SUSTAINING IMMUNISATION EFFORTS UNDER HEALTH REFORM:
CHALLENGES FOR AFRICA

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Taylor et al (1) defines sustainability of immunisation as the capacity of the health system to provide immunisation effectively over time with minimal external input. This definition was adapted from Save the Children (UK).

Countries in different parts of the world, Africa included, have or are implementing health reform. Different models are used. Some reforms involve only the health sector. In other countries the reforms involve other sectors as well, like the Civil Service and Local Government, thus making the whole exercise complex.

The approaches for health reform differ from country to country. However, they all aim at re-organising health services delivery system to become cost-effective, efficient and sustainable.

Several strategies are used either singly or in different combinations to bring about the expected changes effectively. Decentralisation targets at bringing authority and responsibility of health care services to the level closest to beneficiaries. Decentralisation is also expected to result in a better involvement and participation of the beneficiaries. Simple to drastic administrative and structural changes e.g. devolution, are taking place. Integration of generic functions (such as transport; health information systems; procurement, storage and distribution; supervision) aims at increasing cost-effectiveness.

Another aspect of health reform is that of rationalisation of health personnel through functional analysis and redeployment. For some countries, health sector reform also meant having sustainable health financing through re-programming of the national budget, and developing and expanding alternative health care financing such as cost-sharing, group (medical) insurance and community health funds (2).

Depending upon the strategies used and the initial preparations for the institutional changes and harmonisation of activities, experience from countries where health reform has been implemented has shown that the changes have stressed the already much challenged immunisation services in Africa. This paper outlines the different aspects that need to be
addressed to ensure that the benefits of immunisation in Africa are achieved and sustained. Examples included are based on experiences from Tanzania, a study conducted by BASICS in Zambia and Uganda and discussions at the Scientific Advisory Group of Experts (SAGE) meeting in June 1998 (3,4).

1. **Current status of immunisation services in Africa**

   Though immunisation goals to protect the world's children were established in 1974 by the World Health Assembly, most of the African countries started their immunisation programs during the first half of the 1980-Decade. Some of the countries conducted their immunisation services with a minimum set up. The services were mostly delivered as campaigns from the district level. The Universal Child Immunisation (UCI) campaign that was conducted during the second half of the 1980-Decade aimed at accelerating immunisation services. Even after the UCI campaign, countries of the Africa Region have remained behind in all indicators of immunisation.

Vaccination coverage levels for the third dose of DPT have remained the lowest among all WHO Regions. In 1997 the global vaccination coverage for DPT3 was 82%. The Africa region had coverage of 53% while all the other regions ranged between 82 and 93 percent. See Fig. 1: Coverage with third dose of DPT in infants by WHO Region, 1997 (5).

![Fig. 1 Coverage with third dose of DPT in infants, by WHO Region](image-url)
Even among the African countries themselves, there is a distinct inter- and intra-country variation of vaccination coverage levels. Table 1 below shows how the five epidemiological blocks differed in performance in 1997.

Table 1: Coverage with third dose DPT in Infants by Epidemiological Block, Africa Region, 1997

<table>
<thead>
<tr>
<th>Epidemiological Block</th>
<th>DPT3 Vaccination Coverage (%)</th>
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<tbody>
<tr>
<td>Central</td>
<td>37</td>
</tr>
<tr>
<td>Western</td>
<td>57</td>
</tr>
<tr>
<td>Eastern</td>
<td>59</td>
</tr>
<tr>
<td>Southern</td>
<td>74</td>
</tr>
<tr>
<td>Countries in Difficult Situation (CDS) *</td>
<td>45</td>
</tr>
<tr>
<td><strong>Africa Region</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

* Angola, Democratic Republic of Congo, Ethiopia, Nigeria

Source: WHO/AFRO

The burden of immune-preventable diseases, e.g. measles, is still high. See Fig.2 Reported measles cases by WHO Region, 1997 (5).
Out of the 702,298 cases of measles reported during 1997, 41.4% occurred in countries of the Africa Region (5).

Other diseases like yellow fever are re-emerging to become of public health importance in more countries on the continent of Africa. See Fig. 3: Countries at risk for yellow fever and having reported at least one outbreak, 1985 to 1998 (5). Though the reported cases show a high incidence, disease surveillance itself is not adequate (see Fig 4).
2. **Challenges for Africa**

The situation outlined above underscores the need for countries in Africa to improve immunisation services and to sustain them. Immunisation has been identified as one of the most cost-effective public health interventions (6).

The existing deficiencies are challenges for Africa. The on-going health reform provides an opportunity to utilise lessons learned to ensure that quality immunisation services are provided to all, safely and in an effective manner. The challenges are:

- **Economic crisis**
  Countries of Sub-Saharan Africa have been experiencing economic crisis since the 1980s. In the 1990s the GDP growth rate for these countries has been very low (OECD Report - The World in 2020). These slow growth rates have impacted on low revenue collections. Debt payments and emoluments are taking the bulk of whatever is available. Budget allocations may not always be honoured. This has in some cases hampered efforts such as the Vaccine Independence Initiative and Self-sufficiency.

- **Lack of national commitment and guidance**
  There is a heavy dependency on external support for immunisation services in African countries. It is the Governments' responsibility to mobilise and co-ordinate resources for the health of the nation.
  Some Governments lack national health plans that include immunisation services as a priority. In some cases there is no co-ordination among partner Ministries responsible for health services within the country (Ministries of Health and Local Government), with non-governmental institutions and with external partners.

- **Insufficient capacity in management skills**
  Government officers entrusted with leadership of immunisation services are not always trained in managerial skills.
  WHO conducted studies in 13 countries between November 1995 and December 1996. The studies showed that at least in five of the 13 countries reviewed, central and/or health facility level staff had no training in EPI management.

- **Shortage of trained service providers**
  African countries have always been faced with shortage of trained personnel in different disciplines of health care services. In the area of immunisation, shortage of trained service providers has been a problem. A country example shows that graduates are not employed because there are no funded posts at the local
authorities. The other situation is when staff posted to remote units will not report to work.

Health reform is in some countries implemented concurrently with Civil Service Reforms. This has lead to retrenchment of incumbent staff and a freeze for new employment. Where the exercise was not planned well, the problem of trained human resources worsened.

- **Inadequate infra-structure and logistics**

  This shortfall is manifest in two ways. One situation is that of an absolute lack of infrastructure as countries did not set up the systems with the establishment of their immunisation programs. The other situation is where the equipment is there but is old and not functioning. Only in a few cases has there been provision for continuous maintenance and replacement.

  This was revealed by the above-mentioned studies. Ten of the 13 countries had problems in the area of cold chain equipment, transport, vaccine stock management and vaccine handling procedures. These observations indicate that there will be no equity in accessibility of services and the quality of immunisation services is being compromised.

  Lack of standardisation has sometimes resulted to poor quality equipment and problems of maintenance.

- **Poor quality of immunisation services**

  Quality Assurance of services provided is key to effectiveness and utilisation rate. Nine of the countries studied by WHO were reported to have unsafe injection practices.

  Effective participatory supervision is lacking due to inadequate resources. In some countries, as a result of health reform, supervisors have been changed to accommodate new members of the District Health Management Teams. Where the members have not been prepared well enough for the new roles, the supervision conducted is very deficient.

  Rigid route schedules planned under the integrated district transport system have added to the problem. It takes long before support that is needed can be rendered to health facility staff.

- **Lack of quality surveillance data**

  Surveillance data is not always compiled, analysed or interpreted at the local level. It is sometimes incomplete and in many cases late. High-risk areas are not known or identified. As a result the data is not utilised as a management and planning tool.
Integration of health information system is targeted at rationalising data collection so that the data collected is reliable and usable. However, experience has shown that even with a lesser workload, the data collected is not used for action. Submission to the higher levels has become slower. Already gaps in information have been noted in some countries.

- **Insufficient involvement of beneficiaries**
  Communities as beneficiaries of immunisation services need to understand the benefits of immunisation. Community involvement instills a sense of ownership and encourages participation of marginalised groups. Appropriately involved they will demand, monitor and support provision of the services. This potential has not been addressed adequately.

- **Inadequate preparation for the transition period**
  Health reform is complex. They need proper preparation before implementation so that all involved are aware of the purpose and the process for achieving the changes. In some countries where preparations were not sufficient some of the stakeholders have confused the elimination of verticality with disintegration of routine activities such as monitoring and reporting.

- **Reduced efficiency due to decentralisation and integration**
  Lack of clear relevant up-dates on national policies and guidelines may lead to districts making independent and varying decisions on these issues, such as the vaccination schedule. Without a central level support, districts may purchase inappropriate immunisation supplies and equipment for vaccine storage. In some countries this has led to poor quality and lack of standardisation. Vaccines as special health commodities need extra care during storage and transport. Transferring the responsibility for storage and distribution without adequate recognition of cold chain requirements has led to loss of valuable and precious resources.

3. **Recommendations for sustaining immunisation efforts in Africa**
To ensure that quality immunisation services are provided equitably and effectively and are sustained, Governments and their partners have to address the different challenges according to their responsibilities. Immunisation services require both capital investment and recurrent expenditures. High-level management skills are a must for an efficient management of institutional changes as a result of reforms.
3.1 **Government responsibilities**

3.1.1 Establishing ownership for immunisation services

- Governments must have the political will and commitment to promote the health of the people. The Government should take strong leadership in prioritisation, co-ordination and resource mobilisation for immunisation services. The Ministry of Health, as a technical ministry, should liaise and co-ordinate with partner ministries and institutions so as to avoid conflict and duplication of efforts.

- There should be a long-term national health plan that covers priority issues, including immunisation, giving goals and targets. This plan should have contributions from different stakeholders (including staff from the field) using participatory planning methodologies. The plan should then be made available to all the districts to be used as a guide for their own plans. Financial contributions expected should also feature in the plan.

- According to economic development of the country, Governments should take up financing of immunisation services, including the cost of vaccines, either fully or partially. A specific budget line should be established and Ministries of Finance should honour the agreed allocation.

- Release of centrally allocated funds should be timely to avoid frustration and cancellation of planned activities.

- The Government and all the partners should establish a joint immunisation fund to enhance transparency and accountability.

- Government to enhance staff morale by establishing job security on merit.

3.1.2 Empowering the districts

- Orientate and prepare District Health Management Teams on health reform concept, plans for implementation and where responsibilities lie, and on related institutional changes.

- Have public health oriented District Medical Officers (DMOs) with a specific scheme of services.

- Governments to ensure that the district level has the capabilities and capacity to plan, implement and monitor immunisation services and to manage finances.
• Central level to make adequate preparations before handing over responsibility and authority to district PHC Heads (DMOs) to manage immunisation services.

3.1.3 Retain core functions at national level

To support efficiency of the districts and ensure adherence to national priorities and standards, the national level should retain certain core functions, either as direct responsibility or for co-ordination.

As national level responsibility:
• Development of national policies, standards and guidelines.
• Disseminating regular up-dates to districts and health training institutions on new developments in areas of immunisation.
• Procurement of vaccines and equipment.
• Resource mobilisation at the national level.
• International and inter-agency co-ordination.
• National level monitoring, surveillance and reporting, including cross-border and international notification.
• To provide feedback to lower level
• To organise periodic reviews

For co-ordination at the national level
• Collaboration with other Ministries involved in health and health-related activities (Local Government, Education, Community Development).
• Training
• Strategies for disease control and eradication
• Research

To accomplish the above functions and for continuity purposes, the national level should retain existing competent personnel (managers). Should that not be possible, then new staff are to be trained.

The national level should also organise regular evaluations of the integrated generic functions to ensure that efficiency and quality are maintained.

Though district teams are the most important supervisors, national level staff will have to conduct minimum supervision to districts so as to verify reports from the field.

3.2 Partner responsibilities
• Translate verbal commitment into concrete actions by supporting the Governments to take the lead in health reform; supporting local capacity building and institutional development; and participating in joint funding to enhance transparency and accountability of resources.
• Consistent support for what has been pledged.
• Technical partners should recognise the particular circumstances and constraints faced by individual countries, including the agenda for reforms, before recommending universal solutions.

3.3 **District responsibilities and obligations**

- To prepare district health plans according to local health problems and national priorities.
- To involve communities adequately so that they are a driving force and they participate in monitoring of immunisation services and their impact.
- To support delivery of immunisation services by: supplying inputs on time, regular supervision, technical up-dates and strengthening skills of the health workers.
- To monitor quality of services provided including monitoring of adverse events following immunisations (AEFI) for quick response.
- To ensure that quality surveillance data is available in a timely manner for use at local level and for national priority setting.
- To account for resources appropriately and in a timely manner.

While efforts are directed at sustaining the immunisation services, it is important that their outcome is measured. Core indicators are needed to monitor the status of immunisation during the transition period and beyond. For example the following basic indicators give early warning:
- timeliness and completeness of reporting;
- DPT3 coverage;
- drop-out rate DPT1 to Measles to measure programme continuity;
- incidence and age distribution of the targeted diseases.

4. **Conclusion**

Most countries of the African Region face different challenges in providing immunisation services. Although the technology is there, routine immunisation services are not succeeding in
realising the full potential of reducing the disease burden. Countries should use the opportunities offered by health reform to improve and sustain these services. The partners' sensitivity and support are crucial to complement the national efforts and objectives.
References:


