

Vaccination has been shown to be one of the most effective public health interventions. In the past ten years, many new vaccines have become available to low- and middle-income countries. The London School of Hygiene & Tropical Medicine carried out two studies, in collaboration with partners in eight countries, one exploring national decision-making processes around new vaccine adoption and another assessing the impact of new vaccines on country health systems.

## Cameroon

### Introducing PCV13

#### Study 1 Decision-making for new vaccine adoption

As new and improved vaccines become available, countries need to make decisions on which vaccines to adopt into their immunisation programmes. The 13-valent pneumococcal conjugate vaccine (PCV13) was introduced into routine childhood services in Cameroon in July 2011, with the support of funding from the GAVI alliance. This study investigated processes of national decision-making for new vaccine adoption and sought to understand the factors affecting these decisions in Cameroon.

#### Methods

Interviews were conducted with 11 key informants in Cameroon in February 2011, including Ministry of Public Health and Ministry of Finance officials, staff from UN and development agencies, clinicians and academics. Interviews focused on the decision to introduce PCV13, but Haemophilus influenzae type b (Hib) and rotavirus vaccines were also discussed.

#### Findings

##### Main actors

Only a small number of actors were directly involved in the decision-making process and, as expected, Ministry of Public Health officials played a key role. Interviewees noted the Minister of Public Health's support for child health and vaccination. The World Health Organization was considered an important stakeholder, providing information, support and advice to the Ministry of Public Health. Cameroon did not have a functional technical vaccine advisory committee in the period leading up to the vaccine decisions studied. Overall, there was wide consensus and support for the adoption of new vaccines and no dissenters. Researchers and clinicians were involved in advocacy and international agencies played a significant role in agenda setting. The Ministry of Finance did not appear to be influential in decisions to adopt new vaccines. The requirement for GAVI-funding applications led to more structured decision-making procedures, albeit performed in a more automated manner.

##### Key drivers of the decision

- The availability of GAVI funding was a major driver in the decision to adopt a new vaccine
- The burden of disease was also considered an important driver of vaccine adoption decisions
- Political prioritisation of immunisation was important in Cameroon and reaching Millennium Development Goal 4 on reducing child mortality, was considered a key driver
- Feasibility issues, including cold chain improvement, did not influence the decision, but tended to delay introduction
- Sustainability was a concern but not a hindrance to adoption

**CONCLUSION:** *The decision to adopt new vaccines in Cameroon was driven by an underlying desire to seize GAVI funding. The burden of disease and political prioritisation of vaccination were also important drivers.*

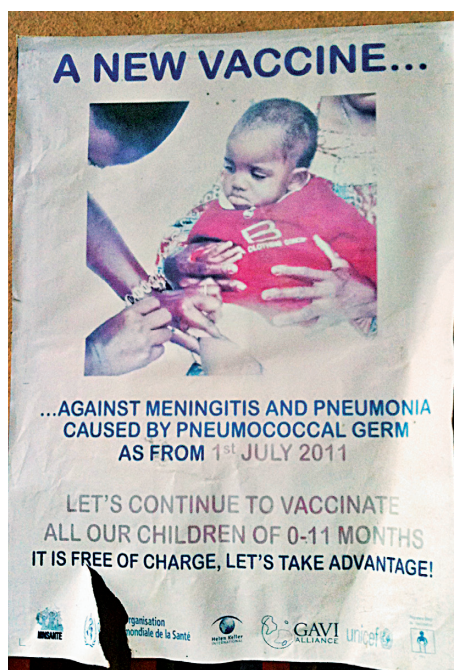
## Study 2

### Assessing the impact of PCV13 introduction on the health system

It is often hoped that introducing additional vaccines may help to strengthen immunisation programmes and health systems more broadly. There are also concerns, however, that such additions may prove to be an added stressor where resources are already overstretched. This study evaluated the impact of PCV13 introduction on Cameroon's immunisation programme and on its wider health system.

#### Methods

The study used a mixed methods approach and data were collected during May and June 2012, ten months after PCV13 introduction. Semi-structured interviews with 47 key informants were conducted at national, regional and district levels. Three districts in each of three administrative regions (Adamawa, Centre and Northwest) were selected for data collection. Structured questionnaires were completed with staff in 28 health facilities in these districts. Routine data on the number of antenatal visits, number of children vaccinated with PCV13 and pentavalent vaccines, adverse effects following immunisation



and number of reported cases of pneumonia, one year before and ten months after PCV13 introduction were collected from 28 health facilities and 9 districts. Data collection tools and data analysis were structured using the WHO health system building blocks framework.<sup>1</sup>

*"Overall everything went well, which demonstrates the system's capacity to absorb new interventions"*

National level interviewee

*"PCV13 was very positive for the EPI because training refreshes our minds on certain aspects that we tend to forget with routine activity"*

District-level interviewee

*"We are obliged to find resources for new vaccines while we still have trouble to finance traditional vaccines"*

National level interviewee

#### References

- 1 World Health Organization, *Everybody's business: strengthening health systems to improve health outcomes. WHO's Framework for Action*. Geneva: World Health Organization. 2007.

# Cameroon

#### Findings

Overall, the PCV13 vaccine was well-integrated and there were no major positive or negative impacts on Cameroon's immunisation programme or health system.

- There were no major changes to the routine immunisation programme following the new vaccine introduction, in particular service provision and supervision
- Strong demand for the new vaccine was reported
- Service utilisation was perceived to have increased, but this was not supported by routine data
- Staff motivation increased
- The majority of staff said there had been a temporary increase in workload at the time of introduction
- Key informants and health facility staff said that training had strengthened their skills, particularly, AEFI surveillance and injection safety
- The cold chain capacity was sufficient to accommodate the new vaccine except at district level, where some informants reported lack of capacity
- Reinforcement of the political commitment for the vaccination programme
- Concerns regarding future financial sustainability were reported as GAVI funding is expected to shrink in line with Cameroon's economic growth



Third photo clockwise: Sandra Mounier Jack; all other photos: Sergio Torres Rueda

**CONCLUSION:** Overall, the introduction of the new vaccine had no or limited effects on Cameroon's health system. The vaccine was well-incorporated into the immunisation programme and positive effects related to staff training and motivation. Negative effects, such as increase in workload, were temporary.