



Ministry of Health
Maldives



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MALDIVES JOINT COVID-19 & HPV VACCINES POST INTRODUCTION EVALUATION (CPIE & HPV PIE)

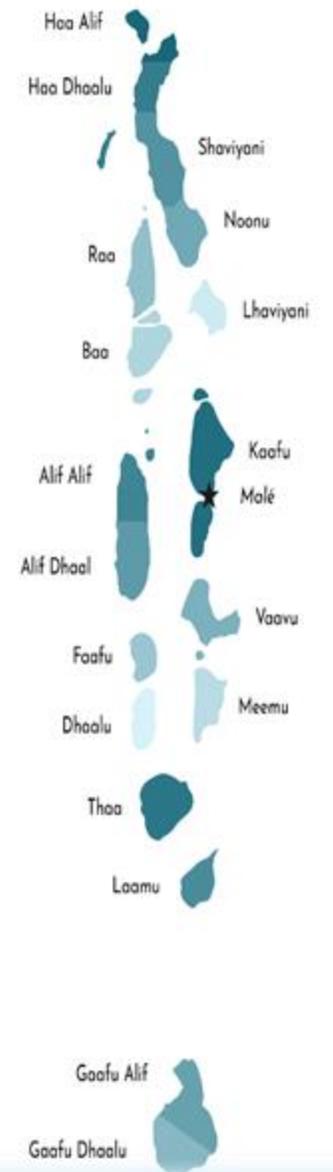
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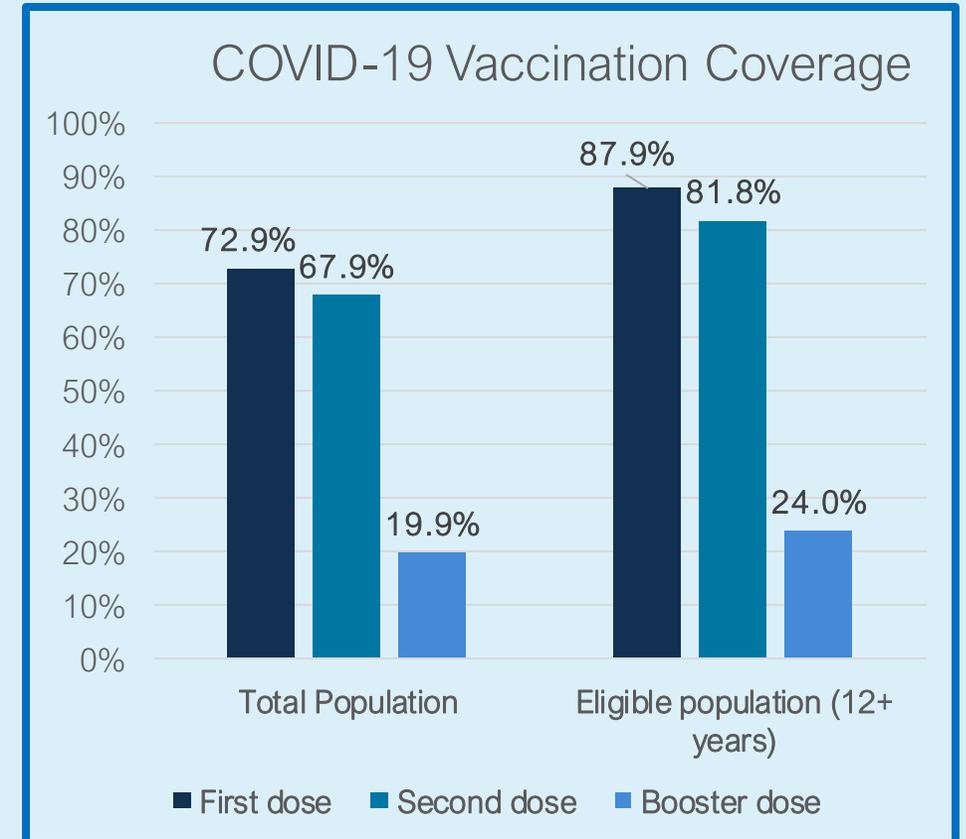
Introduction

- One of the most geographically dispersed nation
- 1,192 islands (grouped into 20 atolls), 187 Inhabited Islands, 166 resort islands
- Total population of 545,847
- Functional health centre/hospital at each island/atoll with a team of doctor, nurses and public health workers
- More than 10% of GDP is spent on healthcare. Highest in the region
- Universal health insurance scheme financed by Government (Aasandha)
- Tourist nation (Approximately 1.5 million arrivals in a year)



COVID-19 Vaccination Overview

- COVID-19 vaccination started 1 February 2021
- Vaccines for primary series: Covishield-SII, Sinopharm, Astra Zeneca, Pfizer-BioNTech
- Vaccine used for booster dose: Pfizer BioNTech
- Current age eligibility:
 - Primary series: 12+ years
 - Booster dose: 18+ years
- Equitable and free of cost vaccination: open to all including expatriates and undocumented migrants



Data as on 13-February-2022

Joint COVID-19 & HPV Vaccines PIE: Objectives

Main objective:

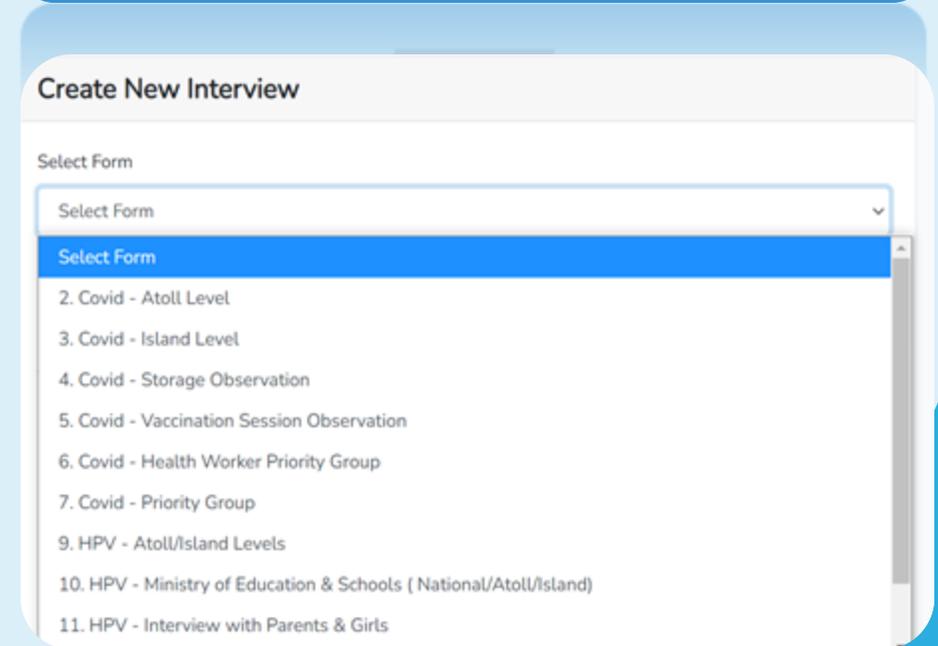
- Evaluate the deployment of COVID-19 vaccines in the country and introduction of HPV vaccine in the national immunization programme

Specific: objectives:

- Identify strengths & challenges in planning & deployment (COVID-19 & HPV)
- Review implementation of the recommendations from 2019 EPI review (HPV)
- Highlight lessons for strengthening national immunization system and services especially as they relate to specific target groups (e.g. adolescents, elderly, persons with co-morbidities); (COVID-19 & HPV)
- Inform recommendations to correct problems & implement improvements for ongoing deployment (COVID-19 & HPV)
- Share lessons learnt (COVID-19 & HPV)

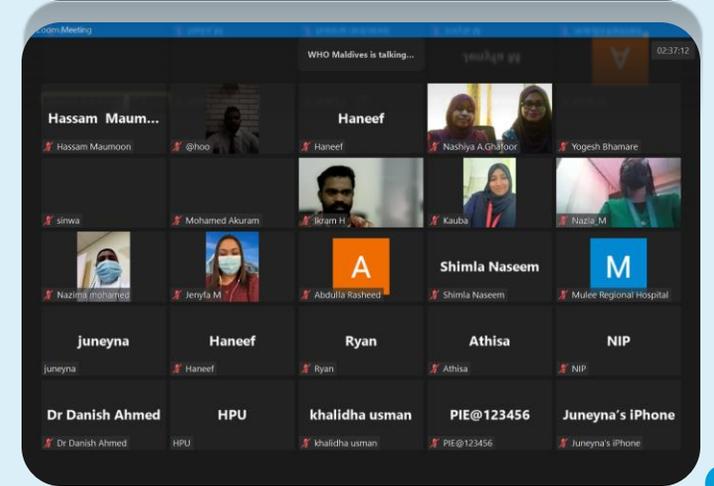
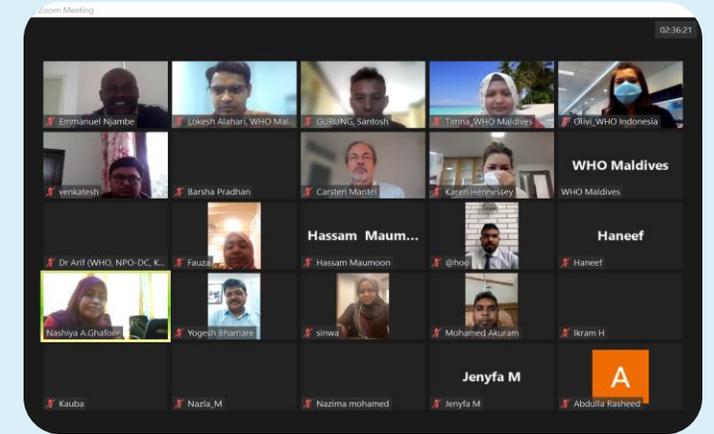
Joint cPIE and HPV PIE- salient features

- Maldives is one of the first countries to conduct a **classic PIE for COVID-19** vaccination and this was coupled **with HPV vaccine PIE**
- A **"real-time online data collection tool"** in a web portal and used
- **The classic PIE exercise evaluated all aspects of COVID-19 and HPV vaccines roll-out**
- High level of political commitment for PIE: Briefing and debriefing meetings were **chaired by HE Minister of Health**, and attended by all senior officials of health department, members of technical advisory bodies and immunization partners.



Preparatory activities for PIE

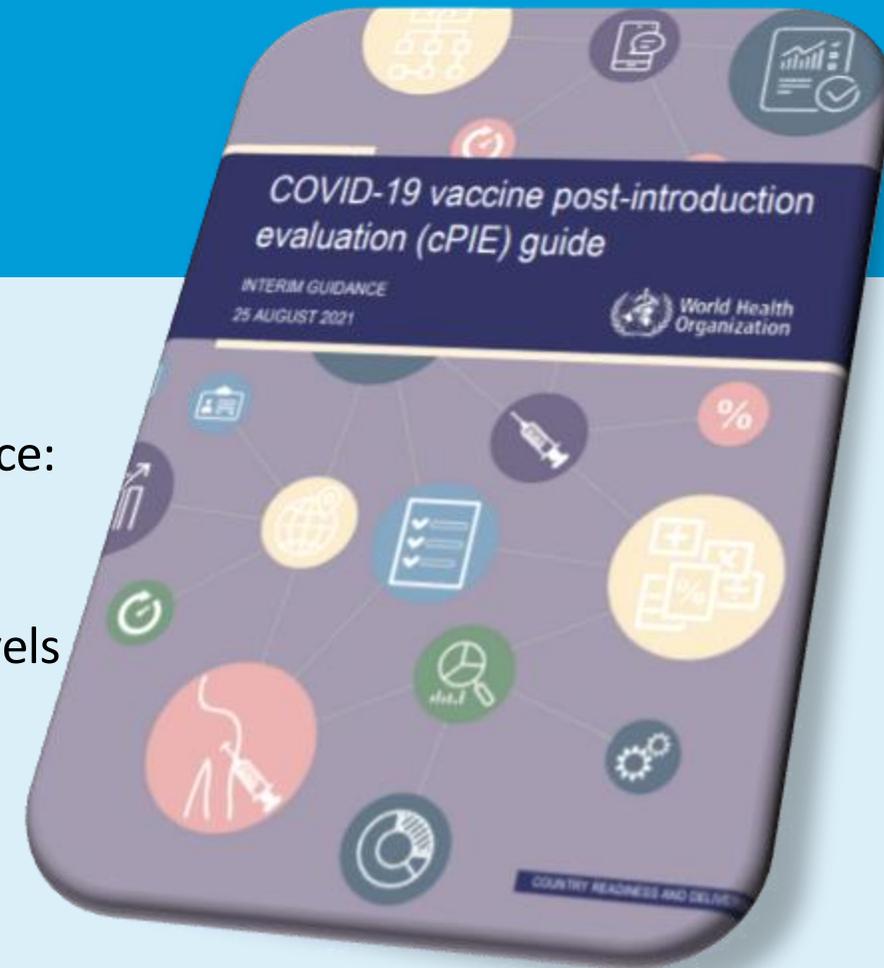
- Conceptualizing of classic PIE amidst pandemic
- Mobilizing national and international experts
- Adopting questionnaires and tools to the country context
- Developing the web tool and field testing
- Regular preparatory coordination meetings among all three levels of WHO
- Planning and coordinating with national, atoll, island focal points
- Virtual trainings and orientations



Process of Evaluation

Followed methodology for a classic cPIE as per WHO interim guidance:

- Desk review of relevant background documents
- Field visits to conduct interviews and inspection of sites at all levels (7 atolls and Male' region)
- Each team was led by an external assessor (international expert)
- Stakeholder engagement and discussions
- Compilation and analysis based on thematic areas
- Briefing and debriefing meetings



Evaluation areas



1. Regulatory Preparedness



2. Planning and Coordination



3. Service delivery



4. Costing and & funding



**5. Supply Chain
Management and Health Care Waste**



**6. Human Resources Management and
Training**



**7. Vaccine demand, advocacy &
communication**



**8. Vaccine Safety Monitoring
Management of AEFIs and Injection Safety**



9. Monitoring & Evaluation



10. COVID-19 Surveillance

Number of site interviews by health administrative level

	Health administration level	Interviews planned/ Conducted	% Interviews conducted
COVID-19 vaccine Questionnaires	National/Central Level	1 / 1	100%
	Covid - National Stakeholder Form	3/3	100%
	Covid - Atoll Level	8/8	100%
	Covid - Island Level	12/12	100%
	Covid - Storage Observation	19/19	100%
	Covid - Vaccination Session Observation	6/22	27%
	Covid - Health Worker Priority Group	18/19	95%
	Covid - Priority Group	41/40	102%
	Covid - Resort or Industrial Islands	8/8	100%
HPV Vaccine Questionnaires	HPV - National Level	1/1	100%
	HPV - Atoll/Island Levels	20/20	100%
	HPV - Ministry of Education & Schools	19/20	95%
	HPV - Interview with Parents & Girls	20/20	100%
	Total	176/ 193	91%

Key Strengths (1)



- Exemplary planning in deployment of COVID-19 vaccines
- Maldives Food and Drug Authority (MFDA) was able to fast track and expedite authorization guided by WHO
- NDVP available and updated
- Equity based vaccine roll out, with inclusion of all residents including expatriates and undocumented migrants
- Prioritization of beneficiary groups were in line with the SAGE prioritization roadmap

Key Strengths (2)



- Proactive efforts in securing vaccine supplies
- Continuous guidance and monitoring from MTAGI and AEFI Committee
- High vaccine acceptance due to proactive communication and public trust in health system
- Rapid dissemination of information and training materials to field staff through viber and google drive
- Good use of virtual communications at all levels during lockdowns



Key Strengths (3)



- All modes of service delivery were observed including fixed & outreach session sites, mobile teams and campaign with mass vaccination centers
- Innovative modes were employed; collaborative efforts with Ministry of Tourism for resort islands, mobile teams for bed-ridden people
- Vaccine distribution to islands was done through multiple modes of transport available in country (airplanes, seaplanes, ferry, speed boats)
- Additional clinical staffs and volunteers were assigned for mass vaccination centres

Key Strengths (4)



- 24/7 hotline for healthworkers and doctors to report and guide in management of AEFIs
- All AEFI procedures are followed as per the National AEFI guidelines
- Safety boxes used in all facilities and IPC measures observed
- Management of crisis communication at national level
- Responsive national/atoll focal points to take questions and guide field personnel

Key Strengths (5)



- Web-based real-time portal for COVID-19 vaccination-DHIFAAU portal
- Both manual vaccination card and digital vaccination certificate with QR Code
- Routine immunization services maintained during pandemic

Overall: The COVID-19 vaccination response led to cold-chain upgrades, reinforcement of AEFI monitoring, and strong community appreciation & awareness of the benefits of vaccination



Key Challenges



- Over-stretched human resources
- Lack of supervision
- Lack of atoll/island operational funds for local needs
- Gaps in oversight and quality control checks of vaccines supply arriving in country
- Duplication and inefficiencies in data reporting systems, minimal data analysis
- Gaps in cold chain, temperature monitoring, and immunization waste management

Key Recommendations (1)

- Identify ways to decrease the staff workload (task-shifting, community engagement, additional staff, etc.)
- Recognize staff for remarkable commitment
- Establish clear SOPs for vaccine quality control & off-label use of vaccines (extended expiry of Pfizer)
- Revive and ensure funding for supportive supervision and operational funds for atolls/islands



Key Recommendations (2)

- Address gaps in cold chain, temperature monitoring gaps, and waste management
- Develop mechanisms or provide instructions for re-distributing vaccines to prevent wastage due to expiry
- Prioritize the design and implementation of a comprehensive electronic immunization registry that facilitates data analysis and guides routine immunization activities



HPV vaccination: Key Findings

- Good acceptance and high reported coverage with both doses of HPV vaccine
- Strong collaboration and coordination with stakeholders, especially Ministry of Education in both the campaign and subsequent integration into routine immunization schedule
- HPV vaccine-specific challenges identified include:
 - Low awareness and misunderstanding of HPV vaccine benefits among girls, parents and professionals (health workers & teachers)
 - Vaccine supply issues: expired vaccine and lack of calculating wastage
- Data issues: inconsistent sources used for estimating the target population, minimal data analysis; not calculating drop-out rates, multiple manual records and irregular reporting to national level



Key Lessons for planning PIE (1)

- Strong coordination and planning is the key for successful implementation of PIE
- Securing international assessors and external partners as per the needs of the assessment
- Customization of tools and questionnaires should be planned well ahead
- Field test the tools well in advance and quantify the time required for assessments
- Virtual orientation and briefing session to assessors before arriving to the country helped



Key Lessons for planning PIE (2)

- Emphasis on COVID appropriate behaviours during assessment
- Using social media platforms and groups to be well connected
- Photographers may be assigned to teams for documentation purpose
- The Web portal has been prepared as a global good so that other countries can adopt and use if needed
- In upcoming cPIEs for other countries, consider to include a component to see how covid-19 vaccination is being integrated within the RI services



Acknowledgements

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Islands/resorts/ schools/ Atoll focal points and teams

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Thank You

