

Expanding the uptake of childhood vaccines in Kenya following introduction of pentavalent vaccine

In 2001, Kenya became the second country in Africa to introduce Hib-containing pentavalent vaccine (DTP-HepB-Hib) with support from the GAVI Alliance.¹ By the third year following introduction Hib disease was virtually eliminated.²

Introduction of a new vaccine is complex and may cause changes in the practices and perceptions of health care workers and parents toward the immunization program. In 2006, coverage of pentavalent vaccine in Kenya averaged 79% nationally with three provinces reporting at or below 75%.³ The drop out rate for the 3-dose vaccine approximated 19%, which, according to UNICEF guidelines, may point to possible issues regarding local health systems, including lack of knowledge by care providers or parents of the full three dose course.⁴ With the goal of sustaining vaccination and optimal coverage in the eligible population, the Hib Initiative conducted a program in Kenya to assess awareness of and demand for the vaccine.



Immunization materials (flyer and poster) developed as prototypes for promotion campaigns

To start, the Hib Initiative conducted formative research in order to identify key issues that impact sustainability of all childhood vaccines, to gather information that could inform future interventions, and to promote the development of behavior change communication materials promoting Hib-containing pentavalent vaccine.

Research findings were presented at a strategy development workshop to assist in identifying opportunities for expanding uptake of pentavalent vaccine. Workshop participants from the Ministry of Health and Sanitation and other immunization stakeholders from the public and private sectors developed a strategy for demand creation of the national immunization programme under the Division of Vaccines and Immunization. One result of the workshop was the formation of a technical committee that works with health communication experts to further develop and implement the communication strategy. In addition, the Hib Initiative commissioned communication experts to design prototype immunization campaign materials (examples pictured above) based on the recommendations made at the workshop and first technical committee meeting.

Overall, the program resulted in bringing together public and private sectors to develop a strategic approach towards the strengthening of health systems to increase uptake and better ensure sustainable vaccine decisions. The following summarizes program activities supported and facilitated by the Hib Initiative.

Update:

In 2008, Kenya was approved to receive GAVI support for introduction of pneumococcal vaccine.

Formative Research

Formative research was conducted during 2007 in order to identify opportunities for expanding the uptake of the new pentavalent vaccine in Kenya. The research was conducted in two sites (one high and one low performing site), Nairobi and Nyeri. Data was collected from existing documentation, Ministry of Health staff, immunization experts, funding sponsors, providers, key informants, and clients/parents. Using a range of qualitative methods, such as in-depth interviews and focus groups, the study collected information to identify the following:

1. *Knowledge, attitudes and practices concerning pneumonia and meningitis among stakeholders, providers, clients and key family decision-makers*
2. *Perceived barriers to immunization*
3. *Perceived benefits of immunization specifically pentavalent immunization*
4. *Recommendations on promotion efforts*

Findings of the study indicated that a considerable number of respondents believe that implementing and sustaining routine Hib immunization will prevent significant amounts of childhood morbidity and mortality. The demand for immunization services had generally increased, which was likely to be partially spurred by the requirement for childhood vaccinations prior to school admission. However, awareness of Hib vaccine among healthcare providers and community members was low. Additionally, many were unaware of which vaccines are contained in the pentavalent vaccine or that the vaccine protects against Hib pneumonia and meningitis.

Study findings highlighted the barriers most often faced by parents and caregivers when trying to access immunization services in Kenya. The most common barriers included busy providers, lack of spousal support, religious beliefs, poor client-provider relations and occasional service charge costs.

Recommendations were made for communication activities to address misinformation among the community members regarding the causes of pneumonia and meningitis. In addition, recommendations were made for the training of health service staff in order to improve vaccine knowledge, enabling more effective client-provider interactions. Long-term awareness campaigns and activities were viewed as essential throughout the country to improve understanding and increase demand for new vaccines.

Hib Vaccine Validation Workshop – Nairobi, Kenya

The workshop was held on April 23, 2008 at Lenana Mount Hotel in Nairobi, Kenya. The goal of the workshop was to identify opportunities for expanding uptake of Hib vaccine in Kenya and to develop a demand creation plan and key messages for the Hib vaccine communication strategy.

Individuals attended from the public and private sector as well as international development organizations. Attendees from the public sector included program, training and communication officers from the Kenyan Ministry of Health and Sanitation and researchers from the Kenyan Medical Research Institute (KEMRI). Attendees from the private sector included a clinical nurse instructor from Aga Khan University Hospital and vaccine managers from GlaxoSmith Kline and Sanofi Pasteur. In addition, representatives were present from WHO and JICA (Japan International Cooperation Agency).

The workshop included a discussion on the findings of the formative research and incorporated topics such as the cost of vaccines, vaccine awareness, the role of male parents, vaccine education and health worker training. A follow-up discussion ensued regarding the implications of the research findings.

As part of the workshop activities, participants worked together to define key audiences by identifying the motivations of the chosen audience and the rationale for choosing each audience segment. Key audiences included parents/caregivers, health care providers, and government officials. Secondary audiences included community groups and leaders, teachers, in-laws, health training institutions, international funding agencies, vaccine suppliers/manufacturers, and provincial administration. Workshop participants then developed key message concepts in relation to each target audience. In doing so, participants identified the barriers to reaching each audience and the best strategy for overcoming barriers. Participants also identified the most appropriate channels for reaching their target audience (e.g. health facilities, schools, community organizations, radio and newspapers).

A portion of the workshop was devoted to consensus building between the public and private sector about how to best develop and promote key messages in the future.

¹ The GAVI Alliance (formerly the Global Alliance for Vaccines and Immunisation) is a public-private partnership of major stakeholders in immunization and health system support.

² Cowgill KD, Ndiritu M, Nyiro J, Slack MPE, Chiphatsi S, Ismail A, Kaumau T, Mwangi I, English M, Newton C RJC, Feiken DR, Scott J A G. (2006). Effectiveness of *Haemophilus influenzae* type b conjugate vaccine introduction into routine childhood immunization in Kenya. *JAMA*, 296:671-678.

³ Immunization in Kenya, Ministry of Health. Accessed on February 04, 2007 from:

<http://www.health.go.ke/Immunisation1.htm>

⁴ UNICEF. The Progress of Nations 2000 Commentary: New Agenda for Vaccines. Accessed February 13, 2007 from: <http://www.unicef.org/pon00/>



The Hib Initiative

- The Hib Initiative aims to guide countries in making informed decisions regarding introduction or continuation of Hib vaccine programs in the context of other health problems and offers technical assistance and support in the following areas:
- Research and surveillance, planning coordination in decision making and implementation, and advocacy and communication support for GAVI-eligible countries
- The Hib Initiative works with GAVI-eligible countries in Africa to support decisions regarding Hib vaccine introduction and sustainable implementation into immunization programmes
- The Hib Initiative unites experts from Johns Hopkins Bloomberg School of Public Health, the London School of Hygiene and Tropical Medicine, the World Health Organization, and the Centers for Disease Control and Prevention (CDC)
- The Hib Initiative is supported by a 4-year grant from the GAVI Alliance (www.gavialliance.org)

www.hibaction.org