

PNACE-085

**DEVELOPING AN APPROACH TO
A REVIEW OF IMMUNIZATION
IN AFRICA
NOTES FROM WHO/AFRO MEETING**

June 8-13, 1998

Abidjan, Cote d'Ivoire

Stan Foster

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BASICS consultant Dr Stan Foster went to Abidjan, Côte d'Ivoire, on June 8-13, 1998, to participate in a meeting organized by WHO/AFRO to review the status of EPI in Africa. This meeting served as the basis for developing an approach for conducting this review, which had been requested of WHO/AFRO at the December 1997 meeting of the Task Force for Immunization (TFI). The results of the meeting in Abidjan are found in the appendix.

APPENDIX
Meeting Conclusions

EXPANDING THE BENEFITS OF IMMUNIZATION TO ALL AFRICAN CHILDREN 1999-2008

BACKGROUND

- EPI in Africa is in transition as evidenced by the introduction of National Immunization Days (NIDs), the increased attention being given to quality, the strengthening of disease surveillance, and the increased priority being given to disease reduction
- To meet the changing needs of immunization in Africa and to better support the member countries, WHO/AFRO/EPI is reassessing its vision for immunization in the 21st century and identifying priority needs for regional leadership and support
- Concurrently, WHO AFRO is preparing for the upcoming December 1998 annual Task Force on Immunization (TFI) to review progress and challenges
- To provide a preliminary assessment of current status and future directions, WHO convened a small group in Abidjan, Cote d'Ivoire from June 10-12, 1998¹

EPI PROGRESS IN AFRICA

Over the last five years, African countries have made significant progress in the provision of immunization services including

- Increased country understanding of and commitment to immunization
- Increased program emphasis on quality, surveillance, and disease reduction
- Increased public awareness of immunization through social mobilization
- Strengthened linkages in the integrated delivery of health services preventive services such as weighing and counseling, vitamin A administration, and screening and referral, and curative services, e.g., immunization component of Integrated Management of Childhood Illness (IMCI)
- A reversal in the downward trend in immunization coverage with current levels equaling or exceeding those reported in the early nineties
- An estimated one million childhood deaths being prevented annually
- The initiation of NIDs in 36 countries
- Increased political advocacy for polio eradication such as being provided by President Mandela of South Africa, the first lady of Ghana, and the OAU
- The utilization of national NIDs for Vitamin A distribution (several countries) and measles catch-up (some countries)
- The addition of Hepatitis B to routine immunization in 5 countries
- The establishment of integrated active surveillance for AFP, YF, Measles, Meningitis, and Cholera
- Increased regional financial support for immunization through new and renewed partnerships from \$2 million in 1994 to \$32 million dollars in 1998

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- Increase in number of WHO staff supporting immunization at country, subregional, and national levels from 5-73
- Development of laboratory network to identify enteric viruses including polio

ACHIEVED AND EXPECTED BENEFITS OF POLIO ERADICATION

- The polio emphasis within EPI is strengthening planning, social mobilization, and disease surveillance
- With polio transmission stopped in east Asia and decreased on the subcontinent and in the middle east, Africa will be the last battleground where victory over polio will be achieved. Victory over polio requires three concurrent strategies: 1) high coverage through routine immunization, 2) NIDs, and 3) an AFP surveillance system identifying => 1 case of AFP per 100,000 under 15s
- When global polio eradication is achieved and polio immunization is terminated, the world will have an estimated economic benefit of 1.6 billion dollars per year

SUGGESTED EPI VISION FOR 1999-2008

Improve the health of African children through the eradication of poliomyelitis, the prevention of Yellow Fever epidemics, and the reduction of morbidity, disability, and mortality of diseases preventable by immunization including measles, neonatal tetanus, and hepatitis B

PROPOSED GOALS FOR 1999-2008

- 1 Strengthen the capacities of communities, districts, and countries to ensure universal access to immunization to all children in the first year of life
- 2 Ensure that each immunization contact meets defined standards of performance regarding vaccine potency, cold chain, screening, dilution, injection safety, vaccine administration, and counseling
- 3 In partnership with communities, achieve targeted levels of coverage
- 4 Develop capacity to collect and use information at all levels to measure progress toward coverage and disease reduction targets and to identify and solve barriers

CONTEXT

- Over its 25 year history, EPI has adapted to new challenges (technical, operational, economic, and political). Among the challenges currently being addressed are 1) health reform and decentralization, 2) disease surveillance, and 3) polio eradication
- EPI has and continues to be built on disease epidemiology and technical interventions
- Considering that African children are most at risk of disability and death from diseases preventable by immunization, the reduction of disease burden of 50% is impressive
- Equally important is the fact the half the burden of disease, 50%, is not being prevented
- As immunization is increasingly integrated into the delivery of other primary

health care services, EPI has an opportunity to share its operational and technical expertise, and practice of disease surveillance, and to gain Gains will include an increase in access to high risk populations and an expansion in the number of workers addressing immunization

- As the PHC component with greatest access to the population, EPI has the opportunity to increase linkages with families and communities

ISSUES

Seven priority issues were identified as important to improving the quality, coverage, and impact of immunization in Africa These issues are described below together with potential actions

ISSUE 1 - POLITICAL UNDERSTANDING AND COMMITMENT

- Changes in governments and key personnel often result in health decision making being placed in the hands of individuals unfamiliar and or uncommitted to immunization
- While the public exposure of NIDs are usually recognized as politically popular and supported, many leaders lack this same enthusiasm for routine immunization
- Global support for immunization including advocacy with national leaders has decreased

ACTION 1- STRENGTHENING POLITICAL COMMITMENT

- In each country, key decision makers need to be identified, and effective channels of communications defined and established
- Key leaders need to be informed about the benefits of immunization and the key roles that their leadership can provide
- Involvement in the political process is essential to ensure visibility, and funding
- In each country, key advocates for immunization among government, private, voluntary, and partners need to be brought together (Immunization Coordination Committees-ICC) to coordinate sharing of information, advocacy, and problem solving

ISSUE 2 - EPI MANAGEMENT

Achievement of benefits of immunization requires leadership at the national level for advocacy, coordination, and technical support While positioning of EPI leadership will vary by country from traditional separate EPI programs to the restructuring within preventive services often associated with health reform and decentralization, e g , Zambia, Ghana, and Tanzania, there are a core set of central leadership/support functions that are required for effective immunization Weaknesses in any one of these nine areas jeopardizes success of immunization

ACTION 2 - STRENGTHENING LEADERSHIP OF EPI AT NATIONAL LEVEL

Listed below are the 9 key central functions needed to support immunization All WHO

staff visiting countries need to have the capacity to assess each of these 9 elements and to skillfully problem solve any deficiencies

- 1 Identification of an immunization focal point for leadership, advocacy, and communications
- 2 National planning including the establishment of quantitative targets for access, quality, coverage, and disease reduction
- 3 Development, review, and distribution of immunization policies and guidelines (As regional and global experience are continually developing new, safer, more effective, and more efficient immunization strategies, national policies and guidelines need to be reviewed on an annual basis to assess relevance of new global policies to the country)
- 4 Forecast, procure, store, and distribute vaccines
- 5 Oversee cold chain regarding number of units, condition, and needs for replacement, procure and distribute cold chain equipment, sterilization equipment, and needles/syringes meeting international standards
- 6 Develop and disseminate performance standards for vaccine potency, cold chain, screening, dilution, injection safety, vaccine administration, and counseling
- 7 Develop system to monitor quality of service delivery to identify and correct gaps between standards and performance
- 8 Coordinate the planning, logistics, and monitoring of special immunization events including National Immunization Days (NIDs) and campaigns
- 9 Coordinate disease surveillance to ensure an "information for action" mentality where essential data are collected with targeted use at community, district, national, regional, and international levels

ISSUE 3 - DISTRICT PLANNING, IMPLEMENTATION, AND MONITORING OF IMMUNIZATION

Increasingly throughout Africa, responsibility for planning, implementation, and monitoring are being decentralized to the district level. In terms of local relevance and accountability, decentralization has the potential to improve the quality and effectiveness of immunization. Achieving this potential, however, requires strengthening the capacities of districts to carry out essential planning, implementation, and monitoring functions. Recent reviews show variable capacity of districts to carry out these tasks. Some district programs are not meeting minimum standards in terms of safety and vaccine delivery.

ACTION 3 - STRENGTHENING DISTRICT CAPACITY TO PLAN, IMPLEMENT, AND MONITOR IMMUNIZATION ACTIVITIES

Following elements are essential for effective district management of immunization delivery. Districts can not be assumed to have these capacities. They need training, support, and monitoring in

- Local planning to ensure access to immunization for all living in the catchment

area Frequency of immunization may vary with risk of disease exposure, e g , daily vaccination in urban areas versus weekly or monthly in areas with lower disease risk

- Strengthen district capacity to plan and implement immunization in two settings
 - 1 As part of well child services, provide weighing and counseling, immunization, Vitamin A supplementation, screening and referral, and counseling
 - 2 As part of sick child services, the identification and vaccination of unvaccinated children This is especially true for measles immunization because of the high risk of nosocomial transmission of measles in sick child facilities (next week may be too late) Immunization of unvaccinated children is included in the IMCI algorithm
- Understanding of standards of performance, ability to communicate those standards to all those providing immunization
- Development of quality assessment tools for self, peer, and supervisory assessment to assess compliance of performance and standards, where gaps are identified utilize adult learning techniques to improve performance
- Strengthen district capacity to collect and use data to monitor program performance, and to identify/respond to priority conditions including AFP, yellow fever, meningitis, tetanus Facilitate district understanding and compliance with disease identification, investigation, and reporting

ISSUE 4 - LACK OF TECHNICAL KNOWLEDGE OR RESOURCES IN CERTAIN COUNTRIES

African countries vary in their capacity to plan, fund, implement and monitor immunization delivery services As the prime regional supporter of technical oversight and coordination in Africa, WHO in partnership with UNICEF, bilateral and multilateral agencies, Rotary International, and other partners, has the responsibility to identify and meet needs so as to maximize the effectiveness of available resources

ACTION 4 - PROVIDE AND FACILITATE TECHNICAL AND PROGRAM ASSISTANCE TO MEET THE NEEDS OF COUNTRIES

Listed below are the types of support identified as being needed to meet the needs of countries

- Provide policy and technical updates to countries
- Annually assess country performance in 9 essential functions listed above, where gaps are identified, institute corrective actions
- Respond to identified requests for support/technical assistance
- Coordinate and facilitate sub-regional, regional, and global disease control initiatives
- Coordinate the regional collection, interpretation, dissemination, and response to disease data provided by individual countries
- Ensure global awareness of national and regional achievements in immunization
- Maintain liaison with partners to facilitate recruitment and distribution of

supplementary resources

ISSUE 5 - MONITOR COUNTRY AND REGIONAL PROGRESS IN IMMUNIZATION

WHO, aided by major improvements in intra-Africa communications (phone, fax, e-mail), has made major improvements in creation simplified information systems which meet identified needs of data for action. Data are fed back to the countries the form of bulletins, special reports, and annual report. EPI has identified a need to use a small number of selected indicators to monitor individual country performance.

ACTION 5 - CREATE A WEB PAGE FOR EACH OF THE 46 AFRICAN COUNTRIES TO VISUALLY PROVIDE STATUS OF IMMUNIZATION PROGRESS AND NEEDS IN AFRICA

Creation of a home page for each country would increase immunization visibility of and accountability for governments, public, WHO, and partners. Listed below are items for consideration in designing the web pages. For countries without access to the web, printed copies will be provided.

IDENTIFICATION (annual update)

- Country Name
- Population (Total, <1, <15)
- Minister of Health
- Director of Preventive Services
- EPI Focal Point
- Surveillance Focal Point

PLANNING AND COORDINATION (annual update)

- Current Plan of Action (Year Start to Year Finish)
- Number of ICC meetings during year held and documented by minutes

ACCESS & COVERAGE (annual graphic showing trend over 10 years)

- BCG as a measure of access
- DPT3/Polio 3 as measure of program quality
- Measles as a measure of program impact
- HBV3 as an indicator in preventing long term sequelae

LOGISTICS (annual update)

- Percent days minimum vaccine stock level achieved during year
- Percent days safe central vaccine store temperature recorded

NATIONAL IMMUNIZATION DAYS (last 6 updated annually)

Date mm/yy	Age Target	OPV (#&%)	Measles #&%	Vitamin A (#&%)

SURVEILLANCE (graph 3 years updated monthly)

- Number subunit, e g , district, reports expected
- % reports received within 30 days
- Measles cases
- Neonatal tetanus cases
- Yellow Fever cases
- AFP rate per 100,000 <15 (target 1 0 cases of non-polio AFP per 100,000)
- % AFP cases with stool collection in 14 days
- % AFP cases with follow up examination at 60 days
- Polio diagnosis with stacked bar indicating cases diagnosed by lab or by residual paralysis at 60 days vs lack of follow up

SUSTAINABILITY (updated annually)

Budgetary Support to Immunization			
	Govt Line Item	Govt Other	External
Routine - Vaccine			
Routine- Cold Chain			
Routine - Other			
NIDs			

ISSUE 6 - LACK OF KNOWLEDGE OF OPTIMUM STRATEGIES AND PRACTICES

Although much can be gained from global EPI research and experience, Africa has unique problems which can only be addressed at the country and regional levels. Continued improvement in immunization in Africa will require a systematic process to identify and prioritize issues for study.

ACTION 6 - RESEARCH PRIORITIES

Identification of immunization research priorities for Africa requires a systematic assessment of needs and priorities. Issues identified at this meeting as worthy for consideration in development of a regional research agenda are listed below.

- Strategies to improve impact of measles immunization especially in urban areas are needed. Current strategy of immunization at 9 months, coverage at 80%, and vaccine efficacy of 80% will only reduce morbidity by 64%.
- Identification, investigation, and intervention testing in areas of low coverage.
- Development of more effective and efficient methods of integrated surveillance.
- Assess validity of administrative estimates of coverage - independent assessments of vaccination coverage, e.g., the USAID funded Demographic and Health Surveys, provides an opportunity to carry out an initial assessment of this issue.
- Assessment of injection safety and clinical waste disposal, development and testing of strategies to address identified gaps.
- Maximizing effectiveness of NIDs in reaching high risk populations.

ISSUE 7 - LACK OF RESOURCES

While most African countries are increasing their allocation of resources to immunization, global support for immunization has decreased and is focused more and more on disease specific problems than on routine immunization. Even for polio, such a strategy is short-sighted as high coverage with routine immunization is, along with NIDs and AFP surveillance, a key element of the polio elimination/eradication strategy.

ACTION 7 - DECREASE COSTS, INCREASE EFFICIENCY, and RECRUIT RESOURCES

- Increase efficiency in vaccine forecasting and procurement at the central level.
- Introduction of the new open vial strategy has the potential to reduce vaccine need and cost. Testing and verification of this assumption is needed.
- Certainly vaccine delivery strategies, e.g., weekly in remote rural areas, may not be cost effective, implementation strategies need to be assessed in terms of impact on coverage and cost effectiveness.
- National authorities need to increase their allocation of resources to human needs. Few interventions, if any, are as good an investment in health development as immunization.
- Democratization and transparency of finances are slowly increasing the efficiency of utilization of funds.
- As was a major advocacy tool in the early 90s, putting a human face on the numbers is needed to sensitize partners to the needs of immunization in Africa and the cost of non-support.
- Probably the best tool for resource recruitment is the sharing of the exciting results of the achievements of EPI in Africa.
- Potential for global polio eradication is also a powerful advocacy tool.
- As global polio eradication will benefit all countries of the world, the needs for Africa over the next 7 years need to be clearly articulated and presented.