

Lessons from dual PCV-rotavirus vaccine introductions and integrated PCV campaigns(e.g., Ghana, Niger, Tanzania)

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PCV & ROTAVIRUS VACCINES GHANA

Ghana introduced Rota and PCV vaccines in 2012 and was the first Gavi-eligible country in Africa to introduce two vaccines simultaneously. The concurrent introduction was a generally positive experience that saved Ghana time and cost without negatively impacting the EPI program, demonstrating the feasibility of dual introductions when proper planning is made in advance even in limited resource settings.

STRENGTHS AND KEY STRATEGIES (1)

EARLY PLANNING

Early planning a year before introduction allowed ample time to involve stakeholders and make appropriate logistical preparations. Early on, Ghana held **regular ICC meetings and established working groups** for the various components of vaccine introduction

PILOT INTRODUCTION

Conducting a **pilot introduction** 1-2 months prior to launch and **real-time monitoring** of the roll-out was found to be critical for a successful nationwide launch

STRENGTHS AND KEY STRATEGIES (2)

EXPANSION OF COLD CHAIN

Expansion of cold chain storage capacity at all levels, including the construction of cold rooms in every regional warehouse, allowed for a smooth introduction. Also, districts and HFs get additional storage capacity

COMMUNICATION

Ghana was able to relieve concerns among parents/caregivers about the administration of the additional vaccines to their children by communicating an understanding of the impact of diarrhea and pneumonia on children.

CHALLENGES FACED

INSUFFICIENT TRAINING

Combined training created some confusion among HCW, especially with regard to age restrictions for Rota. In addition, HCW trainings that were <2 days long were generally found insufficient

COLD CHAIN STORAGE STRAIN

Cold chain storage was a concern, with some staff suggesting that the selection of a multi-dose presentation of PCV could have alleviated some cold chain strain

IMPACT OF SIMULTANEOUS INTRODUCTIONS IN GHANA



Estimated \$1.3 million USD saved compared to introducing separately



High acceptance of concurrent administration



Allowed for improved data collection & management



Areas of time & cost reductions

25% Preparatory meetings and development of communication materials

33 % Grant application process

50% Training time and cost

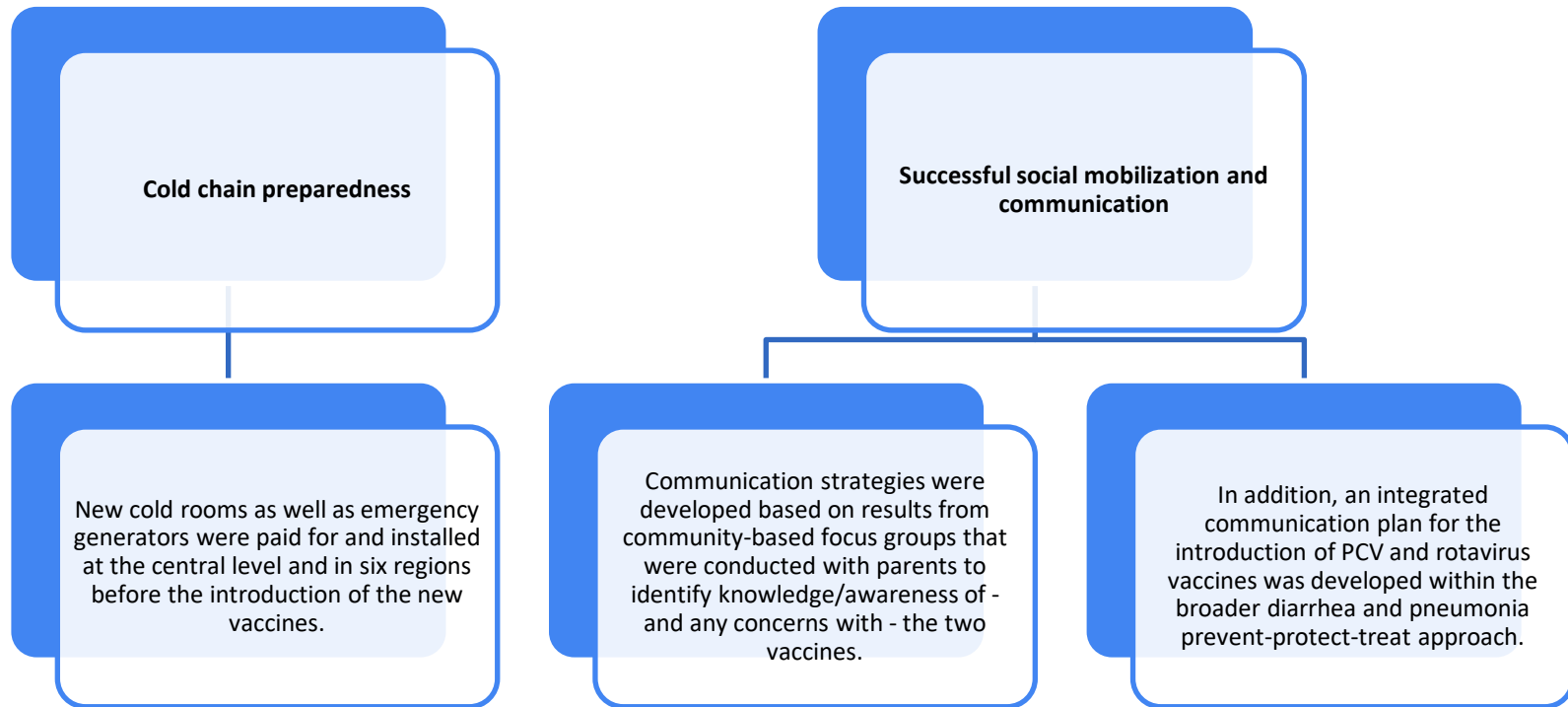


Areas of increased spending

50% vaccine storage waste disposal labor costs

SIMULTANEOUS INTRODUCTIONS OF PCV & ROTAVIRUS VACCINES NIGER

STRENGTHS AND SUCCESSES



CHALLENGES AND LESSONS LEARNED (1)

- **Insufficient data**
 - ✓ Population data obtained from projections from a 2011 census were likely to be underestimated, and the forecasting of vaccine needs using this population data led to stock-outs for PCV
- **Financial impact and funding**
 - ✓ The financial impact of introducing two new vaccines was found to potentially be a strain for the country to meet its co-financing contribution of \$652,519 USD, dispersed in less than two years.
 - ✓ In allocating funds, Niger found insufficient funding allocated for the reproduction and dissemination of communication materials.

CHALLENGES AND LESSONS LEARNED (2)

- **Delays**
 - ✓ The late installation of cold rooms contributed to delays in the new vaccine introduction.
- **Training refresher**
 - ✓ It was identified that additional follow-up on initial training would be beneficial to ensure quality and retention of information from training and address areas needing strengthening

SIMULTANEOUS INTRODUCTION OF PCV & ROTAVIRUS VACCINES TANZANIA

Tanzania introduced PCV and rotavirus vaccines in January (Mainland) and February (Zanzibar) 2013. The concurrent introduction was found to be more cost and time-efficient than separate introductions, with savings, particularly on training time and overall costs.

STRENGTHS AND SUCCESSES (1)

Stakeholder engagement

- Good stakeholders collaboration resulted in access to key expertise, experience, and resources

Cold chain preparedness

- Adequate cold chain capacity and capability ensured at all levels prior to introduction.

Robust comprehensive planning and training

- Cascaded training was conducted before introduction at all levels with timely distribution of user-friendly training materials including dummy vials for practicing RV administration. The training was reported to have led to high levels of staff satisfaction with training. Service providers were found to be knowledgeable on PCV3 and RV, VPDs, targets, and immunization data analysis and use.

STRENGTHS AND SUCCESSES (2)

Integrated planning and delivery of services

- PCV13 and RV introduction was used to further promote additional interventions for diarrhea and pneumonia prevention in the media.

High community acceptance of both vaccines

- Community mobilization through various outlets, including health facilities, mixed media, cultural groups, and community leaders. In addition, acceptance and firm political commitment were expressed by launchings done by higher authorities in most areas.

Post-introduction supervision

- Intensive post-introduction (2-3 months) supportive supervision was implemented to identify and correct system weaknesses early on.

CHALLENGES



Limited and inadequate data such as program calculation errors



Lack of resources contributing to delay in printed immunization materials such as updated child health cards and registries and thus late availability



Inadequate preventive maintenance/repairs for cold chain



Refresher training courses not conducted frequently mainly due to lack of funding



Printed educational material did not focus on inter-integrated approaches to pneumonia and diarrhea control as they had been in media messages

COUNTRY EXPERIENCES IN THE SIMULTANEOUS INTRODUCTION OF MULTIPLE VACCINES

- **Ghana** introduced Rota and PCV vaccines in 2012 and were the first Gavi eligible country to introduce two vaccines simultaneously in Africa. Ghana saved financial resources and improved efficiency of planning and vaccine operations
- **Tanzania** introduced PCV and rotavirus vaccine in January (Mainland) and February (Zanzibar) 2013. The concurrent introduction was found to be more cost and time efficient than separate introductions with savings particularly on training time and overall costs.
- **Niger** launched PCV13 and Rotarix simultaneously in August 2014. Community based communications plans and social mobilization were key to their launch

LESSONS LEARNED



Adequate advanced planning time and stakeholder engagement



Proper cold chain storage preparation and dry storage for other injection materials and related supplies. Revision of M&E tools such as registers and others.



HCW trainings prior to and following launch



Integration with broader pneumonia and diarrhea interventions



Social mobilization and community based communication plans

National Immunization Coverage PCV/Rota 2022

WUENIC-WHO/UNICEF, Last updated: 2023-07-11

Antigen	Ghana	Niger	Tanzania
PCV3	99%	84%	83%
RotaC	94%	86%	67%

PCV3: final dose Rota C: Rotavirus vaccines completed dose

HOW DO COUNTRIES MAINTAIN THIS GOOD COVERAGE?



- Strong EPI program for many years
- Robust planning
- Collaboration with partners enables immunization programs
- Good data system
- Good vaccine stock monitoring system
- Investment in cold chain and dry storage capacity,
- Regular supportive supervision
- Implementation of recommendations from previous assessments and post introduction evaluation (PIE)

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IVD MOHSW

GHANA EPI PROGRAM

NIGER EPI PROGRAM,

TANZANIA EPI PROGRAM

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Thank you!