

Resumption of Post-Covid-19 Immunization Services: Reaching Every Child in Immunization in the Town of Atakpamé, Ogou 1 Commune, Ogou Health District, Plateaux Region, Togo

Wankpaouyare GMAKOUBA^{1,2*}, Auguste AMBENDET³, Kossi TARKPESSI¹, Ditorgue Kodjo ASSONDE⁴

¹ Ministry of Health and Public Hygiene, Lomé, Togo

² Birchigam International University.

³ Boost & SABIN

⁴ Direction Prefectorale de la Santé, Ogou

*Correspondence Author

DOI: <https://doi.org/10.51244/IJRSI.2024.1109047>

Received: 30 August 2024; Accepted: 04 September 2024; Published: 07 October 2024

BACKGROUND AND RATIONALE

Atakpamé is made up of urban and peri-urban (slum) neighbourhoods.

For urban and peri-urban populations, opportunity costs are high, deprivation is enormous particularly among peri-urban communities, recent arrivals are likely to lack health services yet the technology and strategies to reach these populations are available and effective (Unicef, 2018). According to the same source, there are growing disparities in vaccination coverage between rich and poor in the city, with coverage lower among the poor. The city is also the outbreak point for outbreaks, especially in peri-urban areas where highly mobile, poor populations live (WHO, 2017). High population density and promiscuity increase the spread of epidemics.

As the city of Atakpamé has a uniquely diverse internal population, specific strategies and targeted interventions were developed with stakeholders. In order to better understand the specific realities, the process included a situational analysis of immunization data, incorporated prioritization of areas and coordination by district and local representatives to ensure that the strategy put in place is operational.

This operational research aims to show the effect of the reach-every-child strategy on vaccination coverage for the second dose of measles-rubella vaccine.

Strategy objectives:

The strategy's objective is centered on that of the Immunization Agenda (IA) 2030 program. It aims to leave no one behind and reach 95% of the target.

Specific objectives

These are formulated in relation to a priority action.

Priority action 1: Vaccination in primary health care

By January 2023, vaccinate at least 95% of new births in the city of Atakpamé (indicators : percentage (%) of children under one year of age vaccinated against pentavalent 1; percentage (%) of children under one year of age vaccinated against pentavalent 3, percentage (%) of children under one year of age vaccinated against

measles-rubella, percentage (%) of mothers of eligible children vaccinated against tetanus and diphtheria compared with the monthly target).

Priority action 2: Leadership, governance and management

By January 2023, create an environment for effective coordination and performance monitoring at all levels of the HD (indicator: coordination mechanism put in place, number of community meetings held with the full participation of women's groups)

Priority action 3: Health personnel

By January 2023, train health workers and community members and leaders in immunization equity (indicator: number of staff trained in immunization equity, number of community actors trained).

Priority action 4: Disadvantaged populations

By January 2023, vaccinate at least 95% of new births in the city of Atakpamé (indicators: percentage (%) of children under one year of age vaccinated against pentavalent 1, percentage (%) of children vaccinated against zero (0) doses, percentage (%) of mothers of eligible children vaccinated against tetanus and diphtheria compared with the monthly target).

These three key performance indicators are chosen for a reason: experts and technical and financial partners look to these indicators to judge a country's EPI performance. Pentavalent1 immunization coverage is an indicator used to calculate zero-dose children (children who have never received a vaccine) according to the WHO (2022). Pentavalent 3 coverage is the showcase of a country's Expanded Program on Immunization (EPI), as it enables us to judge the ongoing use of services and the ability of health services to retain clients. The second dose of measles & rubella (RR2) shows the percentage of children correctly vaccinated or who have completed the vaccination series. Measles immunization coverage is an essential component of MDG3 indicator 3.b.1 (reflecting population coverage for all vaccines). According to AI 2030, measles immunization coverage and surveillance incidence are indicators of the strength of immunization programs, highlighting communities and age groups that are under- or unvaccinated and in need of increased attention.

What is being implemented and how?

The immunization equity strategy that has been in operation in Togo for several years has been strengthened. It aims to protect every person through full immunization, regardless of geographic location, age, socio-economic status or gender barriers. To improve equity of coverage, priority areas for action are focused on those of AI 2030, which are:

- a) Disadvantaged populations: The aim is to detect and remedy low lifelong coverage rates among the poorest and most disadvantaged individuals and communities.
- b) Barriers to immunization: this involves identifying barriers to access to immunization services due to age, geographical location, social, cultural and gender factors, and using evidence-based approaches to overcome these barriers in order to achieve high and equitable coverage.
- c) Gender-sensitive strategies: involves understanding the role of gender in access to immunization services, and using gender-sensitive strategies to overcome barriers faced by beneficiaries, caregivers, service providers and health workers.
- d) Measles as an indicator: this involves using measles cases and outbreaks as an indicator to detect gaps in immunization programs, and to guide program planning to identify and address these gaps.
- e) Learning from disease-specific initiatives: to capitalize on the experience of disease eradication and elimination initiatives to reach the most marginalized populations, and to integrate into immunization programs effective strategies for implementation and accountability, with full integration of disease control approaches into primary health care.

f) Context-specific interventions: these involve developing, evaluating and scaling up innovative, locally-adapted, evidence-based and people-centered approaches to reach underserved populations.

The third and fourth phases are devoted to strategy development and implementation. The process of developing and implementing the strategy took into account the fundamental principles of IA 2030, which are:

People-oriented

Development of the vaccination plan for Atakpamé began with an analysis of the situation. Priorities were then determined, followed by the setting of objectives, strategies/activities and implementation. In short, the immunization plan was designed and adapted according to the needs and social and cultural preferences of individuals and communities. Implementation gives communities an important place on health committees

This situational analysis provided a better understanding of the commune's social and health environment, available resources, vaccination coverage and the reasons for low coverage. During this phase, information was collected not only on vaccination, vaccination coverage over a two-year period, the input supply system, vaccination personnel, the cold chain and vaccination strategies, but also on the opinions of parents and community leaders on vaccination and the reasons why children are not vaccinated, and their perceptions of vaccination services. A triangulation was carried out by comparing data from vaccination registers, timetables, maternity registers and births recorded at local registry offices.

From this analysis of the situation, we note that the EPI target population for children aged 0 to 23 months is 7554 children according to the projection of the Institut National des Statistiques, des Etudes Economiques et Démographique (INSEED). Vaccination coverage has fallen for all antigens, including tetanus & diphtheria in pregnant women.

With covid-19, monthly vaccination coverage at Penta 1 is 93% (i.e. 7% of zero doses). Before the pandemic, it was 96%. Penta 3 coverage, which was 94% before the pandemic, has fallen to 84%. Vaccine coverage for Measles & Rubella 2 (RR2) before the pandemic was 67%, but with the pandemic it is 65% (DHIS2 Report).

In terms of vaccine demand, barriers and facilitators to vaccination have been identified at the level of the individual (knowledge & beliefs, intentions, preparedness and cost of effort) and vaccination services (places of service, experience of services and care, follow-up after service).

In addition, health staff spend less time on routine vaccination activities than before the covid-19 pandemic, and more time on covid-19 response activities. This has reduced the availability of routine vaccination services at health centers.

Country ownership

The Reach Every Child strategy at national level has been chosen to establish and maintain a robust immunization program in line with national guidelines. This approach prepares districts to support health facilities, by actively promoting micro-planning and the use of indicators to monitor progress, identify and resolve problems, and guarantee the quality of service delivery. This strategy also encourages the establishment of links between health facilities and communities, to improve access to health services, their acceptability, relevance and use.

Data-driven

Data and best practices guide immunization program strengthening and improve design and performance for universal health coverage. The use of data promotes evidence-based decision-making. Quality, "fit for purpose" data are used to monitor progress, improve program performance and inform decision-making at all levels.

A presentation of the results of the situational and causal analysis was made to the heads of the institutions, authorities and leaders of the commune. During this session, the main problems identified were validated. The various stakeholders contributed to the development of solutions applicable to their area.

An action plan was drawn up, taking into account the five components of the Reach Every Child approach: planning and resource management, community commitment, reaching all eligible populations, monitoring and use of data for action, and formative supervision. The following priority areas have been identified in the action plan for implementing the strategy

i- Vaccination in primary health care

This consisted in drawing up a micro plan integrating routine immunization into the minimum package of integrated primary healthcare activities: fixed, advanced and/or mobile routine immunization activities.

ii-Leadership, governance and management

It aims to create an environment for effective coordination and performance monitoring. Particular emphasis is placed on performance management, including the establishment of clear objectives, precise definition of roles and responsibilities and additional accountability, commitment to the use of data, and the development of team spirit and staff empowerment.

iii-Health personnel

Train health workers and members of community health workers in vaccine equity. Motivated, qualified, available and well-informed health workers with sufficient resources to plan, manage, implement and monitor the performance of the vaccination program are essential to the success of this project.

iv-Disadvantaged populations

The aim is to detect and remedy low lifelong coverage rates among the poorest and most disadvantaged individuals and communities. Innovative immunization strategies have made it possible to design immunization schedules with and for communities, taking into account their occupations in order to improve vaccine coverage. Vaccines are administered by public and private healthcare professionals.

However, one constraint is that vaccination sessions are held at unstructured times in neighbourhood markets, in the attractive Agbonou crossroads and in large neighbourhoods at night, due to the activities that keep parents busy during the day.

Adjustments during implementation

Adjustments made throughout the project included the budget and activities.

With covid-19 slowing down economic activity, the use of healthcare services has fallen, as has revenue from cost recovery. This situation is exacerbated by inflation linked to the Russian-Ukrainian conflict. The financing of this local strategy, which depends on cost recovery revenues, is in arrears. Indeed, with covid-19 slowing economic activity, the use of healthcare services has fallen, as has cost-recovery revenue. This situation is exacerbated by inflation linked to the Russian-Ukrainian conflict. Funding for this strategy, which is heavily dependent on cost-recovery revenues, is still outstanding. The intervention was optimized thanks to funding from Sabin Vaccine Institute.

Atakpamé is a city built on plateaus and hills. The main risk is from landslides and traffic accidents in these mountainous areas following torrential rains.

Challenges encountered

Health workers' interpersonal communication: despite their privileged position to inform parents, health workers are not the most frequent source of information for parents. Health workers do not know what information to give parents systematically.

Very few mothers know about vaccine-preventable diseases, the vaccination schedule and the number of vaccination contacts required to vaccinate their child correctly. Some parents are unaware that they can have

their child vaccinated at any health center, provided they have the vaccination record, which is a problem for seasonal and nomadic workers. Misconceptions about vaccine-preventable diseases and the perceived lack of efficacy of certain vaccines circulate: parents believe that vaccines are effective because they have seen or heard by word of mouth (for younger women) of reduced mortality from measles in particular. They are aware that if all children are not vaccinated, diseases may reappear.

However, parents believe that vaccination can prevent diarrhea, malaria, vomiting, influenza and parasites. They are surprised by the frequency of these diseases despite vaccination, questioning the perceived efficacy of certain vaccines, which shows that health workers don't always adequately inform parents about which vaccine is being given to the child (against which disease the child is being vaccinated). Health workers don't talk about rumors about vaccination, such as: it's a trick to inoculate children against disease, vaccination is against religion, vaccination causes infertility.

The professionalism of media professionals on vaccination: media professionals are not specialized in vaccination, which makes them very dependent on health workers who suggest questions and answers to be given during radio broadcasts. What's more, they are not involved in the planning, monitoring or evaluation of communication campaigns.

RESULTS AND LESSONS LEARNED

Activity completion rates are measured monthly. Success is measured by the achievement of activity objectives. Key performance indicators are measured taking into account coverage of pentavalent 1 and 3 and the second dose of measles.

In the fourth quarter of 2022, a total of 189 children lost to follow-up were found and vaccinated for all antigens combined. In addition, 72 zero-dose children were caught up. In terms of gender, 52% of children lost to follow-up were female. Among zero-dose children, 55% of those vaccinated were female. However, this finding is not sufficient to judge the tendency to vaccinate more male children.

As shown in figures 1 & 2 below, pentavalent 1 coverage increased by 07% from 93% to 99%, pentavalent 3 coverage rose by 12% from 84% to 96%, and second-dose measles coverage jumped by 11% from 65% to 76%.

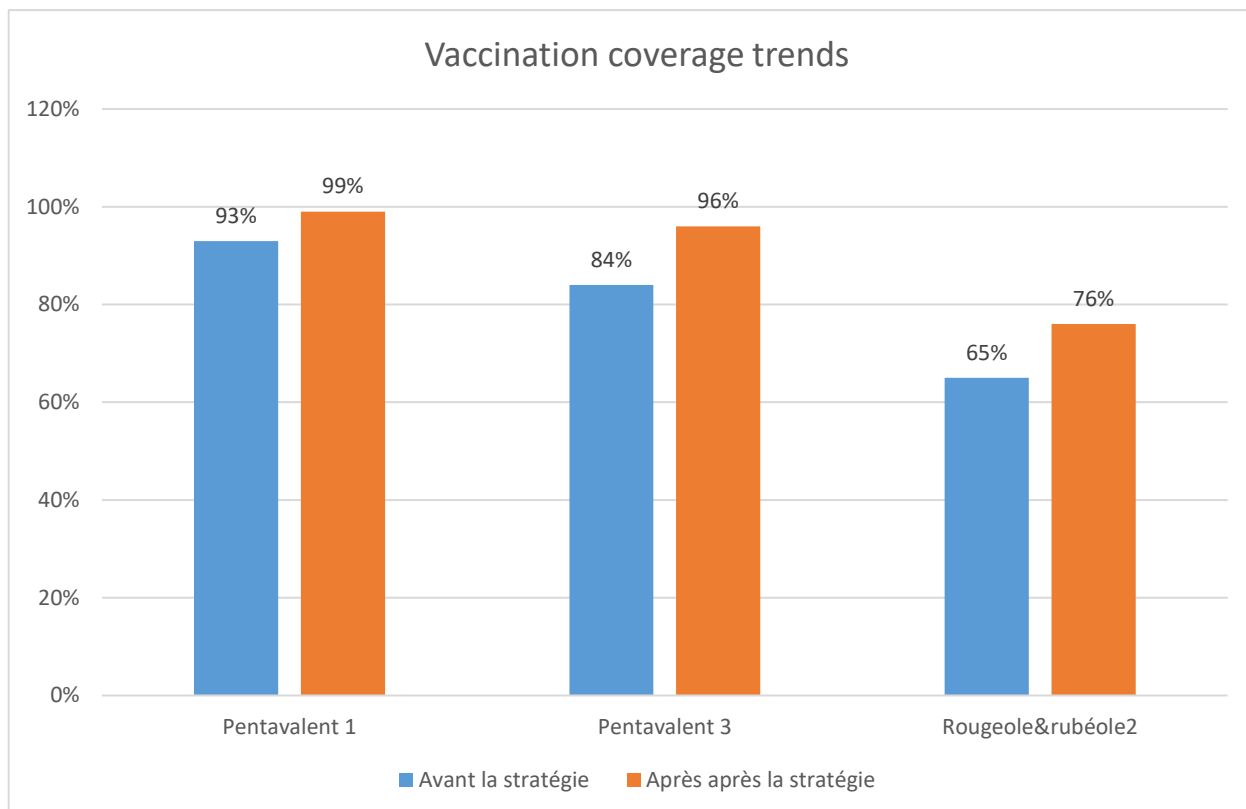


Figure 1: Trends in vaccination coverage (source DHIS2)

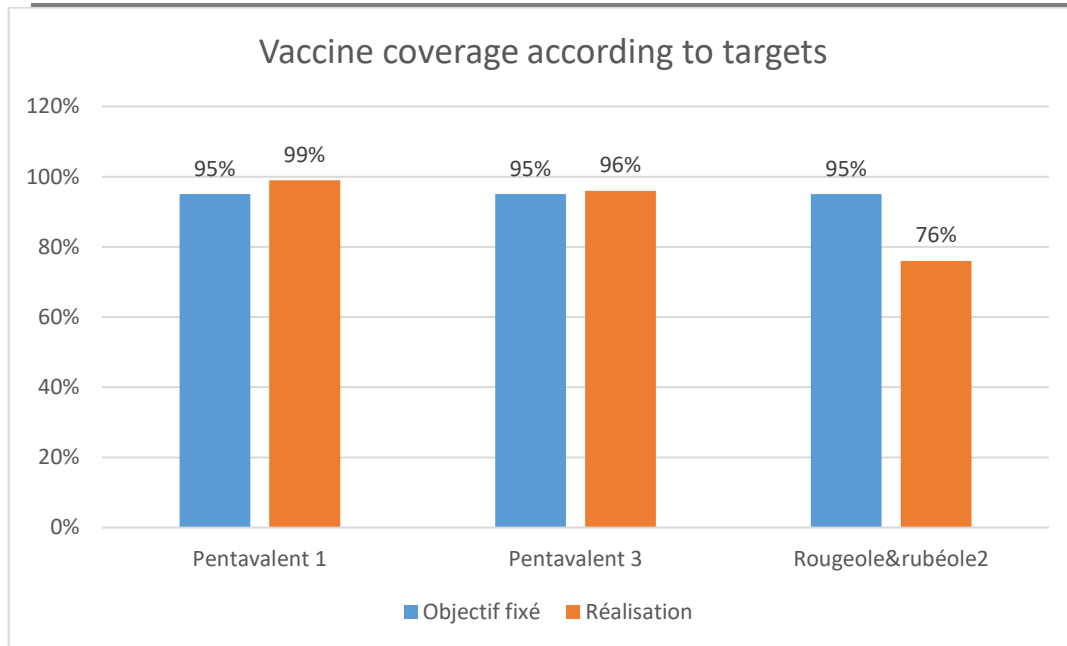


Figure 2: Vaccination coverage according to targets set by antigen (source DHIS2)

Vaccination coverage recorded with the implementation of the strategy exceeds that prior to the covid-19 pandemic, testifying to the optimization of the strategy through the integration of vaccination into curative care, maternal health and the use of missed vaccination opportunities.

Although these key performance indicators show an encouraging trend, it is too early to judge the effectiveness of the intervention.

Important learnings

An electronic vaccination register should be considered to track children who start their vaccination series in one center and end it in another.

-Vaccination in urban areas does not follow conventional vaccination strategies. Equity-focused models developed for rural villages need to be adapted to urban conditions to meet the needs of this unique population.

-Community commitment, the involvement of the private healthcare sector, civil society organizations and municipal authorities are a prerequisite for the successful implementation of urban health programs. As these actors influence public health projects, it is imperative to involve them in the entire process, from planning to execution.

-Integrating vaccination activities (against covid-19 and routine immunization) with primary health care ensures optimal delivery of vaccination services, a prerequisite for achieving vaccine equity in a context of scarce resources.

CONCLUSION

The Equity in Immunization Strategy has increased immunization coverage.

Joint planning involving beneficiaries and local development officials has enabled the population to take ownership of immunization services. Vaccination schedules must take into account the socio-professional activities of the beneficiaries.

RECOMMENDATIONS

In line with international guidelines and the 2030 Agenda for Immunization, I encourage immunization professionals to focus action research projects on increasing vaccine demand, taking into account gender-specific

needs and disadvantaged populations. Vaccination plans must be designed and adapted according to the needs and social and cultural preferences of individuals and communities. Implementation must give communities an important role to play. The use of evidence promotes evidence-based decision-making.

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