Routine Immunisation Services Amidst the COVID-19 Pandemic: A Webinar Series

Join us for **Webinar 2** on Integration of Routine Immunisation services amidst the COVID-19 pandemic.

TUESDAY 26TH APRIL 15:30–17:00 CET

Featuring

1. **Dr. Ephrem Lemango** - Associate Director (Immunization), UNICEF
2. **Chika Offor** - Vaccine Network for Disease Control, Nigeria
3. **David Kunjok** - Bahrel Ghazal regional coordinator, South Sudan
4. **Dr. Florence Sibomana** - Youth leaders for Nutrition, Rwanda

Moderated by:
Fara Ndiaye - Speak Up Africa, Senegal

Discussion Focus

Communities who miss out on immunisation and other essential health services such as nutrition, malaria prevention in LMICs, family planning and COVID-19 vaccine delivery.

#VaccinesWork

Gavi CSO Constituency for Immunisation and Stronger Health Systems
Helping to reach Every Child with Immunisation and Health Services

RESULTS

unicef for every child

Save the Children

Gavi The Vaccine Alliance

USAID FROM THE AMERICAN PEOPLE

MOMENTUM A Global Partnership for Health and Resilience

THE GENEVA LEARNING FOUNDATION

Integration of Immunisation and Other Essential Services Amidst the COVID-19 Pandemic

Dr. Ephrem Tekle Lemango

Associate Director, Chief of Immunization at UNICEF. Dr. Lemango oversees the immunisation and vaccines related work of UNICEF spanning across seven regions and over 130 countries. Prior to joining UNICEF, he served as the Regional Immunisation and Primary Health Care focal point for WHO-AFRO.

Immunization As Entry Point for Essential Primary Health Care Services

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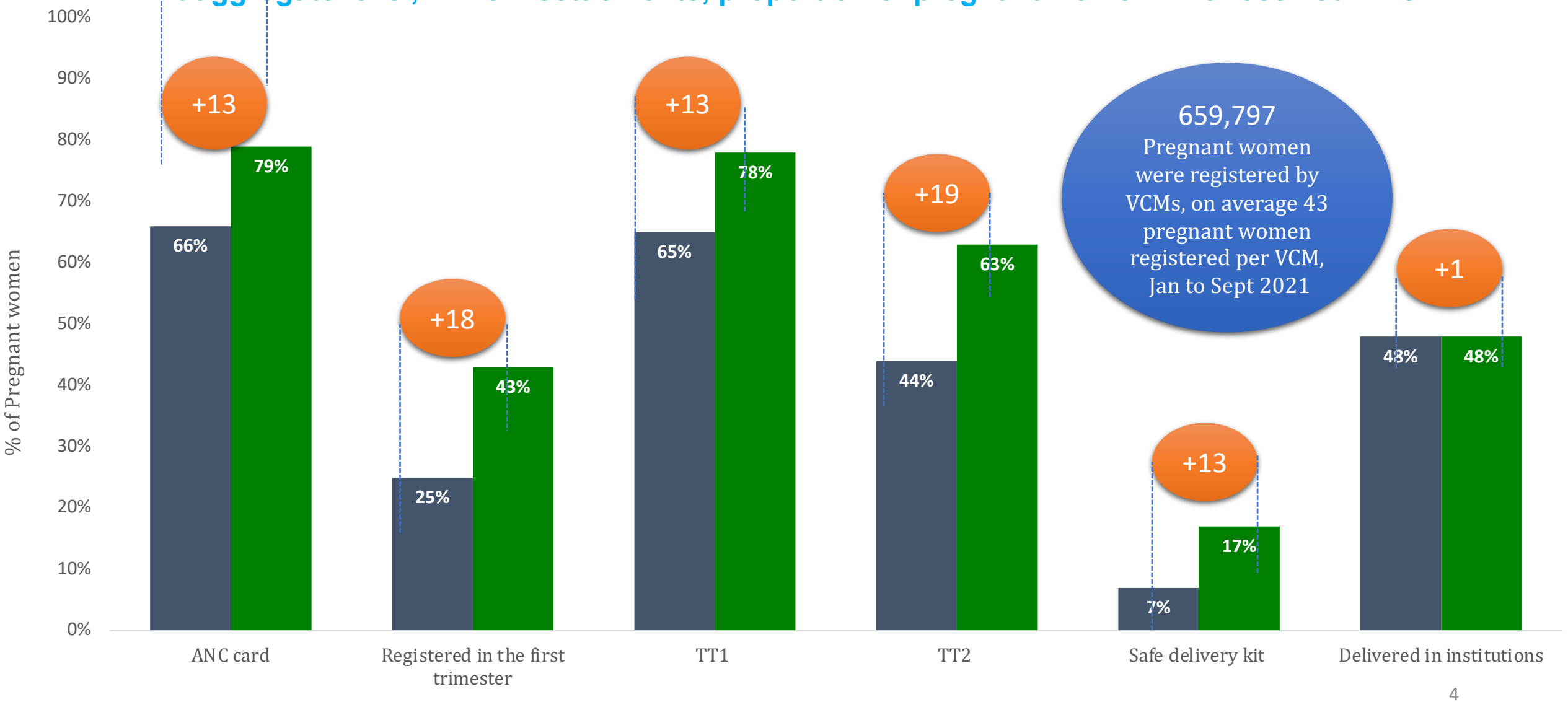
26 April 2022

#WorldImmunizationWeek #LongLifeForAll #VaccinesWork

Nigeria: UNICEF-supported Volunteer Community Mobilizers (VCMs) for Immunization referral support for Antenatal Care (ANC)

At aggregate level, in VCM settlements, proportion of pregnant women who received ANC



Source: VWS RI summary reports Jan to Sept 2021, All 12 Programme States

Why use immunization as an entry to delivery Primary Health Care services?

1. Minimizes missed opportunities and reaches more women and children
2. Streamlines services, allowing health workers to provide comprehensive care
3. Supports defaulter tracking
4. Expands service delivery with a PHC focus – Immunization Plus
5. Enhances immunization and child health outcomes for underserved
6. User-centered - minimizes costs of repeated family travels to health facilities (out of pocket expenditures)

How? System + Service level

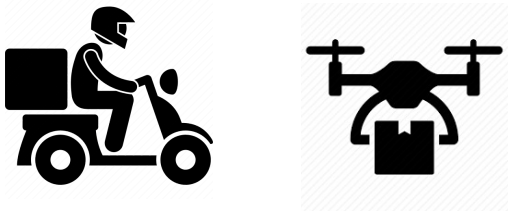
Integrations across Primary Health Care - key considerations

Focus	Focus on health system approach for planning
Optimize	Optimize human resource and delivery platforms – additional resources and skill-sets (trainings)
Supplies	Supply chain and logistics to be considered at design stage
Build	Build RMNCH interventions around existing EPI schedule
Use	Use SIAs, vaccination weeks and CHDs for well-baby care and other MNCAH interventions.
Learn	Learn from country experience - operational research

Primary Health Care

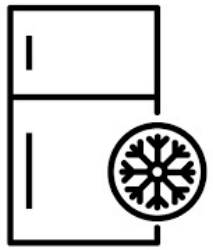
Health Facility Solarization

Alternate vaccine & commodities delivery



Health Care Waste Management

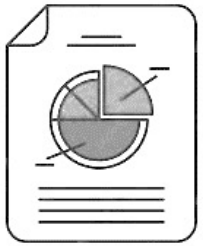
Present Engagement in strengthening of cold chain infrastructure with broader PHC implications



About 65,000 Solar refrigerators deployed since 2016

ISC support to countries through GAVI

Long term strategy



Sustainable Immunization supply chain financing strategy for funding infrastructure and maintenance of CCE through private industry engagement

Work in progress

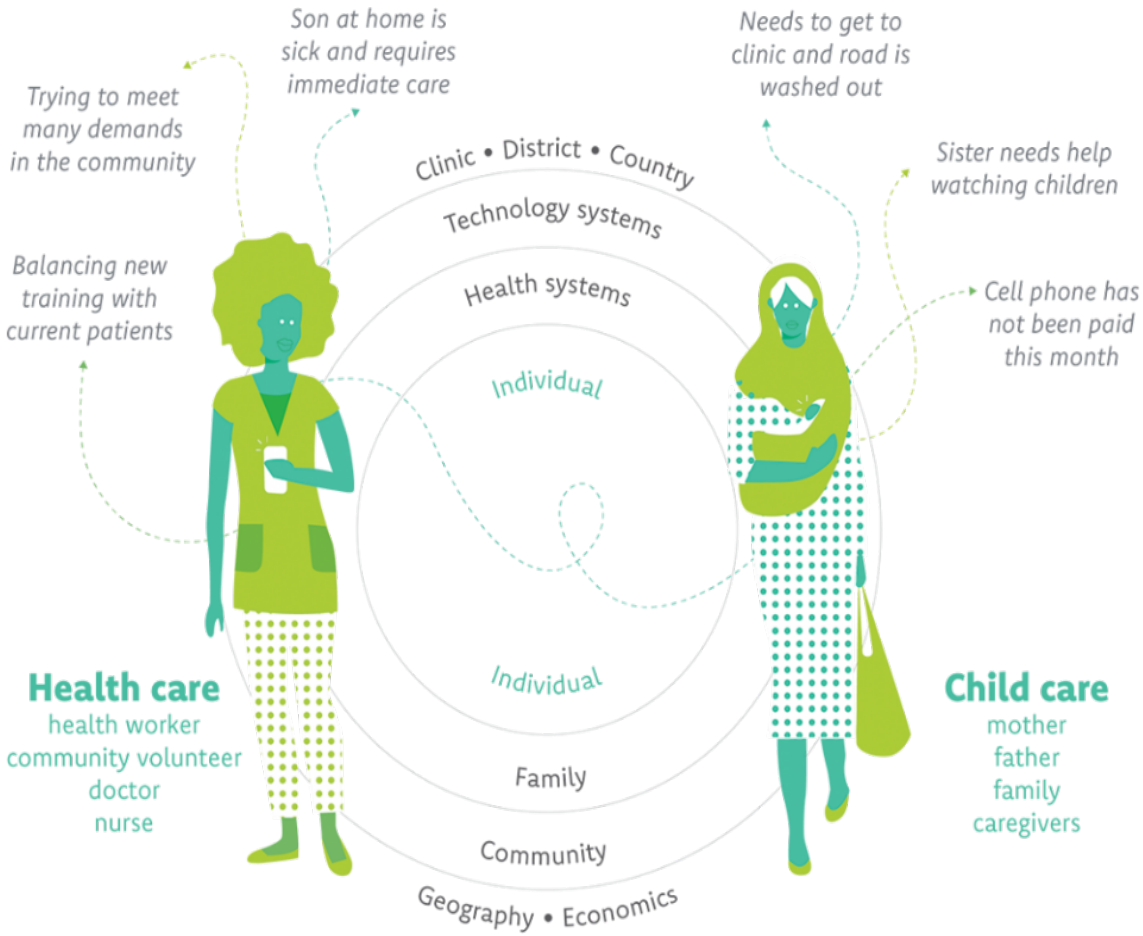
How : Community level –
Integration across essential Primary Health Care services

- Operates in the local community but has wider population focus
- Seeks to address all health problems of all people (life-cycle approach)
- Relies on access to a trusted provider or team of providers (HRH)
- Strong emphasis on prevention
- Improves integration through strengthening health systems
- Engages community gate-keepers in the identification of community needs and managing perceptions

How? Individual level –

Extending Immunization Experiences to improve PHC Services

- **Coverage and Equity** as a primary focus
- Apply **Human Centered Design** approach
- **Social listening and digital engagement**
- Integrate **demand for immunization with other child survival interventions** to promote equitable access to vaccines and vaccination services

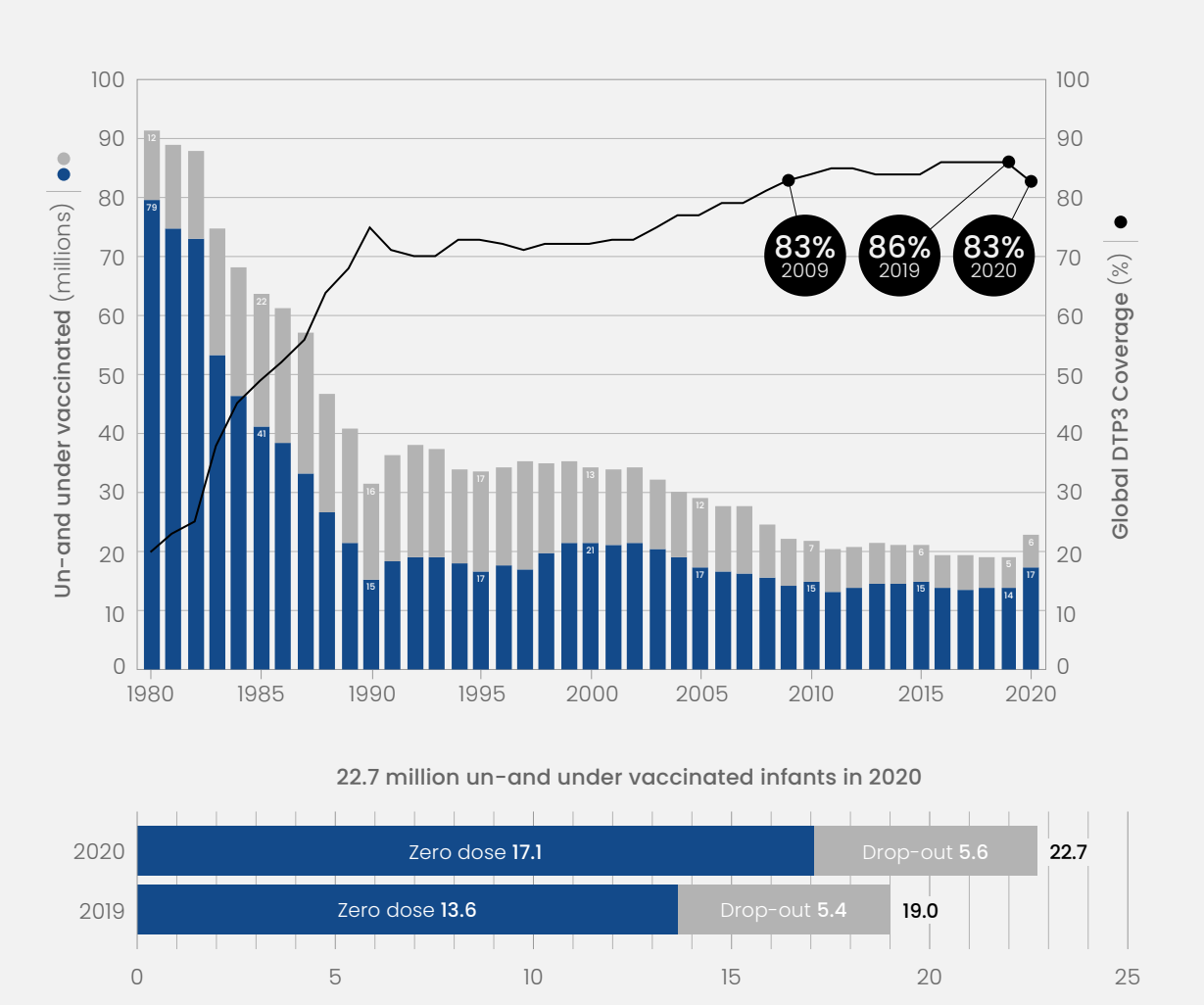


COVID-19 pandemic led to major backsliding on childhood vaccinations in 2020

- Infant immunization coverage [third dose of diphtheria, tetanus, and pertussis (DTP-3)] dropped back to **2009 levels, namely to 83%**, leaving 3.7 million more children un-or under vaccinated than in 2019

- **23 million** children missed out on basic vaccines through routine immunization services in 2020

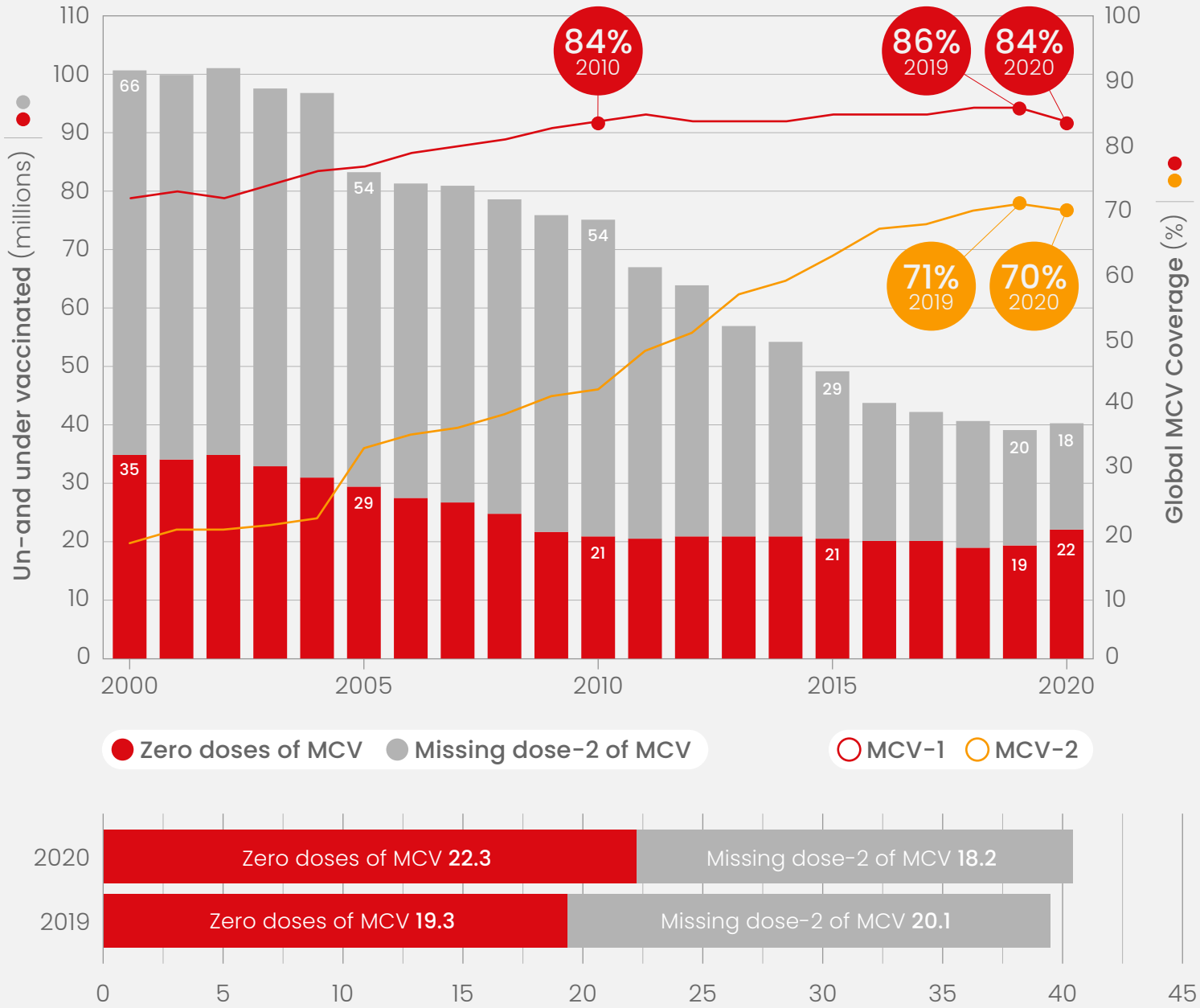
- Most of these – up to **17 million children** – did not receive a single vaccine (***zero dose children****)



* Zero dose children defined as those lacking DTP1
Source: 2020 WHO/UNICEF Estimates National Immunization Coverage (WUENIC 2020), 15 July 2021
https://www.who.int/news/item/15-07-2021-covid-19-pandemic-leads-to-major-backsliding-on-childhood-vaccinations-new-who-unicef-data-shows

2020 saw an increase in children un-protected against Measles

- **Coverage of the first dose of measles vaccine (MCV-1) dropped to 84% in 2020,** the lowest level since 2010
- This left **22.3 million children vulnerable to measles** *(zero dose for measles)*
- **An additional 18.2 million children did not receive the critical second dose** of measles protection program



Going forward: Integration during and peri- COVID-19

Challenges

- Over-stretched systems
  - Eg. Overwhelmed health workers
- Economic slowdown
  - Decreased service seeking
  - Countries unable to afford
- Vertical disease focused approach
  - Effort to reach higher C19 vaccine coverage

Opportunities

- 'Whole of Government' approach
  - Eg. Domestic and Global financing
- Several innovations introduced
  - Eg. Data and digitization
- New and modified service outlets
  - Eg. Discussions on integration
- Legacy investments
  - Eg. Colchain equipments

Integration starts with a shift in ‘Mindset’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Thank you.
#WorldImmunizationWeek
#LongLifeForAll
#VaccinesWork
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Integration of Immunisation and Other Essential Services Amidst the COVID-19 Pandemic

David Kunjok

Regional EPI Coordinator, The African Field Epidemiology Network (AFENET). David is also a Fellow at the Centre for Epidemiological Modelling and Analysis (CEMA).

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EQUITY FROM BIRTH

Committing to an integrated approach to immunization and nutrition : a core element of UHC

David Kunjok

Presentation Outlines

- Background
- Methodology
- Impact of integration
- Challenges
- Lesson Learn
- Conclusion
- Next steps

BACKGROUND

- Immunization is a cost-effective intervention for VPDs deaths

- VPDs major cause of death for <5 in SSD;

251/1000 live births**(Requejo et al.,2015)**

- SDGs: reduction of < 5 mortality rate to 25 deaths/1000 live births by 2030**(WHO, 2020)**

- SSD is unlikely to achieve this health indicator by 2030

BACKGROUND CONT'D

- South Sudan has a fragile health system from prolonged conflict
- Thus the <5 mortality has been constant since 2010**(WHO,2019)**
- WHO, UNICEF, and Immunization vision and strategy goal is VPDs mortality & morbidity reduction among < 5 years of age children
- Global Vaccine Action Plan (GVAP) framework **(WHO, 2017)** Principles emphasize strengthening immunization through integration
- Health services integration is effective in improving immunization uptake in the OPD, IMCI, and reward system

BACKGROUND CONT'D

- Immunization Agenda 2030 comprises the integration of Immunization services and other programs to immunize more children**(WHO,2020)**
- The country has not been able to meet maternal, newborn, and child health (MNCH) care needs(including Immunization)
- Gavi provided(2019) additional Health Systems strengthening and Immunization Funds (HSS) that have helped tailor immunization including nutrition

BACKGROUND CONT'D

- Vertical implementation of immunization services
- Integration - < 5 years mortality reduction, efficient model for resources sharing, technically efficient and promotes equity in reaching zero dose children in SSD
- SSD evidence of improved immunization uptake after integration**(Oladeji et al.,2019; Idris et al.,2021)**
- Slight improvement in vaccine coverage in the 54 priority counties that had the largest number of zero dose and unvaccinated children before 2019
- Admin data for Penta 3 coverage: 2019= 45%; 2020=61%; 2021=82%

METHODOLOGY

- 858 nutrition OTP sites, reaching over 200,000 malnourished under-five children per year.
- MOH and Gavi tailored the integration of immunization into the large-scale RUTF program, targeting 686 OTP centers located in 54 priority counties
- Colocation, Codelivery, and Reporting (functional & infrastructural)

METHODOLOGY CONT'D

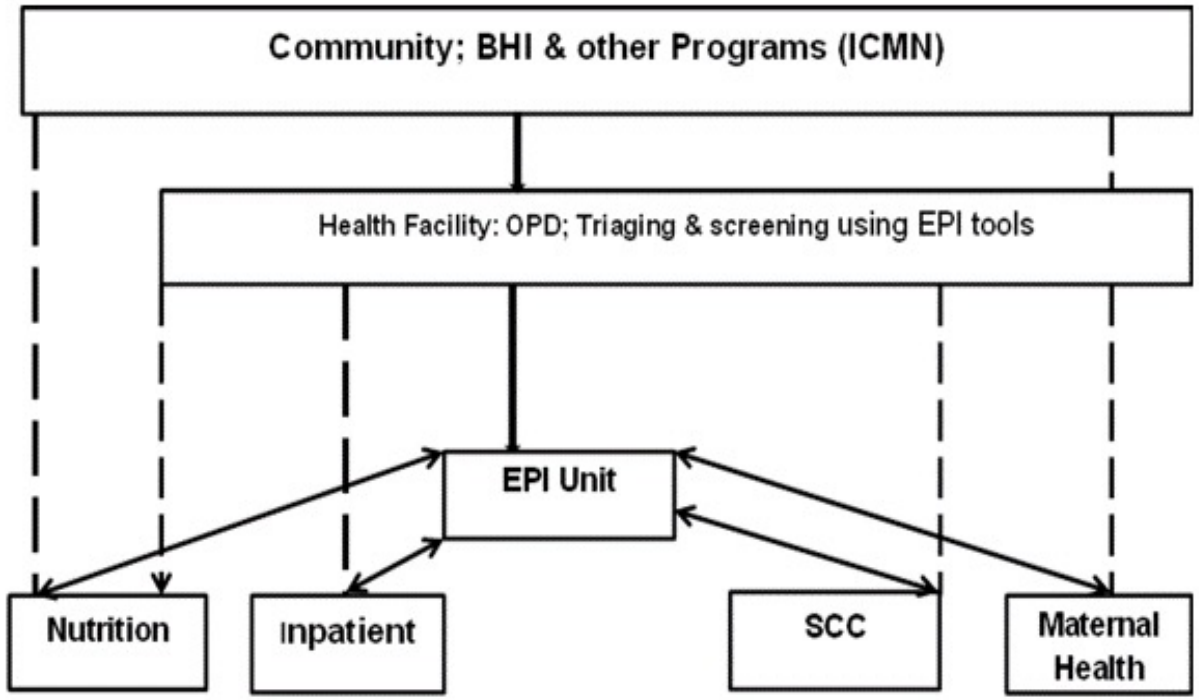
- Immunization screening at nutrition, OPD & IPD for vaccination status; children 0-23 months(zero dose, under immunization)
- Frequent orientation and on-job training(program managers, vaccinators)- Functional approach-integrated supportive supervision(materials, job aids, coordinated microplanning, joint review meetings, reporting, follow-ups)

METHODOLOGY CONT'D

- Collaborative decision making
- Dissemination of policy guidelines such as the Reaching every district/community (RED/C) guide further facilitated the integration of services
- Staff-to-staff support

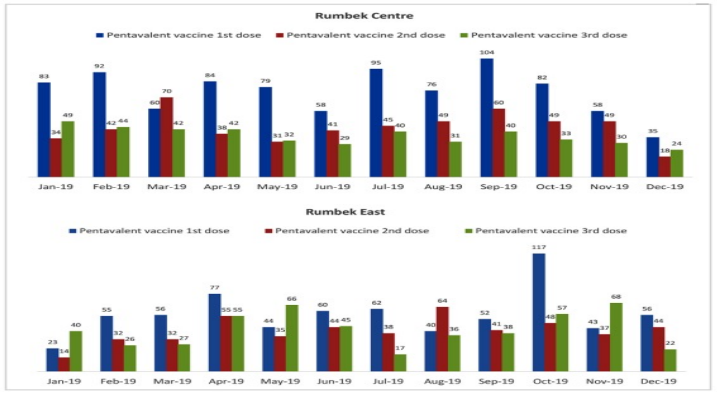
THE MODEL

THE MODEL



IMPACT OF INTEGRATION OF EPI WITH NUTRITION SERVICES

- Improves immunization coverage
- Reduction in immunization drop-out rates after integration in both nutritional programs



Idris et al., 2021

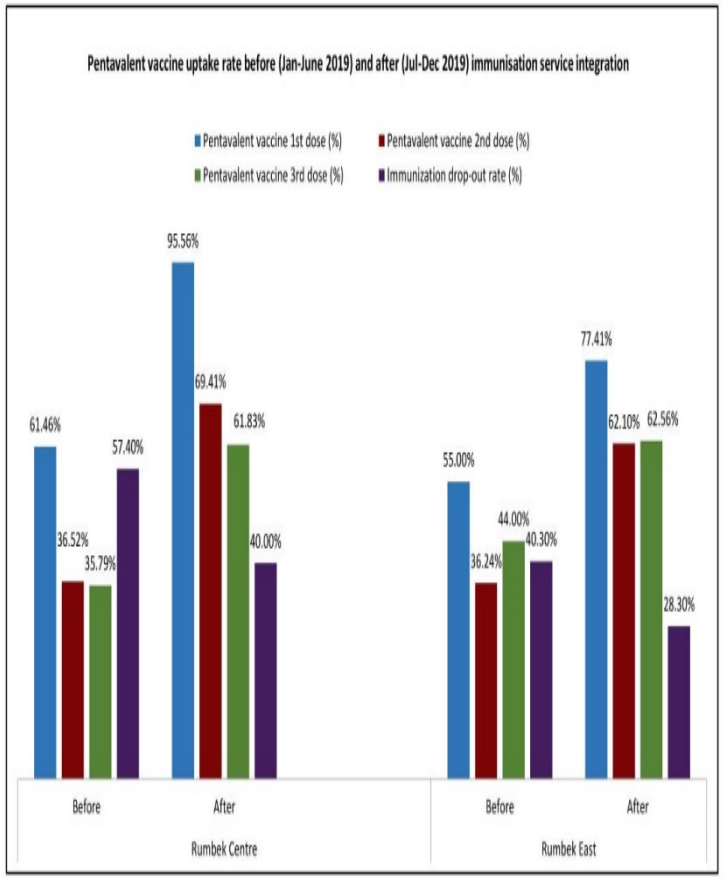
Table 2 Pentavalent vaccine uptake rate before and after immunisation service integration by age

Pentavalent vaccine uptake rate before (January–June 2019) and after (July–December 2019) immunisation service integration

Rumbek Centre county	Before, %	After, %	Immunisation coverage rate ratio (mean and 95% CI)	P value
First dose (<1 year)	54.99	95.56	1.74 (1.52 to 1.99)	<0.001*
First dose (≥1 year)	6.50	4.21	0.65 (0.38 to 1.11)	0.369
Second dose (<1 year)	32.53	64.78	1.99 (1.66 to 2.38)	<0.001*
Second dose (≥1 year)	3.99	4.63	1.16 (0.64 to 2.09)	0.312
Third dose (<1 year)	32.48	52.37	1.61 (1.32 to 1.97)	<0.001*
Third dose (≥1 year)	3.31	10.09	3.05 (1.77 to 5.23)	0.039*
Drop-out rate (<1 year)	61.48	47.06	0.77 (0.64 to 0.93)	<0.001*
Drop-out rate (≥1 year)	54.17	40.63	0.75 (0.39 to 1.46)	0.162
Rumbek East county	**Before, %**	**After, %**	**Immunisation coverage rate ratio (mean and 95% CI)**	**P value**
First dose (<1 year)	50.79	75.10	1.87 (1.60 to 2.18)	<0.001*
First dose (≥1 year)	4.19	2.30	0.69 (0.34 to 1.41)	0.380
Second dose (<1 year)	34.35	57.53	1.67 (1.38 to 2.01)	<0.001*
Second dose (≥1 year)	1.88	4.57	2.43 (1.17 to 5.07)	<0.001*
Third dose (<1 year)	39.73	57.59	1.45 (1.21 to 1.74)	<0.001*
Third dose (≥1 year)	4.24	4.97	1.17 (0.64 to 2.12)	0.529
Drop-out rate (<1 year)	38.72	19.59	0.51 (0.37 to 0.69)	<0.001*
Drop-out rate (≥1 year)	42.11	4.00	0.09 (0.01 to 0.72)	<0.001*

Idris et al., 2021

IMPACT OF INTEGRATION EPI WITH NUTRITION SERVICES



Idris et al., 2021

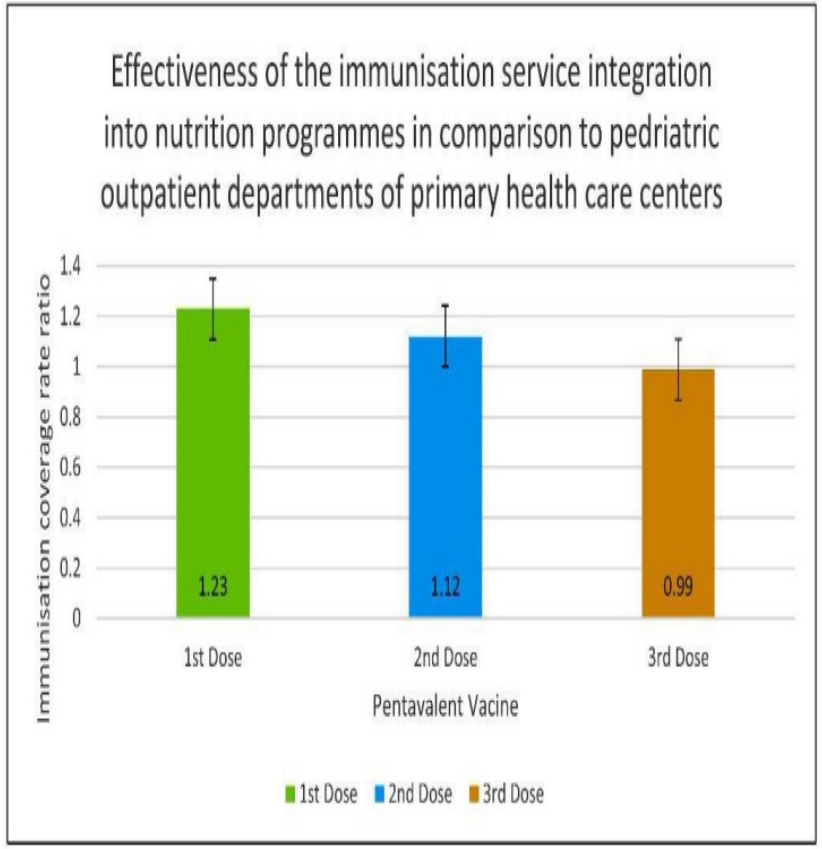
Table 1 Pentavalent vaccine uptake rate before and after immunisation service integration

Pentavalent vaccine uptake rate before (January–June 2019) and after (July–December 2019) immunisation service integration

Rumbek Centre county	Before, %	After, %	Immunisation coverage rate ratio (mean and 95% CI)	P value
First dose	61.46	95.56	1.55 (1.36 to 1.76)	<0.001*
Second dose	36.52	69.41	1.90 (1.60 to 2.25)	<0.001*
Third dose	35.79	61.83	1.73 (1.43 to 2.09)	<0.001*
Drop-out rate	57.4	40.00	0.70 (0.58 to 0.84)	<0.001*
Rumbek East county	**Before, %**	**After, %**	**Immunisation coverage rate ratio (mean and 95% CI)**	**P value**
First dose	55.00	77.41	1.78 (1.53 to 2.07)	<0.001*
Second dose	36.24	62.10	1.71 (1.42 to 2.05)	<0.001*
Third dose	44.00	62.56	1.42 (1.19 to 1.69)	<0.001*
Drop-out rate	40.30	28.30	0.70 (0.51 to 0.96)	<0.001*

Idris et al., 2021

IMPACT OF INTEGRATION EPI WITH NUTRITION SERVICES



Idris et al.,2021

Table 3 Pentavalent vaccine uptake rate before and after immunisation service integration (accounting for seasonality bias)

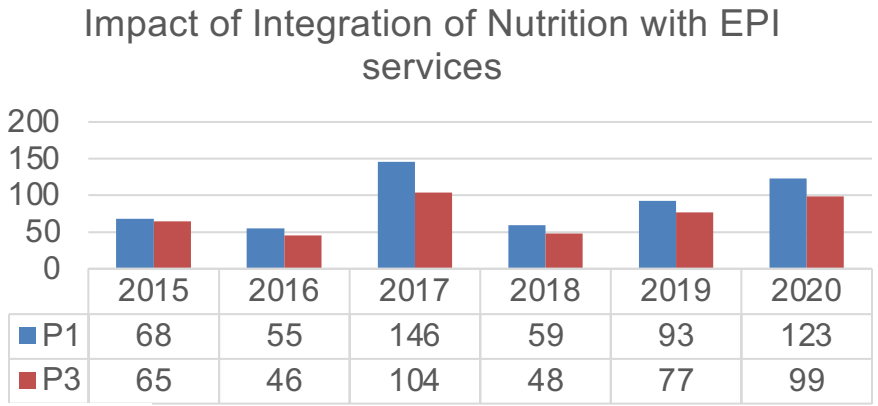
Pentavalent vaccine uptake rate before (July–December 2018) and after (July–December 2019) immunisation service integration				
Rumbek Centre county	**Before, %**	**After, %**	**Immunisation coverage rate ratio (mean and 95% CI)**	**P value**
First dose	78.19	95.56	1.22 (1.08 to 2.56)	<0.001*
Second dose	66.27	69.41	1.05 (0.50 to 2.20)	0.102
Third dose	46.29	61.83	1.34 (1.04 to 2.80)	<0.001*
Drop-out rate	54.41	40.00	0.74 (0.32 to 0.90)	<0.001*
Rumbek East county	**Before, %**	**After, %**	**Immunisation coverage rate ratio (mean and 95% CI)**	**P value**
First dose	63.41	77.41	1.22 (1.05 to 2.56)	<0.001*
Second dose	55.07	62.10	1.13 (0.54 to 2.37)	0.314
Third dose	49.24	62.56	1.27 (1.06 to 2.67)	<0.001*
Drop-out rate	33.49	28.30	0.85 (0.40 to 0.97)	<0.001*

Idris et al.,2021

IMPACT OF INTEGRATION OF EPI WITH NUTRITION SERVICES

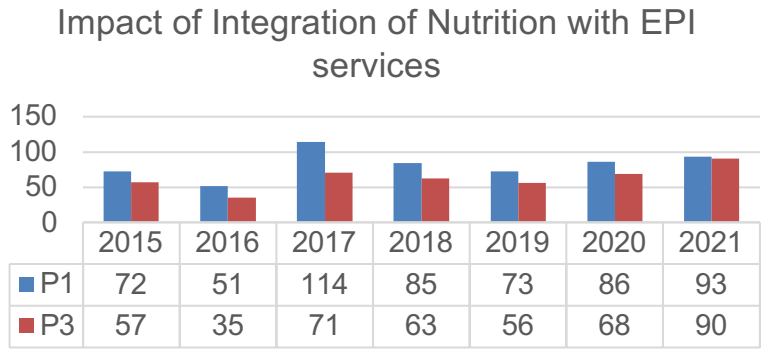
Aweil Centre

Year	Target	Penta '	Penta 3	P1	P3	DOR	unvaccinated
2015	3466	2350	2244	68	65	23	1116
2016	3569	1965	1634	55	46	20	1604
2017	3677	5372	3820	146	104	54	-1695
2018	3787	2240	1831	59	48	22	1547
2019	3900	3621	2985	93	77	36	279
2020	4018	4934	3973	123	99	49	-916



Aweil East

Year	Target	Penta	Penta	P1	P3	DOR	Unvaccinated
2015	16098	11623	9167	72	57	21	4475
2016	16581	8490	5756	51	35	32	8091
2017	17078	19552	12044	114	71	38	-2474
2018	17590	14881	11028	85	63	26	2709
2019	18118	13181	10067	73	56	24	4937
2020	18662	16016	12774	86	68	20	2646
2021	19222	17875	17380	93	90	3	1347



CHALLENGES

- Lack of polyvalent health workers
- Retention of staff
- Training curriculum for health workers does not include nutrition(IIP)
- Lack of integrated key messages for CHWs
- Overburdened healthcare staff
- Unequal resources allocation
- Difficulties with funding mechanisms and logistical challenges

LESSONS LEARN

- Dependent on regular monitoring, motivation, and health education
- Children vaccinated at the OPD(EPI unit) are more likely to return for the subsequent dose(s) than those vaccinated at the OTP
- Mothers & caregivers value nutrition

"*When you tell a woman with a child who is not malnourished to go for vaccination, they ask what will be the benefit. They say if I go and spend the whole day in the line just for my child to receive a vaccine dose, where will I get food for them at the end of the day* **(Kunjok et al.,2021)**

- Decrease competition for resources and duplication

CONCLUSION

- Integration is one of the key drivers for improving immunization coverage and reducing missed opportunities for vaccination
- Improved Immunization coverage curbs VPDs outbreaks and reduce <5 mortality
- It is a key enabler for equity and a core element for UHC

NEXT STEPS

- Scale-up of this intervention to other counties in South Sudan
- policy and practice changes to optimize and scale up the integration of the EPI with other health services in the PHCCs
- Encourage reward system & co-delivery of Immunization and nutrition among others
- Incorporate training manuals to include integration e.g IIP & nutrition

THANK YOU

Integration of Immunisation and Other Essential Services Amidst the COVID-19 Pandemic

Chika Offor

Founder of the Vaccine Network for Disease Control, a Nigerian non-profit that focuses on immunisation, maternal, child and adolescent health. She believes that vaccines are one of the greatest innovations known to man, and she has intentionally empowered over 3000 women to become vaccine advocates in their communities. She is a gender advisor, a health advocate and a community development expert with significant operational experience within and outside the nonprofit sector.

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WHOLE FAMILY APPROACH

AN INCENTIVE THAT ISN'T MONEY

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INTRODUCTION TO THE WHOLE FAMILY APPROACH

- The COVID-19 Pandemic has exposed the fragility of healthcare systems and tested the acceptability of vaccines in Nigeria currently. There is need for upscale and innovative strategies/approaches to foster a change in behaviour and improved uptake of vaccines.
- Before the pandemic, a lot of gains had been made in community/children health; and although the focus has shifted to covid-19, slightly affecting other health areas, we still need to improve those health programs without in turn neglecting the covid-19 vaccine services.
- The WHOLE FAMILY APPROACH is a strategy wherein EVERY member of the family can access at least one health service during a family visit to the health facility. The health facility becomes a one-stop health facility WITH CHILDHOOD VACCINATION (Routine Immunization), SCREENING FOR HYPERTENSION , DIABETES AND MALNUTRITION
- Community involvement makes it more practicable

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INTEGRATION AND TRANSITIONING

- With much focus on Covid-19 Pandemic preparedness and response currently, we are at risk of losing the gains made in the wild polio virus eradication and routine immunization in Nigeria. The advent of COVID-19 brought the immunization community at large, and the polio programme in particular, unprecedented challenges. However, the altered landscape due to COVID-19 provides both a requirement and an equally unprecedented opportunity to coordinate and reimagine collaboration.
- Recognizing the threat of the COVID-19 pandemic and the value of the polio infrastructure, GPEI made available its programmatic and operational assets, as well as human resources from global and country levels, "to enable a strong response to COVID-19, while maintaining critical polio functions such as surveillance and global vaccine supply management."
- The WHOLE family approach presents a strategy of integration between EPI and COVID-19 vaccinations in addition to other health needs of the entire family

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STATE OF AFFAIRS

- Using the Polio Transition Planning guide, Nigeria identified 3 Priority areas for focusing investment of the Polio resources:
  - Routine Immunization
  - Surveillance and disease outbreak and response
  - PHC Revitalization
- Nigeria has already mainstreamed a lot of polio resources into PHC revitalization/MCH (NEMCHIC), improving RI (NERICC) , disease surveillance, non-polio SIAs, outbreak response (OBR for meningitis, YF, measles) etc. THIS DOCUMENT IS YET TO BE ROLLED OUT IN THE SUBNATIONAL/OPERATIONAL LEVELS

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CHALLENGES TO IMPLEMENTATION

- For the Whole Family Approach, though the FCT-PHCB are eager to begin implementation, the Poor state of the primary health centers and paucity of funds are huge challenges. Even with cheaper innovative strategies such as using Bluetooth speakers instead of admin staff, other infrastructural issues such as power become new barriers.
- Human Resources
- Infrastructure
- Power/Water

- These challenges have led to the current private-public partnership initiative called: The Adopt A PHC Strategy (AAPHC).

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