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REACH

RESOURCES
FOR CHILD
HEALTH

Measles Initiative: Initial Planning Visit Nigeria

January 20-24, 1992



**MEASLES INITIATIVE: Initial Planning Visit
NIGERIA**

January 20 - 24, 1992

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Acronyms

CCCD	Combatting Childhood Communicable Diseases
CDC	Centers for Disease Control
EPI	Expanded Program on Immunization
FMOH	Federal Ministry of Health
LGA	Local Government Area
MI	Measles Initiative
NGO	Non-governmental organizations
NNT	Neonatal Tetanus
PHC	Primary Health Care
PID	Project Implementation Document
REACH	Resources for Child Health Project
REDSO	Regional Economic Development Services Office
SOW	Scope of Work
SMOH	State Ministry of Health
TAACS	Technical Advisor in AIDS and Child Survival
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASH	Water and Sanitation for Health Project
WHO	World Health Organization

I. BACKGROUND

Since 1984, the primary goal of the Expanded Program on Immunization (EPI) has been to achieve Universal Child Immunization goals of 80% coverage by 1990. Rather than a sporadic service offered at a few health facilities, EPI became a cornerstone for rural primary health care (PHC) services throughout Nigeria. Beginning in 1988, routine strategies were supplemented by a series of national and state immunization days to promote public understanding of immunization and increase levels of coverage.

Achievements in Nigeria have been impressive. A 1989 program review estimated that 100,000 lives per year were saved through EPI efforts alone. However, some 200,000 deaths were still estimated to occur annually due to immunizable target diseases, of which some 75,000 were due to measles. Coverage surveys in 1991 showed that nearly 80% of children up to two years of age were fully immunized. However, this figure falls rapidly to 38% when only card-verified valid doses are accepted in the analysis of coverage. High average coverage figures can nevertheless mask important disparities from area to area.

A two-member REACH team consisting of an EPI specialist and an urban planner visited Lagos and Ibadan in September 1991 to conduct a very rapid "needs assessment" for EPI in urban areas and to gauge Government interest in undertaking an enhanced urban EPI effort. Their findings were widely disseminated in a document entitled "Urban EPI in Nigeria: A Preliminary Assessment," from which some of findings are reported below.

II. FINDINGS

Nigeria is urbanizing at an extremely rapid rate with nearly 50% of the population expected to reside in cities by the year 2000 (see Appendix 1). From an urban population of 3 million in 1953, Nigeria's urban population is now estimated at nearly 50 million. Lagos experiences up to a 10% annual population increase versus only 3% in rural areas. Lagos may have as many as 10 million residents.

The perception widely exists that urban areas are better off than rural areas despite estimates that one-third to one-half of urban residents subsist at or below the poverty line. The remarkable gains in development and extension of community level PHC to rural areas during the past decade have to some extent bypassed cities. A dearth of disaggregated data impedes effective program planning in the urban areas.

An analysis of 1991 immunization coverage data, which included 22 separate coverage surveys (one per state), revealed important disparities between Lagos State, which is highly urban, and other states. The analysis concentrated on measles coverage indicators because of the need to maintain high coverage levels to reduce transmission within and from densely populated urban areas.

Lagos consistently compared poorly to other states on measles indicators (see Appendix 2). Infant coverage at 53% was lower than the national average and placed Lagos 13th out of 22 states. Drop-out from DPT3 to measles in Lagos was the worst of any state in the nation. See Appendix 3 for a comparison of DPT3 and measles coverage by 12 months of age in Lagos State, Zones B through D, and for the nation as a whole. These unexpected findings shattered a myth that measles coverage in the most cosmopolitan urban center, which has the highest concentration of health facilities, would be

higher due to greater access to and utilization of services.

Lagos and possibly other cities require more focused attention to improve delivery of immunization services. Urban areas provide special challenges and unique opportunities for creative approaches. For example, nearly one-fifth of all measles immunizations were given by the private sector in Lagos versus 3% nationwide. A partial illustrative list of some of these urban-specific opportunities for EPI appears in Appendix 4.

The overriding need is to ensure that high coverage can be achieved in each and every administrative area, including distinct city neighborhoods, and thereafter sustained. As the focus of the EPI in Nigeria, as elsewhere, turns to achieving specific disease reduction targets, it becomes increasingly important to ensure that susceptible pockets do not exist in crowded urban environments.

Despite evidence of declining measles incidence, the potential clearly exists for explosive urban measles epidemics. One authority (Dr. Stanley O. Foster, CDC) claims that Lagos has the highest measles attack rates of any city in the world, with infection generally occurring within a couple of months of loss of maternal (passive) immunity. Low immunization coverage, high population density, high birth rates, and high rates of in-migration of susceptible children contribute to the rapid transmission among the young, for whom measles is particularly severe.

Lagos has entered the "honeymoon period" of temporarily low measles incidence which classically follows the introduction of widespread immunization (see Appendix 5 for measles incidence and coverage by year for the entire country). These short-term reductions in incidence have led to some complacency that measles no longer poses a problem. However, dramatic recurrences of measles epidemics can be expected. Besides unacceptable death and suffering, health authorities and donors may need to contend with the political embarrassment of measles epidemics in the wake of highly publicized claims of Universal Child Immunization. Epidemics may undermine support for the EPI.

Evidence from many African cities provides a powerful epidemiological argument to strengthen disease control efforts in urban areas without detracting from rural efforts to raise coverage. More effective measles prevention in cities should lead to less frequent importation into surrounding rural areas. Due to the earlier age of infection, intensity of exposure and high prevalence of malnutrition, cities require higher immunization coverage than rural areas to reduce more effectively measles mortality. With current measles immunization coverage levels in Lagos, an average of some 200,000 cases with 6,000 deaths will continue to occur annually. Measles probably causes 10% to 20% of under-five mortality and is an associated cause of many other deaths.

Measles control in Lagos will require a strengthening of the overall EPI and a comprehensive and integrated approach. An urban focus within the existing EPI will be needed. Just as EPI has had a leadership role in the development and extension of PHC throughout Nigeria, it is now appropriate for the maturing EPI to lead the way to improved urban health by developing community-level PHC to address the needs of the growing urban poor in each distinct neighborhood.

In November, 1991, a Nigeria Health and Population Sector Assessment provided some guidelines to programming in health and population in Nigeria over the next five to seven years. That assessment recommended that an urban EPI initiative should be supported.

A follow-up planning visit by a REACH epidemiologist and an urban planner to conduct a more

detailed urban EPI assessment, including a detailed implementation plan, is scheduled for February 1992. A scope of work for that assignment appears in Appendix 6. REACH presently has resources for urban health activities which will be used to cover the cost of the planning visit, and may be used for subsequent activities until September 1993. A statement of the REACH vision for urban EPI appears in Appendix 7.

The Measles Initiative (MI) team which visited Nigeria for one week in January 1992 confirmed the high level of interest in an urban EPI focus on the part of the Mission and the Federal Ministry of Health (FMOH) and the willingness to devise, implement and evaluate alternative strategies. A list of persons contacted on this visit can be found in Appendix 8. The FMOH has already included urban EPI activities in their annual work plan. UNICEF also expressed interest in the urban EPI activities being planned and will be invited to participate in the planning visit scheduled for February, particularly as they have considerable experience in communication and social mobilization. The FMOH has designated two officers to participate in the planning exercise.

The MI team believes that lessons learned in Nigeria in urban EPI and control of measles will capture global attention as countries begin to seek more effective methods to control this disease.

It is hoped that a detailed implementation plan can attract additional resources from other donors and from A.I.D. to rejuvenate the EPI in the wake of the 1990 declaration of Universal Child Immunization. Measles control efforts undertaken within the urban EPI focus in Nigeria will be useful in other urban areas in Nigeria, reinforce the efforts in Measles Initiative countries elsewhere in Africa and permit cross-fertilization of ideas. Given the burden of measles on child survival, the MI team believes that it is essential that the Project Implementation Document (PID) for follow-on projects under A.I.D.'s bilateral assistance to Nigeria include a strong emphasis on measles control.

The MI team visited the focus Local Government Area (LGA) within Lagos State which is assisted by the Combatting Childhood Communicable Diseases (CCCD) Project, supported by USAID. Of the 15 LGAs in Lagos State, 6 are considered predominantly urban (Lagos Island, Lagos Mainland, Eti-Oso, Surulere, Ikeja and Mushin. Three are felt to be predominantly rural (Epe, Badagry and Ibeju-lekhi). There are six LGAs which are both urban and rural (Somolu, Oshodi-isolo, Ikorodu, Alimosho, Agege and Ojo). Ojo was mentioned as being less urban than the other 5 LGAs in the urban-rural category. Therefore, the MI team believes that an appropriate choice for an urban EPI effort would be from the predominantly urban category of LGAs. Dr. Sorungbe, Director of PHC in the FMOH, felt that the focus should be on a clearly urban LGA, such as Mushin, where the lessons learned will be applicable to other highly-populated and densely-settled areas. Given the large population size of these urban LGAs and the modest amount of resources available for the effort, the MI team believes that only one LGA should be selected.

The CCCD Project is currently hiring a Field-Based Epidemiologist to cover PHC interventions in three States, including Lagos. The REACH Project will hire an Urban EPI Technical Officer whose focus will be more specific to immunization services within one LGA with a concentration on measles. The REACH consultants on the urban EPI planning team will explore mechanisms for providing technical support to its field staff and for ensuring effective coordination with CCCD.

On the field trip to Ojo LGA, a review of the immunization register at Alaba PHC Center reinforced the previously-mentioned analysis of 1991 coverage survey data which had found high drop-out rates between DPT3 and measles. The register showed that only 10% of the children coming for

immunization were more than 6 months of age. Nigeria's high drop-out may very well be due to their success at reaching children early in life with the other antigens. Determining the reasons for the drop-out will need to be investigated during the urban EPI activities so that appropriate strategies for reducing the drop-out can be implemented. In Alaba PHC Center, the team noted from the register that when children do present at a minimum age of nine months, they are invariably vaccinated against measles, indicating that screening is effectively performed.

One major concern which the REACH planning team will need to address is the commitment of the selected LGA to EPI in light of the decentralization directives issued by the FMOH giving LGAs jurisdiction over PHC. As noted by the Nigeria Health and Population Sector Assessment, the financial implications, especially the flow of resources and personnel from the federal and state ministries of health to the LGAs, are not yet clear. Vaccines, other consumable supplies, and operating expenses will have to be assured before the LGA is selected.

III. CONCLUSIONS AND RECOMMENDATIONS

1) Measles is a serious problem which needs to be addressed:

Measles is a serious public health problem in Nigeria. With current measles immunization coverage levels in Lagos of about 50%, an annual average of about 200,000 cases and 6,000 deaths will continue to occur. Measles probably causes between 10% and 20% of under-five mortality and is an associated cause of many deaths.

2) The REACH urban EPI activity should include a strong component on measles reduction and control:

The urban EPI activities supported by central REACH funding should include a major component for measles control in the selected LGA. This assistance will be important to explore reasons for current low levels of coverage, including both supply and demand sides of the immunization system. More needs to be learned about caretakers' and health workers' attitudes, knowledge, behaviors and practices regarding measles. It will also help to identify reasons for the high DPT-3 Measles drop out rates and current case management practices for measles. Special effort should be made to share this information with other LGA, State Ministry of Health (SMOH) and FMOH officials so that others can learn from these activities.

3) Nigeria is a strong candidate for future funding under the Measles Initiative:

If additional funds become available to the Measles Initiative, Nigeria should be considered as a fourth site for an expanded measles immunization effort in an urban area. With the ground work being laid by the REACH urban EPI activities, these new funds could accelerate the measles reduction and control activities significantly. These funds could expand activities in the focus LGA or support additional urban LGAs.

4) There is support in Nigeria for urban EPI/Measles activities:

The team was impressed with the understanding among those contacted of the problem of measles reduction and control and the commitment to increase activities to focus on measles. The FMOH has recently incorporated an urban EPI focus in their 1992 Annual Work Plan and has assigned two EPI

staff to work with the two REACH consultants in early February. In fact, it was the Minister of Health, the Honorable Ransome Kuti, who began some of the first urban clinics in Nigeria. The FMOH has also expressed interest in developing new approaches to solve long-standing problems.

USAID has been supporting Child Survival activities since 1987 and urban measles is seen as a major concern for the program. The current CCCD project is working in immunization; however, they have not worked extensively on measles in the urban LGAs of Lagos State.

Both UNICEF and World Health Organization (WHO) staff indicated that they would be quite supportive of an urban EPI initiative. UNICEF has requested the assistance of the upcoming consultants in designing a survey of urban areas which is intended to identify major problems in these areas. They have also indicated that some resources and staff time would be available for the upcoming urban planning visit and for follow-up activities, including the area of communication.

5) Geographic Scope:

Lagos State has been identified by the FMOH as the area of geographic focus for the urban EPI activity. In Lagos State there are currently 15 LGAs. Of these, six are largely urban - Lagos Island, Eti-Oso, Lagos mainland, Surulere, Ikeja and Mushin. The planning team will need to visit the most promising LGAs and make a final selection during the first week of the planning exercise with input from FMOH, SMOH, REACH and USAID.

6) Long-Term Urban EPI Consultant:

A long-term consultant will be hired by REACH to support the LGA urban EPI work. This consultant will be Nigerian and will be assigned to the LGA health office. A job description, statement of qualifications and a delineation of working relationships will be developed by the Planning Team after they have selected the focus LGA and have determined their needs and capabilities. The EPI consultant will meet with SMOH and FMOH on a regular basis in order to keep them informed and to pass on lessons learned. It is anticipated that the consultant will be hired by the end of February.

7) Urban EPI Activities Need to Develop a Strategic Communication Plan:

The Team was impressed with the work that has been undertaken in communication in Nigeria. Clearly, communication has played a key role in the impressive rise in immunization coverage achieved by the country. Relations have been developed with several key ministry units, including the Nigerian Television Authority and local advertising firms. The urban EPI activities should take advantage and build on these relationships and systems for urban communication activities. The staff at UNICEF have a lot of experience in this area and have expressed a willingness to assist in this effort.

Persons who have worked with UNICEF on social mobilization and communication activities point to the need for a stronger research foundation to develop communication programs and evaluate impact. Research-based information would be helpful in articulating a strategic communication plan to guide activities. UNICEF communication staff have started to remedy this situation. In early January, UNICEF worked with a World Bank consultant, Dr. Dennis Foote, to develop a request for research proposals from Nigerian firms on the following topics: an inventory of agencies promoting child and

family welfare; a literature review of past experiences in social mobilization; a general population survey on media use, on knowledge and attitudes about oral rehydration therapy and breast feeding, and on the seeking of health services.

An example which guides the design of a Social Marketing Intervention appears in Appendix 9.

8) Quality Assurance of Services:

The urban EPI activities need to review the quality of services provided and explore ways to correct weaknesses. The Standing Orders should be developed for all categories of workers in the target areas. In addition, supervisory training and checklists should be focused on problem-identification and solutions. Some guidance on Quality Assurance appears in Appendix 10.

9) Urban EPI Planning Visit:

Dr. Felicity Cutts and Mr. Ken Olivola have been requested by the FMOH to provide technical assistance for a planning visit on urban EPI. The present team has reviewed the Scope of Work (SOW) for the planning visit and suggested some minor changes (see Appendix 6). The team and the FMOH have also developed a draft schedule for their visit (see Appendix 11), and the FMOH has agreed to set up the initial meetings so the planning team can begin work immediately after the consultants' arrival on February 3, 1992.

10) Memorandum of Understanding:

The Team has prepared a draft Memorandum of Understanding based on the discussions held during the visit (see Appendix 12). This document outlines the background of the urban EPI activities, purpose of the work, specific responsibilities and key activities planned. It is expected that this document will be revised based on the planning visit and signed in mid-February.

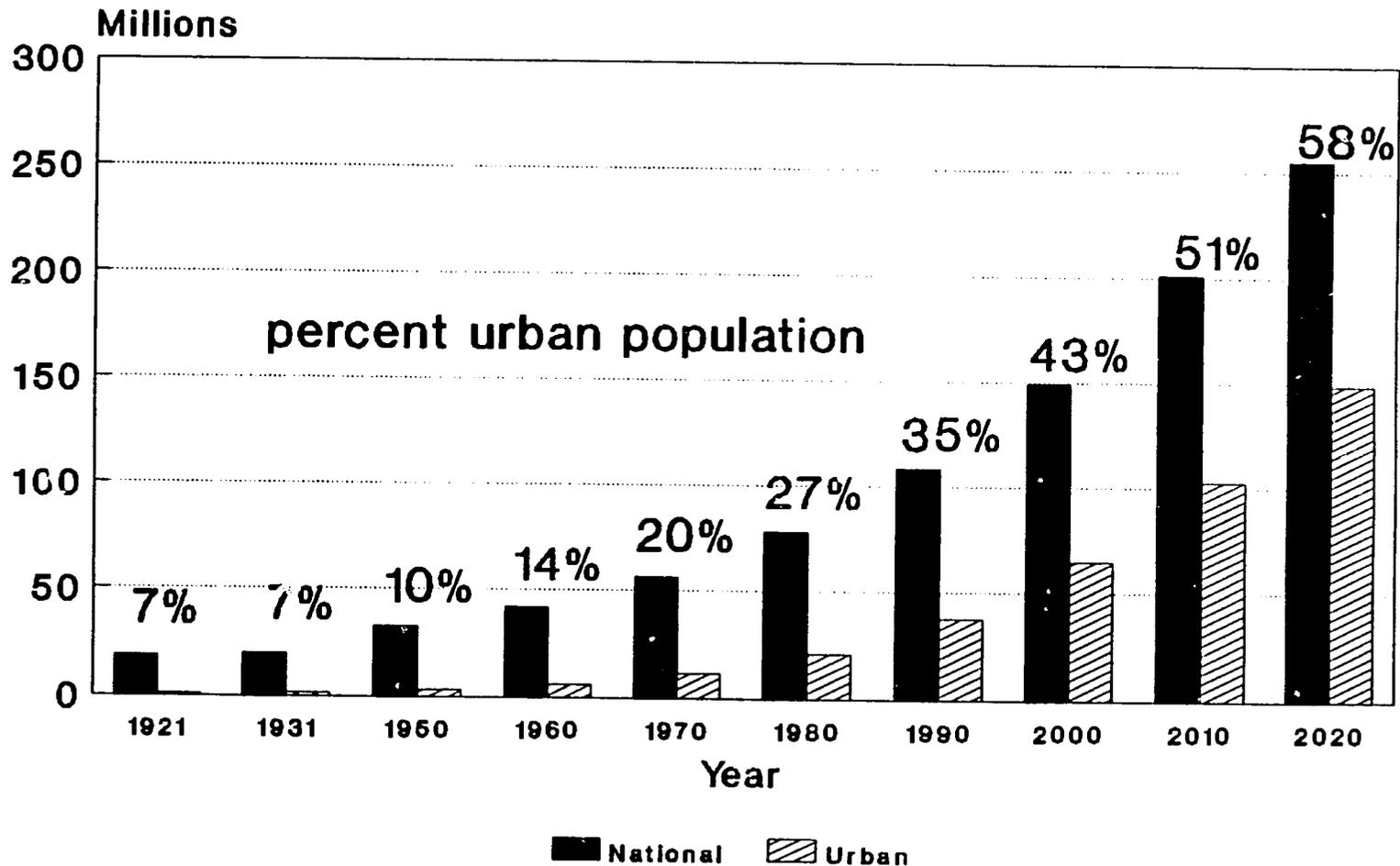
11) Concern over EPI vaccines and supplies:

Nigeria has traditionally purchased the bulk of vaccines for the EPI. However, as reported by UNICEF, with the decentralization of health services and the allocation of funds to the LGAs, UNICEF has had to step in to finance vaccine supplies since many LGA's did not send their request for vaccines or provide the resources for procurement. UNICEF indicated that current projections of funding levels would not permit major vaccine funding support in the future. The urban EPI activities need to address early on the long-term supply of vaccines, especially before any demand creation activities are initiated.

12) Management Issues:

There are critical management constraints in USAID/Lagos for oversight and administration of the urban EPI activity. The team initially explored the possibility of working jointly with the CCCD project in their Lagos State focus LGA-Ojo. However, the team found out that Ojo was largely rural. There are ten or eleven LGAs which were said to be more urban and therefore are more appropriate as a target under the urban EPI. Appendix 13 summarizes the Team's conversations with Dr. Adedeji, EPI Director.

Population Growth in Nigeria National & Urban



source: United Nations

Appendix 2

Measles Immunization Indicators for Nigeria, Zones B-D, and Lagos State, and Rank Order of Lagos' Performance, 1991

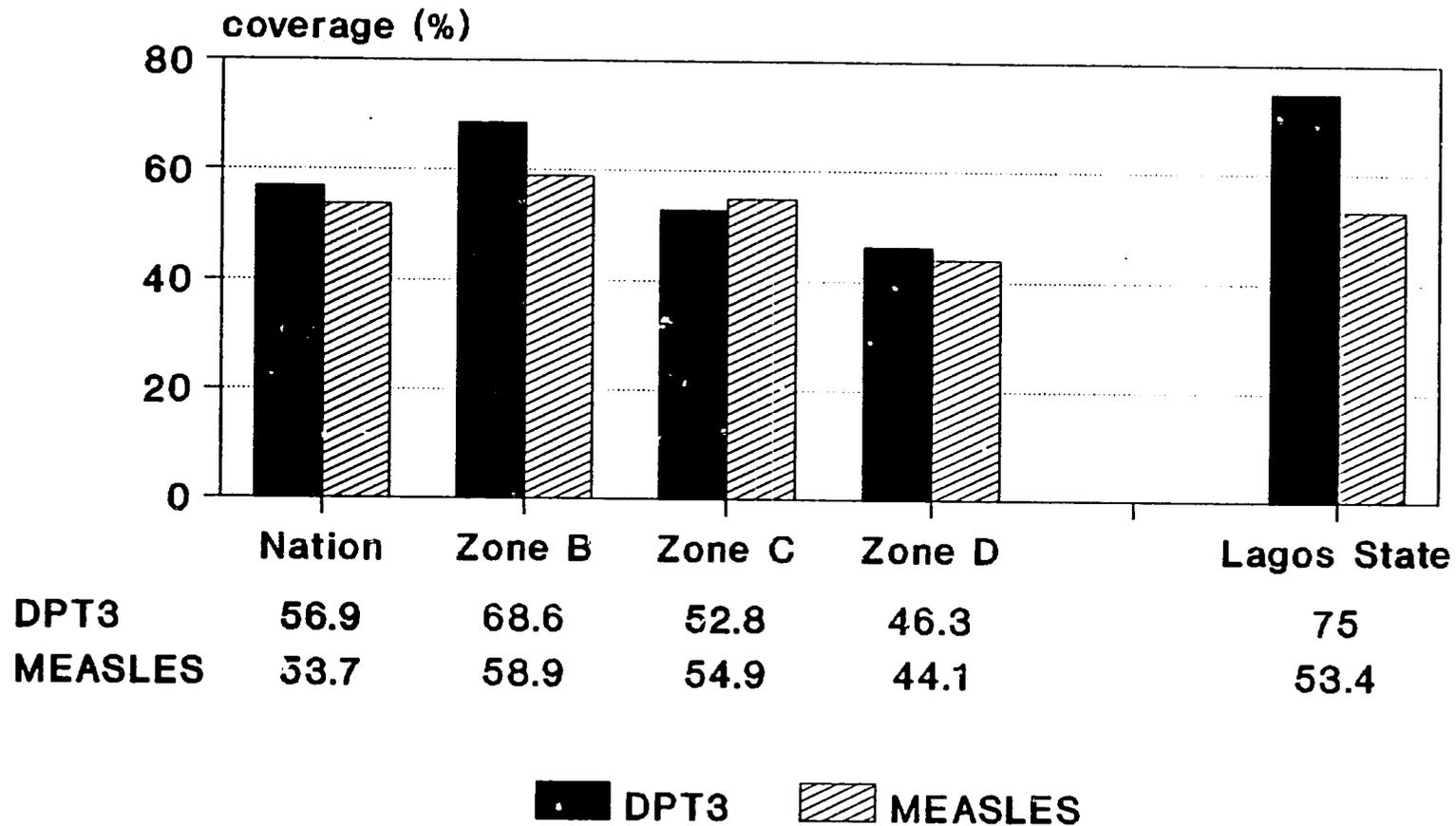
Indicator Lagos (N=22)	National (percent)	Zone B (percent)	Zone C (percent)	Zone D (percent)	Lagos State (percent)	Rank Order*
Accessibility						
-proportion with any immunization	96.3	95.7	97.3	96.3	97.6	13
DPT3 coverage by 12 months, crude	62.3	73.4	58.4	51.1	80.0	6
Measles coverage						
-crude	84.7	81.9	90.3	82.5	77.5	17
-valid, card & history	77.0	75.6	80.5	72.6	66.8	19
-valid, card only	69.3	67.5	73.8	63.8	56.9	18
Measles coverage by 12 months						
-crude	60.9	64.9	64.4	52.9	63.7	12
-valid, card & history	53.7	58.9	54.9	44.1	53.4	13
-valid, card only	48.7	53.1	51.0	38.8	45.5	14
Drop-out rates, crude						
-DPT1 to DPT3	14.7	12.7	10.8	22.7	9.0	8
-DPT1 to measles	10.7	13.4	6.9	11.9	18.6	21
-DPT3 to measles	none	0.8	none	none	10.5	22
Proportion of measles doses, crude						
-before 12 months old	71.9	79.2	71.3	64.1	82.2	5
-before 36 weeks old	8.9	7.8	11.0	11.4	13.8	18
Missed opportunities for measles immunization						
-proportion corrected	19.1	12.1	21.6	29.2	7.6	4
-proportion corrected	65.4	65.3	85.2	51.4	38.2	21
Proportion of measles doses by private sector						
-proportion corrected	3.3	5.7	0.8	0.8	18.5	1

* a rank order of 1 signifies the best performance

Source: based on data presented in FMOH, Lagos - Expanded Program on Immunization. National Coverage Survey. (Preliminary Report: 18 April 1991)

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Levels of DPT3 and Measles Immunization Coverage by 12 Months of Age, in Nigeria Zones B-D and Lagos State, 1991



Source: FMOH

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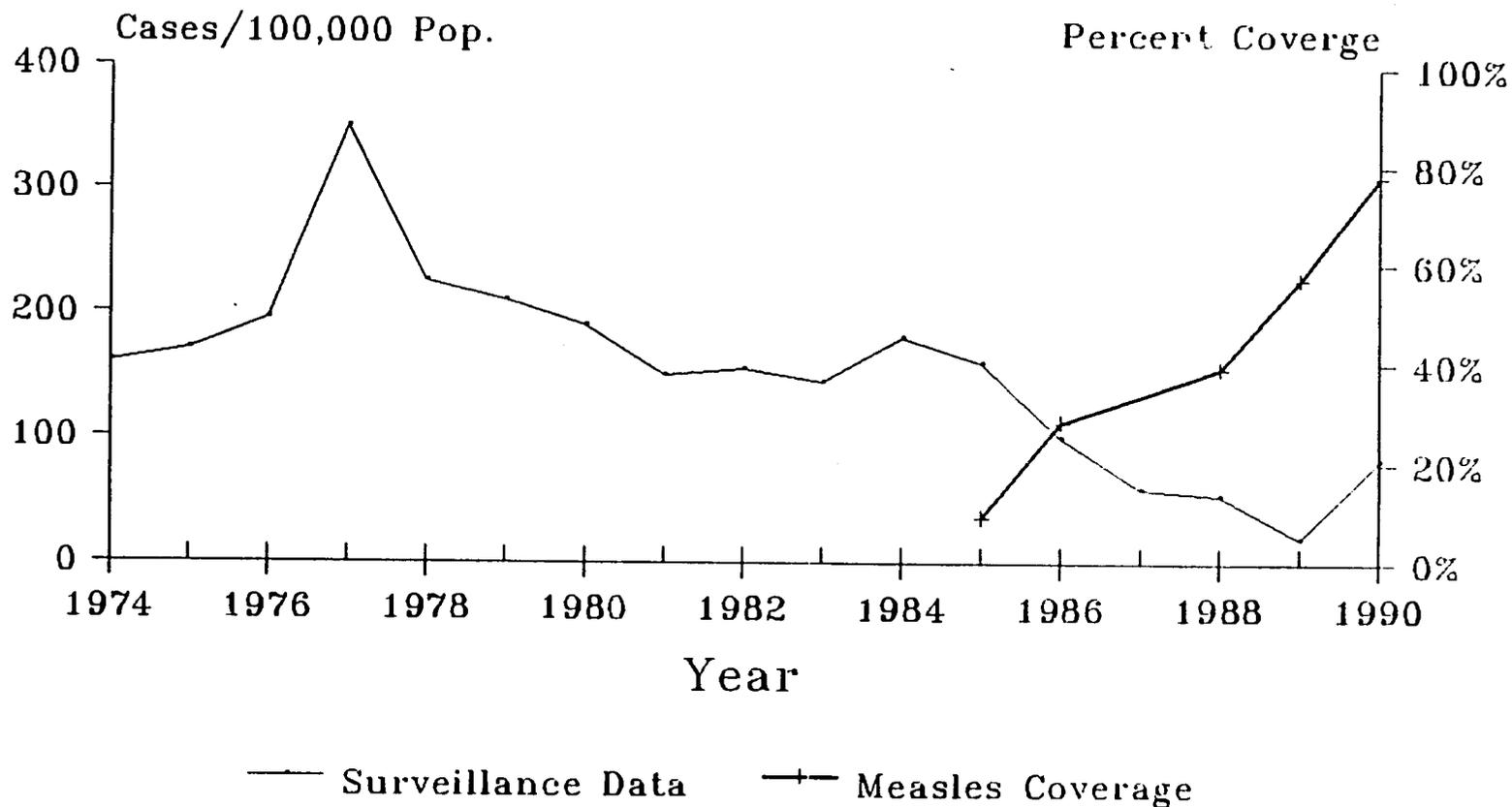
Appendix 4

Some Urban-Specific Opportunities for the EPI

- **Microplanning of Strategies**
- **Two Dose Schedule**
- **Individual City EPI Plans**
- **Develop Assessment Tools for EPI**
- **Gear up Social Mobilization in Cities**
- **Role of the Private Sector**
- **Reduce Missed Opportunities**
- **Inter-Sectoral Aspects of urban EPI**
- **Eventual Integration of Health Services in Cities**

Measles Incidence and Coverage by Year

Incidence - Per 100,000 Population
 Coverage - Percent Vaccinated - Measles



Source: Epidemiological Unit, Lagos
 1986-Cap.LGA's-Meas 11-23mo correct age
 1991-EPI Coverage Survey

Appendix 6

Scope of Work

Follow-Up Visit for Nigerian urban EPI Programming

After preliminary REACH visit to Nigeria to determine interest and possibilities for future urban EPI interventions in one or more cities, a follow-on visit is recommended to:

- conduct in-depth review of urban-specific EPI needs;
- work with government and donors to determine which city(s) should be scheduled for intensified EPI efforts;
- prepare work plans for urban EPI activities to be implemented during next two year period.

Specifically, the follow-on visit will be organized as follows:

- a) Review, with FMOH, the status of urban EPI in Lagos in one LGA. This would include: determine the extent of immunization coverage and vaccine-preventable diseases in urban areas and the quality of surveillance and monitoring. Sources of information would be coverage data, vaccine use and disease incidence. Of particular interest will be the lowest income urban neighborhoods.
- b) Conduct an urban needs assessment in one LGA which would include: clearly demarcating physical boundaries, demographics, establishing an urban "poverty threshold," locating low income neighborhoods, understanding urban social structure and communications for various EPI target populations.
- c) Identify the various partners (public and private) responsible (or potentially) for EPI services in the LGA, including assessing how responsibilities for an urban EPI effort could be shared.
- d) Review the existing public health service structure in terms of: existence and/or location of fixed health facilities, health personnel, supplies and equipment, logistic needs, training needs and any resource gaps.
- e) Determine the social mobilization/communications needs for the LGA in EPI.
- f) Review FMOH plans (as well as state and LGA) for integration of EPI and other health services.
- g) Identify realistic roles for the public as well as the private sectors for the above.
- h) Upon completion of a) through g) above, assist FMOH (with substantial donor consultation with CCCD and UNICEF) in creating detailed plans of action for the LGA. The plans will also consider eventual goals of national policy formulation for urban EPI and other PHC.
- i) The team will work with USAID and FMOH to identify and recruit one or two national urban EPI officers who will be responsible for implementing the plans of action with government.
- j) REACH will supply 1.64 person months of TA to conduct this work with one medical

epidemiologist experienced in urban EPI and one urban planner experienced in urban EPI planning. Ideally, the visit will be scheduled for 3 weeks in February 1992. REACH core funds will support all costs associated with consultants.

- k) The FMOH has agreed to detach two full-time counterparts to the team who would work with them at all times, including making necessary field visits within the city.
- l) Finally, the team will identify resource requirements and source of funds to finance implementation of work plans.

Appendix 7

REACH Statement of Purpose: Urban EPI

I. PURPOSE

REACH has been active in the development, implementation and evaluation of urban EPI activities since 1986. By the end of the project, REACH hopes to foster urban EPI program development in at least four countries and to document these experiences for use by others.

II. RATIONALE

The rate of urbanization and urban growth is increasing. In sub-Saharan Africa an increase of 382 percent in the total population of urban areas is expected between 1975 and the year 2000. The number of cities in Africa of over 500,000 inhabitants has grown from 3 in 1969 to 28 in 1980. The demographic, epidemiological, sociological and logistical implications of such a rapid rate of urbanization and urban growth for delivering health services, including immunizations, are just beginning to be discussed.

While health statistics may show that average infant and child mortality is substantially lower in urban areas compared to rural areas, that accessibility on the whole to health services is higher, and EPI coverage may also be higher, averages often obscure the nature of poverty. Specifically, the data obscure the extreme health conditions existing in urban slum and squatter areas.

Urban areas deserve priority for immunization programs because the high birth rate, crowded living conditions, and continuous influx of new susceptibles from rural areas perpetuate disease transmission. In Niamey, Niger with a coverage of 73%, a recent outbreak of measles occurred, with approximately 22% of cases in children < 9 months and a hospitalized case-fatality rate of 33%.

"Chains of transmission" of the EPI target diseases often begin in cities and spread to rural areas. This is especially true of measles and pertussis.

III. PRIORITIES FOR REACH

1. **To foster interest among donors and host country governments for the development of urban EPI**
 - a. collaborate with UNICEF/WHO/Rotary and other NGOs in organizing and sponsoring an urban EPI meeting in a working urban EPI site
 - b. document urban EPI experience in select countries where urban EPIs exist
 - c. commission papers on urban EPI which focus on policy issues and case studies
 - d. present information on urban EPI at international meetings
 - e. collaborate with other agencies (e.g., WASH, World Bank, UNICEF) working in urban areas

- 2. To assess problem and design appropriate control strategies for EPI**
 - a. develop detailed methodology to assess/review the existing urban health delivery situation
 - b. identify field sites for an urban EPI initiative
 - c. convene core group about every six months to periodically review urban EPI approaches
 - d. collaborate with UNICEF in analyzing urban data on EPI coverage
- 3. To improve efficacy of existing services**
 - a. conduct facility assessments to identify service delivery problems-gaps in service and to evaluate improvement after training and supervision
 - b. identify reasons for community attendance at various health facilities
 - c. conduct studies on missed opportunities
- 4. To provide information on methods of materials relevant to urban realities**
 - a. conduct study of communication work being done in Bangladesh, Philippines and Indonesia to identify communication and health education methods that work in urban areas
 - b. assess usefulness of various groups (e.g., schools, industry, etc.) in motivating, educating and referring persons for immunizations
- 5. To develop appropriate tools to monitor and evaluate EPI**
 - a. assess utility of standard coverage survey methodology in obtaining accurate data on coverage
 - b. identify and field test other methodologies like LQAS (Lot Quality Assurance Sampling), registers, census to identify and reach poorly covered neighborhoods
 - c. develop surveillance tool for measles, polio and NNT in urban areas

Appendix 8

Persons Contacted

Federal Ministry of Health

Dr. A.O. Sorungbe, Director for Primary Health Care
Dr. M.D. Adedeji, Assistant Director, EPI/CDD/ARI (PHC)
Mrs. S.O. Lawani, Senior Health Planning Officer, EPI/CDD/ARI
Mrs. F. Asoegwu, Senior Scientific Officer, EPI/CDD/ARI
Dr. M.Y. Salami, Mushin LGA

Ojo LGA

Dr. O.O. Campbell, Medical Officer of Health
Mr. J.A. Ogunkoya, Supervisor for Health and PHC Services
Mrs. R.O. Oboise, Assistant Chief Nursing Officer, Alaba PHC Center

USAID/Lagos

Mr. Gene Chiavaroli, A.I.D. Affairs Officer
Mr. Modupe Broderick, TAACS Advisor
Mr. Rudy Thomas, Program Officer
Mr. Robert Boncy, REDSO/West Africa

CCCD

Dr. Rick Spiegel, Epidemiologist
Mr. James Herrington, USAID/CCCD Consultant
Dr. Stanley Foster, CDC, Atlanta
Dr. Andrew Vernon, CDC, Atlanta
Mr. David Bassett, CDC, Atlanta
Ms. Helen Nwabuoko, Project Assistant Joel Breman, CDC, Atlanta

UNICEF

Mr. Cristian Laubjerg, Senior Program Officer
Dr. V.P. Kimati, Chief, Health Section
Dr. K.S. Mung, Program Officer
Ms. Rosemary Wellington, Communications Officer
Mr. Rogelio Tangara, Community Participation Officer

WHO

Dr. H.C.A.M. van Vliet, Epidemiologist

Other

Mr. Frank Nwaokolo, JSI (FHS Project)
Mr. Tony Agboola, Consultant, FHS Project

Appendix 9

Designing the Social Marketing Intervention on urban EPI in Lagos State, Nigeria: A Decision-making Guide

A. OBJECTIVE OF THIS DOCUMENT:

1. To identify questions that a communication specialist/health educator will need to address in order to be able to design a communication/social marketing intervention for the Urban EPI program. These questions include: the nature of the problem being addressed; the segment of the population to be targeted; the distribution of vaccines, supplies and communication materials; the barriers to improved measles coverage; and the benefits that the mother perceives in having the child immunized against measles.
2. To propose a process of formative research, using both quantitative and qualitative information, to provide the information upon which a social marketing/communication strategy for an Urban EPI program can be developed, implemented and evaluated.
3. To identify a broad-based, generic work plan which can be used in the planning, implementation and monitoring of the social marketing/communication component of the Urban EPI program.

Considering the extremely limited time available on this trip, the work plan, decision-making guide and formative research agenda are presented as suggestions to the Planning team from the REACH project who will be in country for a 3 week period in February.

Following are key decisions that a communication specialist will need to reach to design the social marketing/communication intervention. The communicator has to make these decisions jointly with the EPI program manager.

1. Determine expected outcome of the intervention.

Specify the outcome indicators for the intervention. Outcomes may be defined as increasing measles immunization coverage by a certain percentage over baseline coverage; it may concern morbidity/mortality reduction; it may target population segments with a high-risk of dying when infected with measles; it may choose to reduce immunization drop-out rates from DPT3 to measles immunization. The intervention may be aimed at measles control or measles elimination or measles eradication.

This decision will be reached by determining resource requirements-vaccines and syringes, communication support materials, logistics for supervision, the epidemiology of the disease and the means currently available in the public health program to achieve the goals of control, elimination or eradication and overall feasibility of implementing such an intervention.

2. Identify means of achieving objectives.

To attain a given objective, there needs to be specific actions taken by the health workers to provide the immunization service and to inform and motivate mothers. Mothers, on the other hand, will need to change health practices for new practices which will lead to the attainment of the objectives of the intervention such as the increase of measles immunization coverage. New behaviors to be promoted should be practical and do-able. Supportive mechanisms should be developed so that mothers and health workers will find the new behaviors rewarding.

Select a practical communication goal given available resources. Specify whether the communication task is to:

- teach new knowledge (have your child immunized against measles as soon as he or she becomes 9 months old, assuming this knowledge was absent)
- change an attitude (at 6 months of age, the child is strong enough and no longer needs a watchful, intensive care of the child's health. This relaxed attitude about child care may lead a mother to forget to take the child for measles immunization at 9 months of age)
- promote a specific benefit (if my child is immunized against measles, I will not have to worry about complications)
- establish a new behavior (get mothers to have tetanus toxoid immunization as another way of protecting her child's health).

Aside from stating a clear communication goal, determine whether other elements in the program are functional such as the distribution of vaccines and supplies. The success of a communication effort hinges on the availability of high quality health services.

3. Design strategy

a. Choose behavior or health practice to promote:

Mothers' behavior needs to change in very specific ways so that the program goals will be achieved. Health worker behavior will also need to provide mothers the support and encouragement they need to carry out new health practices.

It is important to determine if the adoption of the new health practices will lead to the attainment of the goals of the intervention, in terms of the outcome indicators identified in number 1.

b. Choose the audience segments whose behavior you would like to change.

The target audience is specified in terms of key characteristics such as: demographics; current health practices, including child care and immunization; beliefs and perceptions about immunizable diseases. The more specific the description of the target audience, the greater the likelihood that the communicator will be able to craft messages that are meaningful to a given audience.

The target audience for EPI programs are the caretakers of children under one year of age, usually the mother. Women and children are the beneficiaries of immunization programs, but messages are aimed at the person who makes the decision to take the child for immunization. In the case of tetanus toxoid immunization, the mother herself may be the primary target audience for messages. Husbands, if they influence the mother's decision, should also be targeted with specific messages.

The audience segments chosen must be large enough to achieve a public health impact.

- Communications are aimed at segments which are relevant to the attainment of the intervention's goals.

For example, if the intervention's objective is to reduce the dropout rates from DPT3 to measles, there are several questions that need to be answered before a decision on the target audience can be reached.

- Should the intervention reach those mothers who are already visiting health centers or should it bring in those that are currently "out of the system"?
- Should it communicate with those who have started immunization on time and convince them that it is best to finish the immunization series on time? (Increase on-time start and on-time finish; reduce delayers.)
- Should the intervention communicate primarily with health workers to reduce missed opportunities by convincing health workers to immunize at every single opportunity and by providing them the supportive mechanisms of vaccine supply, training, supervision, counselling and monitoring?
- Should the intervention also communicate with mothers to convince them to take their child to the health center for measles immunization as soon as the child reaches 9 months of age, even if the main focus of the communication will be health workers? This approach may be valuable if the diagnosis of the Urban EPI problem points to missed opportunities as the primary reason for low measles immunization coverage rates.

c. Choose messages and channels of communication.

- The messages must focus on the "benefits" to the mother and her child of completing the immunization series. These benefits must be viewed from the perspective of the mother and not the EPI program management. To be persuasive, benefits have to communicate the mother's concerns and offer immunization as a means through which she attains the goals she has set for herself.
- Channels of communication will be chosen on the basis of its being considered a credible source of health and child care information and its power to reach the segments of the population that the intervention would like to target. Cost-effectiveness of the channels of communication and its replicability in other urban sites should also be considered. Multiple channels of communication are usually found effective and efficient.

All these key decisions are documented in a short paper, usually called a CREATIVE BRIEF, which is then discussed with all partners in implementation. Communication materials developed for the intervention are judged against the strategy outlined. Field activities, research and communication materials for radio/TV/print or for face-to-face communication have to be consistent with the decisions outlined in the CREATIVE BRIEF. Activities that do not support the strategy should not be undertaken and communication materials which do not conform to the strategy should not be disseminated. All inputs and activities should support the strategy laid out for the intervention.

B. AGENDA FOR FORMATIVE RESEARCH

1. Quantitative data

Quantitative data is needed to determine the extent to which certain health practices occur; to identify the EPI problems in an urban setting; to investigate the magnitude of the segments of the population where the EPI problems occur; to determine media use patterns in the community (radio listenership/TV viewership/print material readership).

A baseline coverage survey will be needed before the intervention is launched. A post-intervention coverage survey will also be required to provide a measure against which the impact of the intervention can be assessed.

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2. Qualitative data

Qualitative data will be useful in determining the reasons why mothers do not engage in the proposed health practices, such as completing measles immunization at 9-12 months of age. Qualitative research will allow the project team to explore motivations, beliefs and practices in more detail. Focus group discussions can be held with various groups such as: those mothers who have dropped out after DPT3; those who have been successful at having their children fully immunized; those who belong to a community-based organization which promotes child health; those mothers who do not visit the public health system and are therefore unreached by the health centers.

Behavioral trials among a small panel of cooperating mothers will help the project team design an intervention that will promote health practices that are do-able by the target groups. It will also provide valuable experience to the project team in honing the implementation systems for the intervention.

Materials pretesting will enable the communicators to determine if the messages are understood.

C. GENERAL WORK PLAN FOR THE INTERVENTION

1. Quantitative Research

A coverage survey can be undertaken. Media use questions can be added to the coverage survey.

2. Qualitative Research

Focus group discussions
Behavioral trials
Materials development and pretesting

3. Training of health workers

Quality assurance research can be undertaken to determine weaknesses in the system that jeopardize quality of care. These studies can investigate supervision, quality of face-to-face counselling done by health workers, immunization services.

4. Launch the intervention

Preparations for the formal launch of the intervention over the mass media (if mass media is to be used) can include social mobilization activities to ensure that the political leaders, community leaders are supportive of the intervention.

5. Routine monitoring of service delivery and communication activities.

Improvements should be made based on feedback obtained regarding services.

6. Post-intervention evaluation

Appendix 10

Quality Assurance

The last several decades in health services development has largely been a period of expansion of services to provide better coverage of underserved population segments, in effect, a focus on increasing the quantity of services. Although expansion to largely equitable distribution of services is by no means a finished task, it now is obvious that the time has come to focus more attention on the efficiency with which available resources are used. When the quality of services provided is much less than it could be, in effect a portion of the resources expended is wasted because the outcome of the service provided is less than it could be. Thus, relatively small investments in improved quality have the potential for substantial gain in effectiveness.

There are many definitions of quality of care. The most comprehensive includes facets of patient satisfaction with the service received, availability of drugs, supplies and other commodities required to serve the patient appropriately, and compliance by health workers with the technical specifications of their jobs. Quality assurance focuses primarily on helping workers do their jobs in a technically correct way. This is accomplished by making sure that they have the skills, the materials, and the information that they need to do so. The approach employed is development of appropriate standards of performance by health workers, effective training based on those standards, supervision and other forms of monitoring aimed at identifying gaps between standards and actual performance, development of feasible, sustainable solutions to problems identified, and information and logistical back-up.

The Honorable Minister of Health has stated that improving the quality of care in Nigeria now must be as important as expanding the coverage of services. Nigeria has made a good start on promoting better quality with its development of Standing Orders for some categories of health care providers and some health problems. It is our understanding, however, that Standing Orders have not been developed for all categories of workers. This is a task that should be considered, but that should involve in some substantive way the groups of health workers they target. In other words, while a high level of technical expertise is a necessary input to Standing Orders, those affected should participate to assure feasibility and internalization.

Supervision is a critical element of quality assurance. Nigeria already has some supervisory checklists (including some developed with CCCD assistance), but we were not able to review any. From what was described, they focus more on outcome assessment than on process and thus are more likely to note that problems exist but not to help explain why or what to do about them. Supervisors need to be trained to be problem-identifiers and solvers who work in conjunction with their supervisees. The supervisory training described to the team does not seem to be in this mode. The team observed one serious problem at one health center that should be caught by effective supervision, namely, a missed opportunity to immunize some pregnant women with TT. This failure to immunize was in direct contradiction to an effective FMOH policy in place, and almost certainly was not a one-time occurrence. Assistance in revamping the training of supervisors for more quality-orientation and development of additional tools to help supervisors with this job could be a very useful input of the urban EPI activities.

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Appendix 11

Suggested Schedule for urban EPI Planning Visit

Day 1

USAID, FMOH, UNICEF

Day 2

Rotary, Better Life for Rural Dwellers, Health Education

Pascal Fitsch, UNICEF epid. Zone B/Lagos State Government

Day 4

Meeting with FMOH - Decision on target LGA

Meetings with PVOs and others working directly in selected LGA.

Day 5

Work in Target LGA collecting data and talking with key staff

Day 6

Continue work in Target LGA - Identify Working Group

Day 7

Work in Target LGA

Day 8

Working Session with Key Actors in LGA Action Plan

Day 9

Prepare and Redraft Action Plan

Day 10

Workshop - Dissemination and Discussion to other Donors on Action Plan

Day 11-15

Follow up action on Plan - Consultant Visit Schedule; Interviews of Long-Term Consultant:
Memorandum of Understanding

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Appendix 12

Draft Memorandum of Understanding

I. BACKGROUND

At the World Summit for Children in September 1990, leaders of more than 150 countries committed themselves to targets for the reduction of immunizable diseases, including a world target of 90% reduction in measles incidence and 95% reduction in deaths due to measles by 1995. Internationally, implementation of this United States Government commitment is the task of the Agency for International Development (A.I.D.). In January 1991, A.I.D. Administrator Dr. Ronald Roskens and Health and Human Services Secretary Dr. Louis Sullivan were asked by President Bush to travel to Africa "to see what else America and others could do to advance child survival across that continent...." It was subsequently determined that the Agency should make a special effort to assist several key African governments in their efforts to reduce the impact of immunizable diseases on their children. In this effort, measles is accorded special emphasis because in most immunization programs it is the antigen with lowest coverage. In Nigeria, in accordance with the policy of the FMOH to try to improve coverage in urban areas, the focus of the urban EPI Activity will be on one urban Local Government Area (LGA) in the State of Lagos.

The overall A.I.D. Measles Initiative will assist programs simultaneously in three or four countries in Africa. While each country project will have unique aspects designed specifically around that country's needs, information on effective operational improvements will be shared. Thus, all of the countries, as well as others that are not directly part of this initiative, will benefit from the important lessons that are expected to be learned about means for improving the effectiveness of prevention and management of the target diseases. Funding for urban EPI through REACH has been identified for work through September 1993, with the possibility of additional funds from the Measles Initiative to carry on the work beyond that time. The current funds are additional to, and are not part of, the present bilateral agreement between the governments of Nigeria and the United States.

II. PURPOSE OF THIS COLLABORATION

As noted, the overall purpose of this collaboration between the A.I.D. urban EPI Activity and the Government of Nigeria Ministry of Health Expanded Programme on Immunization is to carry out a series of activities aimed at reducing morbidity and mortality in urban areas of Nigeria due to immunizable diseases. The basic strategy of this initiative will be to improve effective and sustainable coverage and, in the case of measles, to improve case management. Technical assistance will be provided by staff of the A.I.D.'s REACH Project. The work will be focused in one LGA to be selected jointly by the FMOH, USAID and REACH, with the ultimate agreement of the particular State and LGA involved. The lessons learned in the focus LGA about strengthening EPI and improving case management are expected to be applicable to many other LGAs in the country.

Specific objectives are to:

- Identify constraints on, and factors in, the immunization service system that are presently impeding the delivery of effective and efficient services; and
- Identify opportunities to eliminate those constraints or modify those factors that are impacting negatively on the system; and

- **Develop, test, and implement sustainable responses to the problems and opportunities that are identified.**

III. APPROACH AND RESPONSIBILITIES

Although FMOH/EPI, SMOH, the LGA and REACH each will have specific responsibilities in this project, the approach will be a highly collaborative one. The following general responsibilities are identified:

- REACH will provide technical expertise on a short-term basis to supplement that of FMOH, SMOH and the LGA in technical areas identified as needing strengthening;**
- REACH will supply one individual who will be both the technical officer resident in the focus LGA and the primary technical liaison between the FMOH/EPI, SMOH, the LGA, USAID/Nigeria and the REACH staff based in the United States;**
- REACH will provide additional financial resources required to carry out project activities in problem identification and solution development and testing; use of appropriate local consultants and organizations will be maximized in order to help develop additional local capacity for this work;**
- FMOH, SMOH and the LGA will provide staff appropriate in numbers and skill level to collaborate effectively in the process of identifying problems in the immunization system;**
- FMOH, SMOH and LGA staff will collaborate in developing, testing and implementing sustainable improvements to the system; the project will explore innovative modifications that appear to have significant positive impact on disease reduction, especially morbidity and mortality due to measles;**
- FMOH, SMOH and the LGA will facilitate access to various operational levels of the immunization and general service delivery system and also to information required to identify and resolve problems;**
- FMOH, SMOH, LGA and REACH will collaborate in the dissemination of lessons learned that may have useful application in the immunization programs of other LGAs in Nigeria and in other countries;**
- The Government of Nigeria agrees to exempt supplies, equipment and vehicles purchased for use in this project from all customs duties and sales taxes. FMOH will assist as feasible in the processing of papers required to assure that these items are obtained expeditiously and free of customs and duties.**

IV. KEY ACTIVITIES PRESENTLY IDENTIFIED

- Selection of the focus LGA (2/92);**
- Urban EPI Planning by FMOH, SMOH, LGA team, including Dr. Felicity Cutts and Ken Olivola from REACH (2/92);**
- Analysis of coverage data and information obtained by Planning Team to help identify major**

constraints and problems in the immunization system (2/92);

- d) Preparation of detailed implementation plan for resolution of Urban EPI problems identified;
- e) Identify and orient resident technical officer (2/92);
- f) Determine indicators for tracking sustained improvement in the system (3/92);
- g) Implement activities in the long-term plan (3/92 - 8/93);
- h) Monitor progress against indicators and report on a regular basis to the FMOH/EPI, SMOH, LGAs, USAID/Nigeria, appropriate donor agencies in Nigeria, and A.I.D./Washington;
- i) Document and disseminate information regarding improvements in the system and progress achieved.

This Memorandum of Understanding is accepted.

For REACH

For the Government of
Nigeria Ministry of Health

For USAID/Lagos

Title

Title

Title

Date

Date

Date

AS

Appendix 13

Summary of Conversation with Dr. Adedeji

Date: January 22, 1992

Present: Dr. Adediji, Mrs. Lawan, Mrs. Asegwu, R. Clay, C. Verzosa, S. Blumenfeld, R. Steinglass

1. Government views on urban EPI

- Lagos State selected for focus
- Urban EPI will be part of overall immunization work
- Urban EPI is included in 1992 Government work plan
- Two staff from EPI FMOH will work with consultant team:
 - Mrs. S.O. Lawan
 - Mrs. F. Asegwu

2. Geographic Focus

- Out of 15 LGAs in Lagos State:
 - 6 urban
 - 3 rural
 - 6 urban-rural
- Mushin LGA seems good possibility for urban focus as it is highly and densely populated and poor
- LGAs need management assistance due to decentralization

3. Timetable for planning team consultants' visit

(See Appendix 11)

- need to select SMOH and LGA counterparts
- important to get donor involvement early

4. Working group for urban EPI

- include those involved in EPI in selected urban area
- need to include communications specialist

5. Memorandum of Understanding

- need for a MOU between FMOH, SMOH and USAID on roles and responsibility for urban EPI

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- current team will prepare a first draft to be further developed and finalized during the planning visit of Dr. Cutts and Mr. Olivola

6. Scope of Work for Dr. Cutts and Mr. Olivola

- Team will review and, if necessary, revise scope of work based on their visit this week and FMOH will set up initial appointments