



Recap of first day's sessions: summary of key points

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Technical Consultation Meeting for the EM Regional COVID-19 Vaccine Effectiveness Studies

12–13 November 2023 | Cairo, Egypt

WHO guidance and protocols for evaluation of COVID-19 vaccine effectiveness: Recent revisions and current recommendations

1. RCTs still gold standard for evaluation of vaccine **efficacy**, but observational studies necessary to determine vaccine **effectiveness**
2. WHO has developed **guidance** for evaluation of COVID-19 VE
3. **Important considerations**, e.g., screening, use of RATs, definitions, covariates to collect, biases and cofounders, different types of immunity
4. Two main **WHO methods**: TND in SARI and cohort study among HCWs

❖ **522 COVID-19 VE studies globally up to 2 November 2023 (428 primary series and 267 booster doses)** Live updates available on [View-Hub.org](https://view-hub.org)

Main approaches in conducting the EM Regional COVID-19 Vaccine Effectiveness Study

1. Enhancing processes and structures in the Region

- EMR COVID-19 vaccine effectiveness dashboard
- Standardization of study design and data analysis
- Securing regional ethical clearance
- Development of the regional data entry platform (REDCap)
- Establishment of a multidisciplinary technical team

2. Building national technical capacities in countries

- Regionwide workshops
- Country-specific trainings

Main objectives from establishment of the EM Regional COVID-19 Vaccine Effectiveness Network

1. Quality assurance of national study results

- Standardization of methods, adaptation of generic WHO questionnaires, developed uniform codebooks

2. Facilitation of data sharing by countries with the WHO EMRO

- Regular data monitoring / validation , recurrent technical meetings, planned site visits to study sites

3. Outcomes from use of collected data

- capacity-building programs, increased statistical power and establishment of a sustainable platform

Challenges and lessons learned from the COVID-19 Vaccine Effectiveness Studies in the EMR

Challenges:

- General challenges inherent to COVID-19 VE studies
- Specific challenges to countries
- Unique challenges on multinational (regional) level

Future needs:

- Continued implementation of VE studies for generation of evidence and policy-making
- Linking different data sources
- Integration models with routine PHC services
- Monitoring AEFIs along with VE for better decision-making
- Sustainable financing of vaccine supplies and research globally

Regional COVID-19 Vaccine Effectiveness Study from PAHO



Results just recently published in the Lancet Regional Health – Americas. November 2023

<https://www.sciencedirect.com/science/article/pii/S2667193X23002004>

Countries participating in the EM Regional COVID-19 Vaccine Effectiveness Study: Iran, Jordan, Egypt and Pakistan

- Differences in **data sources** and **validation steps**
- Some **VE estimates less than optimal** due to different vaccine types and potential classification errors
- Overall, **COVID-19 vaccines found effective** against symptomatic COVID-19 infections & severe disease
- **Waning immunization** confirms need for **booster doses**
- **Emergent variants** necessitate generation of **new vaccines** for future
- Importance of **statistically non-significant** and **negative VE** results citing limitations

COVID-19 vaccine effectiveness studies from other countries in the EM Region: Qatar, KSA and UAE

- Various methods / study designs used
- In general, use of **national electronic health records** / databases and vaccine registries ensured data completeness and quality
- Capacity for **genomic surveillance** and **epidemiological expertise** were key contributing factors to offering valuable insights
- **Partnerships** between academic and public health (governmental) sectors emphasized for effective use of evidence in policy-making

Discussion highlights



Develop a **one-page summary** of study results from each country's studies to disseminate among MoHs and facilitate policy-making for immunization programs



Explore possibility to **pool results** from studies using similar methods / designs among all EMR countries



Provision of technical support through **capacity-building** programs and **opportunities to exchange** findings among researchers found to be beneficial



Thank you

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