

WHO EMRO Support for Research and Knowledge Management for COVID-19 Response in the Eastern Mediterranean Region

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**TECHNICAL CONSULTATIVE MEETING FOR THE EMR COVID-19
VACCINE EFFECTIVENESS STUDIES**

CAIRO, EGYPT

12-13 NOVEMBER 2023

Research on COVID-19: a necessity not a luxury

A novel “high-impact” disease – many unknowns at start

Origins, diagnosis, clinical management, short- and long-term trajectory of the disease, transmission and preventive behaviour, vaccines (development, efficacy, effectiveness), etc

WHO response in EMR

Regional plan for enhancing EIPM ratified by MoHs of EMR countries in 2019

WHO EMRO established the **Pillar** for “Research and Knowledge Management” in its COVID-19 response structure

Areas of focus:

1. enhancing capacity for evidence generation at national level
2. timely provision of available evidence to support pandemic response
3. enhancing capacity and experience sharing in use of evidence

Rashidian, Wu, Al Ariqi et. al. [WHO's support for COVID-19 research and knowledge management in the Eastern Mediterranean Region](#). BMJ Glob Health. 2022 Jun;7(Suppl 3):e008737. doi: 10.1136/bmjgh-2022-008737

Implementation of population-based sero-epidemiological Unity Studies in EMR with WHO support

Country	Date	Type of survey	Sample size(s)
Afghanistan (2 rounds)	June 2020; February 2021	Household	9546; 22000
Jordan (3 rounds)	July 2020; October 2020; December 2020	Household	~5000
Pakistan (2 rounds)	July 2020; October 2020	Convenient-open market; Household	~5000
Palestine	January 2021	Household	6151
Somalia	August 2020	Convenient-Health facilities	3600
Syria	February 2021	Convenient-Health facilities	10000
Yemen (Aden)	January 2021	Household	2001
Egypt	February 2021	Household	6000
Tunisia	March 2021	Household	10000
Lebanon	March 2021	Random phone calls	~3700
Libya	March 2021		
Sudan	April 2021	Household	15000
UAE	August 2021	Household	8831

Countries to participate in COVID-19 VE Studies supported by the WHO

National COVID-19 VE Studies	Study design and method	Sample size and study sites	
Countries and Investigative Institute	Egypt <i>Al-Azhar University</i>	Mix Retrospective-Prospective Cohort Study in Health Care Workers (HCWs)	1,006 participants From 5 hospitals
	Iran <i>Kermanshah University of Medical Sciences</i>	Retrospective Test-Negative case-control Design (TND) in Sever Acute Respiratory Infections	30,000 Participants From 7 provinces
	Jordan <i>MOH</i>	Prospective Test-Negative case-control Design (TND) in Sever Acute Respiratory Infections	1,000 cases: 2,000 controls (3,000 total) From 4 hospitals
	Pakistan <i>Khyber Medical University</i>	Mix Retrospective-Prospective Cohort Study in Health Care Workers (HCWs)	1,627 participants From 3 hospitals

Supporting national level research studies on priority COVID-19 related topics

Research priority settings for COVID-19

WHO/EMRO special Calls for Proposals related to “Research in Priority Areas of Public Health (RPPH)” in **2020 and 2022**

Calls for Proposals in 2021: “Migration Health Research” and “IHR and Health Security Preparedness”

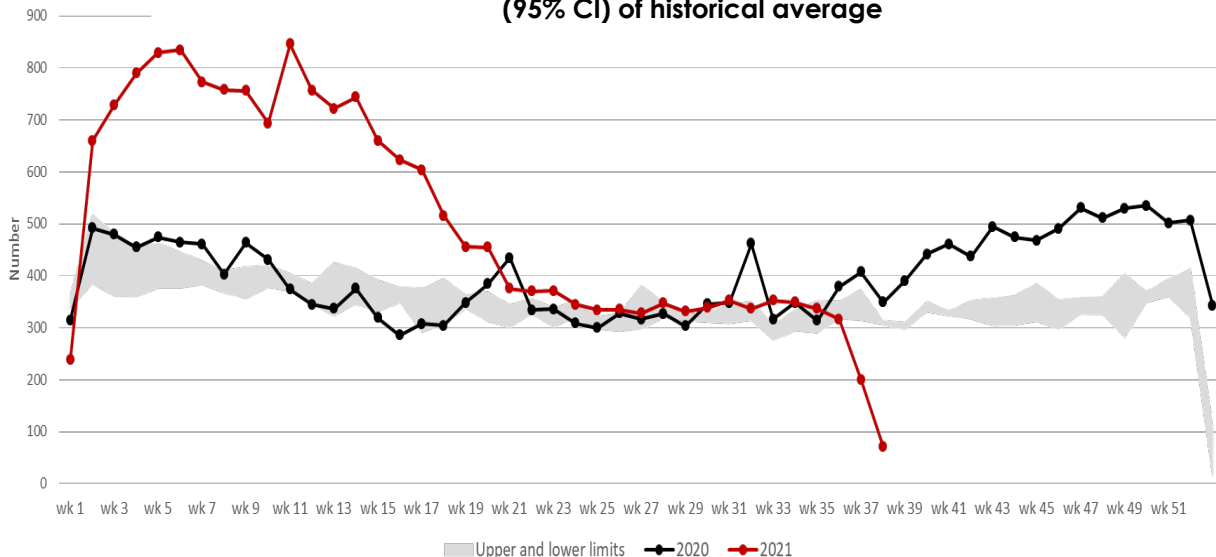
New round of call for proposals (**2022-2023**) for COVID-19 related research has started

[WHO Solidarity RCT](#) for COVID-19 treatment

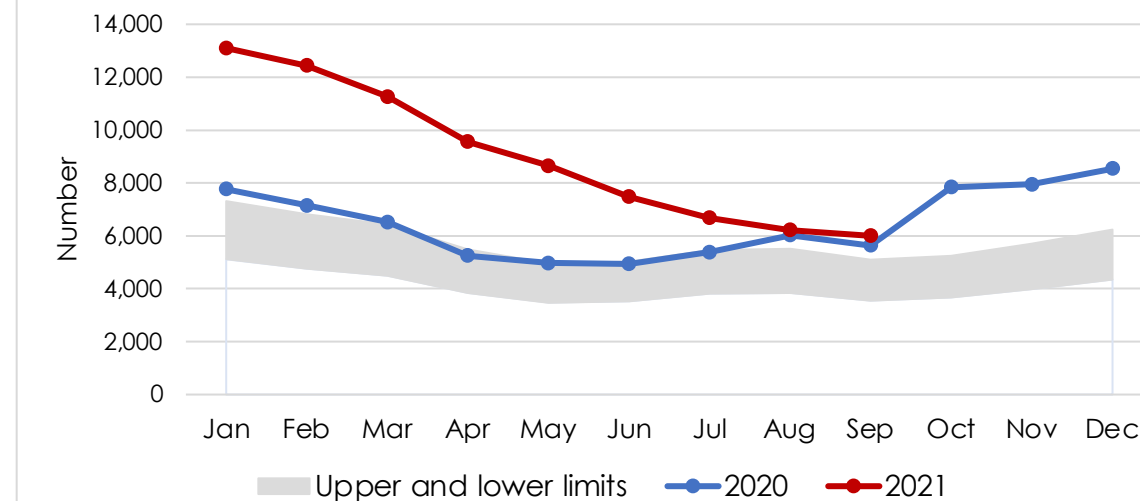
In EMR: Iran (25 hospitals); Saudi Arabia (7 hospitals), Pakistan (2 hospitals) and Lebanon (1 hospital) enrolled in the study

Excess deaths during the pandemic period, 2020 and 2021 (monthly and weekly examples)

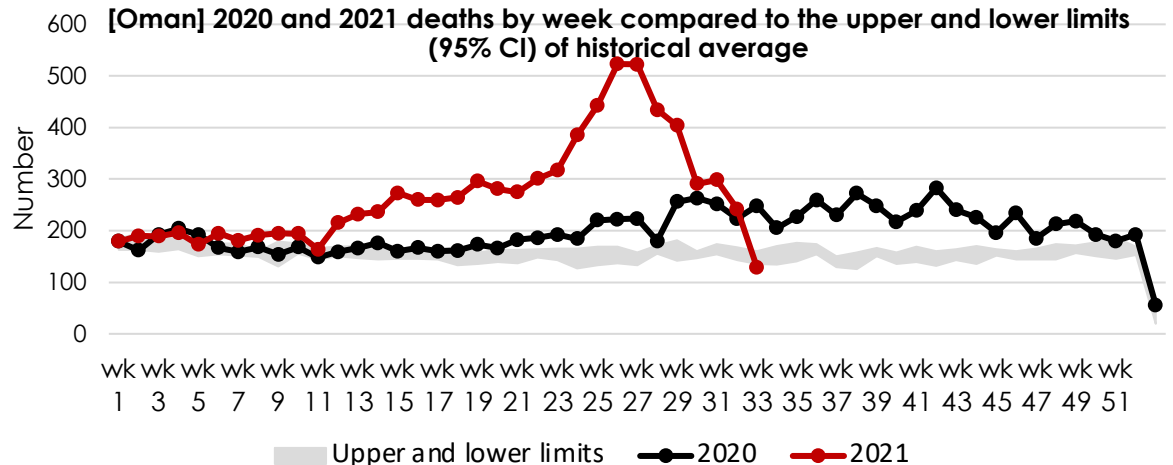
[L] Lebanon 2020 and 2021 deaths by week compared to the upper and lower limits (95% CI) of historical average



Tunisia]2020 and 2021 deaths by month compared to the upper and lower limits (95% CI) of historical average



[Oman] 2020 and 2021 deaths by week compared to the upper and lower limits (95% CI) of historical average



Timely provision of available evidence to support pandemic response

Evidence summaries to IMST



Eastern Mediterranean Health Journal

Case-studies of use of evidence in national policies in response to COVID-19 pandemic

Country	Name of Case Study
Afghanistan	- Role of National Household Survey to Prevent and Reduce Infodemic in Afghanistan - Using social and behavioral data as an algorithm to inform policy-making processes in Afghanistan
Iran	- Establishment of a rapid response system to provide timely evidence for policy-making: a case study from the National Institute for Health Research in Iran
Jordan	- Using local data and modelling to respond to COVID-19: A case study from the Ministry of Health in The Hashemite Kingdom of Jordan
Libya	- Engaging stakeholders through trainings to increase covid-19 vaccine acceptance in Libya
Morocco	- Continuity of healthcare services in Morocco during the COVID-19 crisis: using evidence to ensure anticipatory action
Palestine	- The PNIPH/WHO COVID-19 Monitoring apparatus in the occupied Palestinian Territories
Oman	- Knowledge, Attitude and Practice Survey for COVID-19 Vaccination in Oman: A Case Study from the Ministry of Health
Pakistan	- Use of a national survey and stakeholder engagement to establish an online teaching system: a case study from Khyber Medical University in Pakistan
Saudi Arabia	- Improving Uptake in Response to COVID-19 Pandemic in Saudi Arabia through raising awareness and local data: Lessons learned from an Academic Institution
Somalia	- Using global evidence to inform risk communication and community engagement (RCCE) to respond to COVID-19
Sudan	- Sudan's Governance Model for Covid-19 pandemic during the first wave
Syria	- Adapting clinical guidelines for case management and health care worker training
Yemen	- Use of local data and knowledge to respond to COVID-19: A case study from Syoun/Hadhramout Yemen - Bridging gaps between policy-makers and experts to adapt global guidelines for the development of a national vaccination deployment plan: A case study from Yemen
EM region	- Assessment of Medication safety considerations in the national treatment protocols for COVID-19 in 10 EMR countries

Science as a solution, science as a challenge

Good science is the key!

Too many research studies that are poorly designed, or conducted

By early 2021, there were over 300 RCTs registered in EMR country
70% had a target sample size of below 100

Inappropriate interpretation of research findings!

Findings are generalized, taken out of context
By clinicians, scientists, policy makers ... (not just journalists and the public)

Abuse of science or research processes

Approval to conduct research used as the approval of the intervention under study



Concluding remarks

WHO is playing a pivotal role in support of key research in EMR countries

Research has already helped in better understanding of the disease, and reducing morbidity and mortality

The challenge of pseudoscience and infodemic is real

Collaboration in research is key

Need to enhance governance of research for health in the countries

Further research on impact of social interventions and preventive measure are needed

Systematic guidance and oversight of research is required



EMRO's Research and Knowledge Management team in response to COVID-19 pandemic

(2020-2022: from four WHO technical departments / engaging all IMST pillars)

- Lubna Al-Ariqi
- Arshad Altaf
- Eman Aly
- Amal Barakat
- Victoria Belorgeot
- Henry Doctor
- Kamal Fahmy
- Nilmini Hemachandra
- Kazuyo Iwamoto
- Zahra Karimian
- Mehrnaz Kheirandish
- Chiori Kodama
- Gary Kuniyoshi
- Ahmed Mandil
- Mohamed Nour
- Hatem Nour Eldin
- Arash Rashidian
- Sumithra Reddiar
- Maha Talaat
- Kaiyue Wu
- Bassim Zayed

[Paper available at: WHO's support for COVID-19 research and knowledge management in the Eastern Mediterranean Region | BMJ Global Health](#)

