational Tasks for Each of the Four Areas of Study

Educational Tasks of CBD Workers in Family Planning

- 1. They are to educate families to accept family planning.
- 2. To educate families on choice and correct use of contraceptives methods and contra-indication of each method.
- 3. To educate families on the meaning of family planning and its advantages to the family, community and the nation in general.

Methodology

CBD Workers

TBA

Interview

Families

Accepters

Non-acceptors

Educational Tasks of CBD Workers on

Pregnancy and Delivery

- CED (TBA Workers to educate pregnant mothers on personal and environmental hygiene before, during and after child wirth.
- 2. They should educate pregnant mothers to send for the CBD workers in cases of emergency for pre, intra and

- symptoms of imminent dangers dizziness, swollen legs, anacmia, etc.
- 3. They should educate families on care and appropriate feeding of mother and baby, particularly breast feeding, types of weaning/diet preparation of baby food, balanced diet for the pregnant mother, exercise and rest.
- 4. CBD workers should educate on the importance of protecting pregnant mothers against malaria, e.g. association between malaria and stillbirth.
- 5. They should organize and mobilize community efforts and resources for increased food production gardening, poultry, fishery, etc.

Methodology

TBAS

CBD Workers

VHWs: (Sample)

A. Interview

Pregnant Mothers

Married Men (Sample)

B. Look for evidence of acceptance of Family Planning (Users).

Educational Tasks of CBD Workers on

Malaria

- 1. The CBD workers should health educate the community on environmental sanitation - disposal of refuse and empty receptacles, filling of pot holes, covering of empty pots, clearing of weeds, clearing of drains, etc.
- They should educate the community on the use of appropriate protective items: mosquito nets, use or mosquito proof windows and doors and use of insecticides and repellents (traditional and modern).
- 3. They should educate the community on the causes, signs and symptoms of malaria.
- 4. Educate the community on the acceptance and use of anti-malaria drugs and on the known harmful effect of traditional drugs and herbs.
- 5. Educate the community on the management of high temperatur's and convulsions, danger of traditional drugs like cowsurine.
- 6. Organize and mobilize community efforts and resources for malaria control.

Methodology

TBAS

CBD Workers

VHW

A. Interview

Sample of community members

Male

TBA and VHW in action in the community

B. Observation

Environmental Sanitation Check list of selected (Sample of) households

Family Drug Kit

Educational Tasks of CBD Workers on Diarrhoea/ORT

- 1. They should educate the community on the causes of diarrhoea and measures of prevention and treatment.
- 2. Educate mothers on how to prepare ORT.
- 3. Educate mothers on how to recognize the signs and symptoms of dehydration and when to give Oral Rehydration Therapy (ORT).

Methodology

TBAs :

CBD Workers

VHWs

A. Interview

Mothers whose children had had diarrheea

Nurses/Midwives in clinics

Patent Medicine Sellers

B. Observation:

New cases of diarrheea

Evidence of hygiene measures

- boiling of water
- refuse disposal
- infant feeding practices.

APPENDIX C

Participation of Trainees at Tonkere during Training Sessions by Sex

Date	Sex	Participation Variables					
Date	sex	NQ	Q	AB	CF	G	
4/6/84	M F	5 6	2	A.	0 0	0 3	
5/6/84	M F	9 6	1 4	0 0	0	0	
6/6/84	M F	2 2	3	0	8 7	0	
7/6/84	M F	7 7	3	0	1 3	0	
8/6/84	MF	0	1 0	0	0	10 10	
TO	PA L	1414	15	7	19	20	

Participation Variables

NQ = No Question

Q = Question AB = Absent

CF = Correct Feedback

G = Graduation

Topic	Date	Sample Questions
Contraceptive Devices	4/6/84	- Can unmarried female students use contraceptives? - What age groups use the "pill?"
Contraceptive Devices	5/6/84	- Do condoms come in sizes or how will it fit every user? - Will the shield expand just like condom during applica- tion.
Obtaining Birth Certificate	6/6/84	- How will children not born in hospital obtain a birth certificate?
Communicable Diseases	CK IV	- How should Yellow Fever be treated?
General Questions	7/6/85	- How should sore mouth be treated? - Is family planning services
General Questions	8/6/85	free? - Is it necessary to tally the contraceptive devices dispensed?

APPENDIX D

STANDING ORDERS FOR TREATMENTS BY TEA'S/VHW'S

ILLNESS	DRUG	ADULT	AGE OF PATIENT: SCHOOL CHILT	UNDER 5
1. Fever/ Malaria	Nivaquine	4 start 2 bd x 2/7	2 start 1 bd x 2/7	start bd x 2/7
	Nivaquine Syrup		7/1	Under 3 years: 2 tsp start 1 bd x2/7
	Panadel	2 TDS x 3/7	1 108 x 3/7	½ TDS x 3/7
	Multivite	1 bd x 7/7	1 daily x 7/7	
	Multivite Syrur	(0×)		1 tsp daily x 7/7
	Folic Acid	1 daily x 7/7	1 daily x 7/7	½ daily x 7/7
	Antihis- timine: Benedryl	1 start		
	Phenergan Syrup		2 tsp start	1 tsp start
2. Cough	Benylin Syrup	1 tsp TDSlm 3/7	tsp TDS x 3/7	1 tsp TDS x 3/7
3. Diarr- hoea	Oralyte	1 packet per bottles (1	eeded for all age r day mixed with liter) of water; every stooling.	3 small stout

The state of the s				
Worms	Mabendezel	1 bd x 3/7 Not for preg- nant women	1 bd x 3/7	1 bd x 3/7 Net fer children under 2 years
5. Anaemia	Felic Acid	1 TDS x 7/7	1 bd x 7/7	½ TDS x 7/7
	Multivite	1 TDS x 7/7	1 pa x 7/7	½ TDS x 7/7
6. Prenatal	Ferrecal Plus (er Filiben)	1 daily (per 14 days	treatment)	
7. Delivery	Ergometrine	immediatel post-partum	У	

APPENDIX E

QUESTIONNALTS FOR CED WORKERS

Dia	rrhoea/ORT - CBD Worker
1.	Name
2.	Address:
3.	Age:
4.	Sex:
5.	Married/Single/Divorce/Widow:
6.	What are the causes of grarrheea?
7.	How can you treat diarrhoea?
8.	How can you prevent diarrhoea?
9.	Do you teach the mothers how to prepare ORT?
10.	Apart from ORT, what other anti-diarrheea de you give?
11.	What are the signs and symptoms of dehydration?
12.	a. When should you start to give ORT to somebody with diarrhoea?
7	b. What is ORT (Oral Rehydration Therapy)?
13.	Observation: Ask for new cases of diarrhoea. Evidence

QUESTIONNAIRES FOR PREGNANCY

practices.

14. What type of care would you give to a pregnant weman?

of hygiene measures such as boiling of $\mathrm{H}_2\mathrm{o}$, refuse disposal, infant feeding

- 15. What advice do you give to them concerning
 - (a) diet,
 - (b) personal, and
 - (c) environmental hygiene during pregnancy
- 16. What advice do you give concerning their preparation for labour, delivery and post-natal?
- 17. What advice do you give to pregnant women in case they have signs and symptoms of imminent danger such as dizziness, swollen legs or eyes, ants crawling round their urine?

QUESTIONNAIRES FOR DELIVERY

- 18. How would you recognize that a pregnant woman is in labour?
- 19. How do you prepare for taking delivery?
- 20. How do you take delivery?
- 21. What kind of post-natal care do you give to mothers?
- 22. When do you seek for medical assistance during
 - (a) Labour
 - (b) Delivery
 - (c) Post-natal
- 23. How many deliveries have you taken since you have been trained?

QUESTIONNAIRES FOR FAMILY PLANNING

24. What advice do you give to pregnant women concerning family planning?

- 25. (a) Whom did you introduce the topic Family Planning to first, husband or wife?
 - (b) How do you 'troduce the topic?
- 26. Who wuys the idea first, husband or wife?
- 27. What advice do you give in making appropriate family planning choice/method?
- 28. Which of the family planning methods are more in demand?
- 29. (a) What types of problems have the acceptors encountered concerning the use of the chosen method?
 - (b) How did you solve them, if any?
- 30. (a) Do you use any of the family planning methods yourself?
 - (b) If so, how land have you had it and what method?
- 31. What type of problems have you encountered concerning the disbursement of family planning methods?

QUESTIONNAIRES FOR MALARIA

- 32. What do you think can cause malaria?
- 33. How would you know that some one is suffering from malaria?
- 34. How would you treat malaria?
- 35. (a) What steps should one take to reduce the incidence of malaria in the community?
 - (b) What efforts and resources are required for malaria control in the community?
- 36. What do you do to prevent mosquite bites in homes?

- 37. (a) Is there a difference between the use of antimalaria drugs given by you and the traditional
 ones?
 - (b) If yes, what is it?
 - (c) What are the harmful effects of traditional drugs such as herbs and cowurine?
- 38. What should you do to somebody with
 - (a) temperature
 - (b) convulsion
- 39. What have you done to encourage people to improve on agricultural food production?
- 40. Observe environment for sanitation. Check family Drug Kit.

APPENDIX F

QUESTIONN TRE FOR PATIENTS

- 1. Name:
- 2. Address:
- 3. How old are you?
- 4. Sex:
- 5. Married/Single/Divorce/Widow
- 6. (a) What is your understanding of CBD workers
 - (b) How long ago how they existed in the village?
- 7. Have you ever been attended to by CBD worker for anything?
 If so, for what were you treated?
- 8. (a) Are there medicine dealers around the village?
 - (b) If so, what type of medicine did you buy from them since the CBD workers were trained?
- 9. Do you remember the name of the drug you we're given when last you were treated by CBD worker?
 - (b) If so, name some.
- 10. For how many days did you use the drugs that you were given?
- 11. If you get better before you complete the course of treatment given, what do you do to the rest of the drugs?
- 12. How much did you pay for a course of treatment?
- 13. What advice were you given concerning:
 - (a) Environmental Sanitation
 - (b) Improvement in agricultural production to boost food production.
 - (c) Family Planning.

APPENDIX G

QUESTIONNAIRES FOR SUPERVISORS

- 1. Name:
- 2. Address:
- 3. Age:
- 4. Sex:
- 5. Married/Single/Divorce/Widow:
- 6. What are the criteria used in selecting the CBD workers?
- 7. (a) From your own point of view, what are the shortcomings of the project?
 - (b) How can you improve on the shortcomings?
- 8. What should the government do to promote the CBD Programme?
- 9. How have you integrated the CBD project into the existing local health services?
- 10. As a CBD worker, what have you gained since this project commenced in cash or kind?
- M. (a) As a Supervisor, are you enjoying the responsibility given to you?
 - (b) If No, why not?
 - (c) If yes, what aspects appeal to you most?
 - (d) And what aspects do you dislike most?

APPENDIX H

QUESTIONNAIRES FOR COMMUNITY LEADER

- 1. Name:
- 2. Address:
- 3. Age:
- 4. Married/Single/Divorce/Widow:
- 5. Status: e.g. Chief/opinion leader, etc.
- 6. What are the criteria used in selecting the CBD worker?
- 7. (a) From your won point of view, what are the shortcomings of the project?
 - (b) How can you improve on the shertdemings?
- 8. What should the government do to promote the CBD programme?
- 9. (a) Have the CBD workers been useful to this community?
 - (b) If yes, explain.

APPENDIX I

QUESTIONNAIRES FOR DIRECTOR OF CBD PROJECT - U.C.H.

- 1. Name:
- 2. Address:
- 3. Age:
- 4. Sex:
- 5. Married/Single/Divorce/Widow:
- 6. Why was Akinyele Local Covernment selected as the pilot project area in not any other local government in Oyo State?
- 7. What were the criteria used in selecting the CBD workers? (TBAs and VHWs)
- 8. How were the supervisors selected and what were the criteria used in their selection?
- 9. Were the selected supervisors working in the project sites before they were given this responsibility?
- 10. (a) From your own point of view, what are the shortcomings of the project?
 - (b) How can you improve on the shortcomings?
- 11. What should the government do to promote the CBD programme?

APPENDIX J

QUESTIONNAIRES FOR COORDINATOR OF CBD PROJECT IN STATE HEALTH COUNCIL

- 1. Name:
- 2. Address:
- 3. Age:
- 4. Sex:
- 5. Married/Single/Divorce/Widow:
- 6. Why was Akinyele Local Government selected as the pilot project and not any other local government in Oyo State?
- 7. How were the supervisors selected and what were the criteria used in their selection?
- 8. Were the selected supervisors working in these areas i.e. the project sites before they were given the responsibility of supervisors?
- 9. (a) Since the take over of the CBD project by the Oyo State Government, what are some of the problems encountered in relation to:
 - (1) transportation
 - (2) financial
 - (3) personnel
 - (4) drugs
 - (5) equipment
 - (b) How were they solved?
- 10. (a) From your own point of view, what are the short-comings of the project?

- (b) How can you improve on the shortcomings?
- 11. How have you integrated the CBD project into the existing local health services?
- 12. What contributions has this programme made to the Health Care system in Oyo State.