

Requesting Section: Health/HIV, UNICEF EAPRO

TITLE: A multi country survey: Perceptions and demand for routine immunization and other maternal and child health services during COVID-19 pandemic among caregivers and healthcare workers in East Asia and Pacific

1. Background

Ensuring access to high-quality pregnancy, postnatal care, and immunization services is critical for the reduction of maternal, neonatal, and child mortality.^{1,2} The global pandemic of coronavirus 2019 (COVID-19) continues to negatively affect many aspects of healthcare, including immunization and other routine maternal and child health (MCH) services, particularly in lower- and middle-income countries (LMIC). Early modelling estimates of the indirect effects of COVID-19 pandemic suggested the potential for significant increases in maternal deaths and deaths to children under five years.³ While there have been reports of disruptions to MCH programs caused by the pandemic, efforts to systematically collect primary data in this area have been limited.

Gaps remain in our understanding of how the COVID-19 pandemic has affected caregiver demand for immunizations and healthcare worker (HCW) perspectives towards providing immunization and other MCH services. Studies and reports indicate that caregivers may fear becoming exposed to coronavirus at health facilities or be dissuaded from seeking services by rumors and misinformation, or that HCWs may be hesitant to provide services to the public for fear they may be exposed to the virus.^{4,5,6} However, caregivers and HCWs may be positively motivated to receive and provide immunization services due to the protective benefit of vaccines on vaccine preventable diseases, including COVID-19 vaccines.

In addition, little is known about how health seeking behaviors for routine MCH services and perceptions of COVID-19 vaccines vary between and within countries with disparate COVID-19 pandemic experiences (e.g., areas with high versus low community spread). More research is needed to better understand the impact of the global COVID-19 pandemic on caregiver and HCW perceptions and demand for immunizations, including COVID-19 vaccines, and other MCH services.

2. Objectives, Purpose & Expected Results

Given the effectiveness of immunization and MCH services for reduction of maternal and child mortality, continuing high-quality immunization and MCH services during the COVID-19 pandemic are priorities for the

¹ McGovern ME, Canning D. (2015). Vaccination and all-cause child mortality from 1985 to 2011: Global evidence from the demographic and health surveys. *American Journal of Epidemiology*, 182(9): 791-798. <https://doi.org/10.1093/aje/kwv125>

² WHO, UNICEF. (2020). Ending preventable newborn deaths and stillbirths by 2030: Moving faster towards high-quality universal health coverage in 2020-2025. <https://data.unicef.org/resources/ending-preventable-newborn-deaths-and-stillbirths-by-2030/>

³ Robertson T, Carter ED, Chou VB, Stegmuller AR, et al. (2020). Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: A modelling study. *The Lancet*, 8, e901-e908. [https://doi.org/10.1016/S2214-109X\(20\)30229-1](https://doi.org/10.1016/S2214-109X(20)30229-1)

⁴ World Health Organization. (2020). *Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020* (No. WHO/2019-nCoV/EHS_continuity/survey/2020.1). World Health Organization.

⁵ Apisarnthanarak, A., Apisarnthanarak, P., Siripaparat, C., Saengaram, P., Leeprechanon, N., & Weber, D. J. (2020). Impact of anxiety and fear for COVID-19 toward infection control practices among Thai healthcare workers. *Infection Control & Hospital Epidemiology*, 41(9), 1093-1094.

⁶ Ahinkorah, B. O., Ameyaw, E. K., Hagan Jr, J. E., Seidu, A. A., & Schack, T. (2020). Rising above misinformation or fake news in Africa: Another strategy to control COVID-19 spread. *Frontiers in Communication*, 5, 45.

United Nations Children's Fund (UNICEF) East Asia and Pacific Regional Office (EAPRO).⁷ This focus remains particularly critical in the context of limited supply of COVID-19 vaccines and the global emergence of SARS-CoV-2 variants, both which could extend the pandemic well beyond 2021.^{8,9}

UNICEF EAPRO, in partnership with the Global Immunization Division (GID) in the United States Centers for Disease Control and Prevention (CDC), is seeking to contract with an institution to lead a multi country survey of healthcare workers and caregivers in select countries of the East Asia and Pacific (EAP) Region. The research is intended to provide an understanding of the impact of the COVID-19 pandemic on routine immunization and other MCH services in at least two countries in the region in order to inform strategies for systems strengthening during the pandemic and for communications activities during COVID-19 vaccine introduction and roll-out. Comparisons in perceptions and care-seeking between and within countries with varying degrees of COVID-19 pandemic will provide additional insights that can inform programming in other countries in the region.

Objectives of the research include the following:

HCW Survey

- Describe HCW experiences with COVID-19 and perceived risk of infection
- Describe HCW perspectives on how COVID-19 has impacted routine immunization and other MCH service delivery
- Identify HCW strategies to address disruptions to routine immunization and other MCH services
- Assess HCW self-efficacy to provide routine immunization and MCH services during COVID-19 pandemic
- Describe HCW exposure to and influence of COVID-19 related rumors or misinformation, and how they have addressed it
- Describe HCW acceptance of, demand for, and confidence in COVID-19 vaccines
- Describe HCW perspectives on challenges and enablers for delivering COVID-19 vaccines

Caregiver Survey

- Describe caregiver experiences with COVID-19 and perceived risk of infection
- Describe health-seeking behaviors among caregivers related to routine immunization and other MCH services in the context of COVID-19
- Assess caregiver perceptions of immunization and other MCH services since the start of COVID-19 pandemic
- Describe caregiver acceptance of, demand for, and confidence in COVID-19 vaccines
- Describe caregiver exposure to and influence of COVID-19 related rumors or misinformation

The **primary purpose** of the research study is to better understand the influence of the global COVID-19 pandemic on caregivers of children and HCW demand for immunizations, including COVID-19 vaccines, and other MCH services. A **secondary purpose** of the study is to explore how care-seeking behavior and perceptions of COVID-19 vaccines among caregivers and HCWs vary between areas with high and low/medium community spread of COVID-19.

⁷ WHO Office for South-East Asia, UNFPA, and UNICEF East Asia and Pacific. (2020). Continuing essential sexual, reproductive, maternal, neonatal, child and adolescent health services during COVID-19 pandemic: Practical Considerations. WHO. Regional Office for South-East Asia. <https://apps.who.int/iris/bitstream/handle/10665/331816/SRMNCAH-covid-eng.pdf?sequence=1&isAllowed=y>

⁸ Galloway SE, Paul P, MacCannell DR, et al. Emergence of SARS-CoV-2 B.1.1.7 Lineage – United States, December 29, 2020–January 12, 2021. *MMWR Morb Mortal Wkly Rep*, 2021; 70:95–99. DOI <http://dx.doi.org/10.15585/mmwr.mm7003e2>

⁹ Fontanet A, Autran B, Lina B, Kieny MP, Karim SSA, Sridhar D. (Online Feb 11, 2021). SARS-CoV-2 variants and ending the COVID-19 pandemic. *The Lancet*, [https://doi.org/10.1016/S0140-6736\(21\)00370-6](https://doi.org/10.1016/S0140-6736(21)00370-6)

The **expected outputs of the quantitative research study among HCWs** will include information on the following domains of interest:

- Demographic characteristics
- Risk perception of COVID-19
- Impact of COVID-19 on immunization and MCH services
- Self-efficacy to provide immunization and MCH services in the context of COVID-19 pandemic
- Receipt/Acceptance/demand/confidence in COVID-19 vaccines
- Exposure and influence of COVID-19 rumors and misinformation

The **expected outputs of the quantitative research study among caregivers of children** will include information on the following domains of interest:

- Demographic characteristics
- Risk perception of COVID-19
- Experience of COVID-19
- Health seeking behaviors in the context of COVID-19
- Attitudes towards immunization
- Receipt/Acceptance/demand/confidence for COVID-19 vaccines
- Exposure and influence of COVID-19 rumors and misinformation

Data comparisons will be considered for the following groups:

- Age groups
- HCW cadres
- Urban versus rural
- Country A versus country B
- Within country high COVID-19 community spread versus relatively low spread
- Levels of demand for immunization
- Vaccinated versus non-vaccinated
- High exposure to misinformation versus low exposure
- Others, as deemed relevant

Expected results of the research include the following:

- Policy makers, government sectors, and UNICEF country offices will be provided with contextualized and evidence-based recommendations on strengthening and increasing demand for routine immunization and MCH services in the context of COVID-19 pandemic.
- Policy makers, government sectors, and UNICEF country offices will be provided with contextualized and evidence-based recommendations for increasing access and demand for COVID-19 vaccines among caregivers and HCW.

3. Description of the assignment

EAPRO will form a cross sectoral Technical Advisory Group (TAG) with experts from Health and C4D, country office representatives from health/immunization and C4D, along with experts on demand and social and behavioral research from US CDC. The contracted institution will design and lead the research, including overseeing sub-contracted organizations in-country, as needed.

Activities include:

- Conduct a desk review of COVID-19 immunization and MCH-related guidance documents, papers, reports and instruments to inform the background section of the research protocol and data collection tool development.
- Design the quantitative research protocol and data collection tools in close collaboration with the TAG; protocol should include one EAP country with medium/high community spread of COVID-19

(e.g., Indonesia) and one EAP country with relatively low community spread (e.g., Papua New Guinea).

- Following approval from TAG, submit the research protocol to the appropriate in-country ethical review boards and make necessary adjustments to the protocol, as needed.
- Recruit and train the research team and conduct research study in two countries in East Asia and Pacific; may take the option to sub-contract specific activities, as needed, to fulfill the research protocol. Training should include content on ethical considerations, methods, quantitative data collection, tools, and quality assurance activities.
- Conduct data entry and submit to TAG the 2 raw, merged datasets one dataset for caregivers and one dataset for HCWs, including data from both countries in each set.
- Conduct data cleaning and creation of variables of interest as defined by TAG (country, urban vs rural, high community spread vs low community spread, age groups, HCW groups, demand level groups, among others). Submit to TAG the 2 cleaned datasets, one for caregivers and one for HCWs, including data from both countries in each set.
- Undertake a summary analysis of the quantitative research data focusing on covering the objectives of the study and comparisons of interest and produce a summary report with recommendations for each country.
- Facilitate virtual (as needed) country consultations and validation of the draft reports and recommendations.
- Facilitate a virtual consultation with TAG on the draft country reports, recommendations, and regional implications.
- Based on the feedback from the consultations, finalize and submit to the TAG the country reports.
- Present remotely the final findings at country level and to a regional audience.
- In consultation with EAPRO point of contact, draft a manuscript of key findings for peer-reviewed journal.
- Hold regular progress review meetings with UNICEF Regional Office and TAG.

The implementation arrangement of this assignment:

- Overall project lead and management: UNICEF EAPRO Regional Advisor on Health/HIV.
- Oversight and technical guidance: Technical advisory group, including UNICEF EAPRO Regional Communication for Development Advisor, UNICEF Country representatives, and US CDC social and behavioral research focal points.
- Geographic scope: **Papua New Guinea** or other EAP country with low/medium COVID-19 community spread and **Indonesia** or other EAP country with medium/high COVID-19 community spread.

4. Deliverables and Timeline

4.1 Research protocol and data collection tools

- **Desk review** of published and gray literature on COVID-19 in the selected countries, implications of pandemic on immunization and MCH services, perceptions of caregivers and HCWs on the pandemic and COVID-19 vaccination, and available tools for collecting behavioral and social drivers of vaccination. The desk review should inform the development of the research protocol and tools but does not need to be formally submitted to UNICEF point of contact or TAG.
- **Research protocol** should include sections as required by ethical review boards, including but not limited to: Background and Significance (overview of COVID-19 pandemic globally and in the country of interest, immunization and MCH situation in the country, summary of evidence to-date on impact of pandemic on immunization and MCH services, perceptions of health services and COVID-19 vaccines, gaps in knowledge), Study Goal and Objectives, Study Design and Methodology, Data Management and Statistical Analysis, Quality Assurance, Safety

Considerations, Expected Outcomes and Limitations of the Study, Ethical Considerations, Plans for Dissemination.

- **HCW survey questionnaire** should cover the domains including, but not limited to: Demographic characteristics, Risk perception of COVID-19, Impact of COVID-19 on immunization and MCH services, Self-efficacy to provide immunization and MCH services in the context of COVID-19 pandemic, Receipt/ acceptance/ demand/ confidence in COVID-19 vaccines, and Exposure and influence of COVID-19 rumors and misinformation. The questionnaire should also include questions that allow for creation of comparison variables, including but not limited to: Age groups, Cadres, Urban/rural, Country A/B, Areas with high/medium-low COVID-19 community spread, High/low demand for immunization, Vaccinated/non-vaccinated, High/low exposure to misinformation. Strong consideration should be given to inclusion of items from the global Behavioral and Social Drivers (BeSD) for Immunization tool.
- **Caregiver survey questionnaire** should cover the domains including, but not limited to: Demographic characteristics, Risk perception of COVID-19, Experience of COVID-19, Health seeking behaviors, Attitudes towards immunization, Receipt/ acceptance/ demand/ confidence in COVID-19 vaccines, and Exposure and influence of COVID-19 rumors and misinformation. The questionnaire should also include questions that allow for creation of comparison variables, including but not limited to: Age groups, Urban/rural, Country A/B, Areas with high/medium-low COVID-19 community spread, High/low demand for immunization, Vaccinated/non-vaccinated, High/low exposure to misinformation. Strong consideration should be given to inclusion of items from the global Behavioral and Social Drivers (BeSD) for Immunization tool.

4.2 Support of in-country data collection

- **Recruit and train local research teams**, including interviewers, data entry and supervisors, on the research protocol including, but not limited to: Overview of the study, Protocol and procedures, Quantitative data collection techniques, Ethical considerations, Data collection instruments, Interview practice sessions, and Quality assurance.
- **Technical support and oversight to local research teams for data collection and data entry**, including procedures for quality assurance at every stage of the process.
- **Raw and cleaned datasets** should be shared with UNICEF EAPRO point of contact as follows: Merge raw HCW data from two countries of interest into a single HCW dataset, Merge raw Caregiver data from two countries of interest into a single Caregiver dataset, Clean raw, merged datasets and create comparison variables of interest.

4.3 Results and dissemination. *The target audience will be Government Ministries of Health, UN agencies, Donors, NGOs and Private Sector.*

- **Analyze data**, including but not limited to: Univariate and bivariate analyses of variables of interest (by comparison groups, as appropriate).
- **Draft and finalize country reports**, including but not limited to: Overview of COVID-19 pandemic in-country and immunization and MCH indicators, Overview of study methods and procedures, Country-specific summary findings for HCWs and Caregivers on key variables (Perceptions and experiences of COVID-19, Demand for and trust in COVID-19 vaccines, Impact of epidemic on immunization and MCH services, Self-efficacy to provide immunization and MCH services during the pandemic, and Exposure to COVID-19 rumors and misinformation) – where sample sizes are large enough, include comparative analysis on key variables by groups of interest (urban/rural, age groups, cadre, etc.), key recommendations for strengthening services and communication for routine immunization, MCH, and COVID-19 vaccine introduction, and regional implications.
- **Power point presentations** should capture an overview of research, methodology, findings, and recommendations and implications for routine immunization, MCH services, and COVID-19 vaccine introduction in each country and regionally.

- **Draft manuscript for peer-reviewed journal** in consultation with UNICEF EAPRO and TAG after coming to agree on priority results, key messages, and journal for submission.

Deliverable	Indicative timeline
Institute contracted	June 14, 2021
Deliverable 1 – Research Protocol and Ethics Review	
Complete TORs for local research teams/sub-contracts	July 1, 2021
Complete desk review to inform background and tools	July 14, 2021
Develop Research protocol	August 1, 2021
Finalize protocol and submit ethics application	August 7, 2021
Deliverable 2 - Support of in-country research	
Train local research teams on the protocol	October 1 – October 7, 2021
Provide technical support and oversight to local research teams for data collection and data entry	October 7 – November 21, 2021
Merge raw datasets, one each for HCWs and Caregivers, and submit to TAG	November 21 – December 1, 2021
Clean datasets, one each for HCWs and Caregivers, create variables of interest, and submit to TAG	December 1 – December 14, 2021
Deliverable 3 – Results and Dissemination	
Analyze data and draft country reports, including country-specific key findings and recommendations, and regional implications	December 14 – February 14, 2022
Conduct consultations virtually with countries and region to review/validate findings and recommendations	February 14 – February 28, 2022
Revise reports based on feedback	March 1 – April 1, 2022
Finalize country reports, submit PPT covering key findings and recommendations for each country and regional implications, and conduct dissemination presentations at regional and country levels.	April 1 – April 14 2022
Draft manuscript for peer-review journal and submit to UNICEF point of contact and TAG	April 14 – May 31, 2021

5. Reporting requirements

- Electronic progress reports provided on a monthly basis to regional focal point
- Monthly check in calls with the regional focal point
- Quarterly check in calls with TAG members

6. Location and Duration

- Starting period: June 14, 2021, negotiable depending on signing of contract
- Foreseen finishing period: May 31, 2022 which may be extended based on satisfactory performance and agreement of both parties.
- Indicative schedule of the assignment: as per the deliverables table above
- The assignment will be completed partially at the institute's premises (desk review, research protocol design and development, dataset cleaning, data analysis, development of reports, presentations, and manuscript, virtual meetings and dissemination) and in the countries of interest (ethical review submission and follow up, trainings, data collection). The institute will be responsible for acquiring resources and facilities required for its completion.

7. Qualification requirements or Specialized skills/Experience Required:

7.1 Institution

The selected institution must have:

- Proven track record in undertaking multi-country social and behavioral research
- Proven track record in training, supporting and coordinating local research teams
- Experience undertaking desk reviews
- Experience developing research protocols and shepherding them through the ethical review process
- Experience designing and implementing quantitative research
- Experience cleaning and analyzing quantitative research data
- Experience creating and disseminating research findings via PPT presentations and peer-reviewed manuscripts
- Proven track record in delivering with quality within a specific timeframe

Desirable

- Experience undertaking research on behaviors and social drivers for immunization demand
- Experience undertaking research with caregivers and healthcare workers
- Experience advising governments on the development and delivery of immunization and MCH services

7.2 Team

The project leader must have at least 10 years in social and behavioral, quantitative research design and methods.

The team must consist of members covering the following areas of experience and expertise:

- Social and behavioral research design and implementation (e.g., knowledge, attitudes, and practices)
- Immunization systems and services
- Maternal and child health systems and services
- Experience working in East Asia and the Pacific

It is desirable that team members have:

- Understanding of the COVID-19 pandemic and how it has influenced health services
- Understanding of immunization and MCH service provision in the region
- Understanding of barriers and enablers to care for immunization and MCH services

8. Evaluation process and methods

The evaluation panel will first review each response for compliance with the mandatory requirements of this RFPS. Failure to comply with any of the terms and conditions contained in this RFPS, including provision of all required information, may result in a response or proposal being disqualified from further consideration. Kindly also refer to the detailed instructions in the main LRPS document.

Each valid proposal will be assessed by an evaluation panel first on its technical merits and subsequently on its price. For this RFPS, the weight allocated to the technical proposal is 70% (i.e., 70 out of 100 points). To be further considered for the financial evaluation a minimum score of 49 points is required. Only proposals with a score of 49 or more points in the technical evaluation will be financially evaluated (i.e., the financial proposal will be opened). For further details and the distribution of points kindly refer to **table 1** below.

The weight allocated to the financial proposal is 30% as per the following: the maximum number of 30 points will be allotted to the lowest technically compliant proposal. All other price proposals will receive points in inverse proportion to the lowest price. Commercial proposals should be submitted on an all-inclusive basis for providing the contracted deliverables as described in the TOR.

The proposal(s) obtaining the overall highest score after adding the scores for the technical and financial proposals is the proposal that offers best value for money and will be recommended for award of the contract.

Table 1: Evaluation Criteria and distribution of points

CATEGORY	Max. Points
1. METHODOLOGY <ul style="list-style-type: none">A clear and feasible research methodology that demonstrates a firm understanding of the TOR's scope, objectives and goals (15)Quality of proposed research implementation plan, e.g., how the bidder will undertake each task and time-schedules (10)Risk assessment - recognition of the potential obstacles and methods to prevent and manage peripheral problems / quality assurance measures (5)Clear description of the implications of COVID-19 on project activities and plans to mitigate risk of exposure to team members (5)	35 points
2. PROPOSED TEAM and ORGANISATIONAL CAPACITY <ul style="list-style-type: none">The proposal clearly sets out the role of each team member for undertaking each task and deliverable, and describes why they are suited to fulfill the role (10)Professional expertise, knowledge and experience with similar projects, contracts/sub-contracts, clients and consulting assignments (10)Proven track record in delivering similar or related projects (10)Description of infrastructure/connections/relationships within countries of interest that will make completion of the project possible. (5)	35 points
TOTAL POINTS FOR TECHNICAL PROPOSAL (min. passing score = 49 points)	70 points
3. FINANCIAL PROPOSAL <ul style="list-style-type: none">Full marks are allocated to the lowest priced proposal. The financial scores of the other proposals will be in inverse proportion to the lowest price.	30 points
TOTAL POINTS	100 points

9. Administrative issues

- Bidders are requested to provide a detailed technical proposal in **Annex C** – Technical response form. The technical proposal must include all information needed to fully evaluate the proposal against the evaluation criteria outlined in section 8 of this TOR.
- Bidders are requested to provide a detailed cost proposal in **Annex D** – Financial Proposal, factoring in all cost implications for the required services.
- The bidder is required to include the estimate cost of travel in the financial proposal noting that i) travel cost shall be calculated based on the most direct route and economy class travel, regardless of the length of travel and ii) costs for accommodation, meal and incidentals shall not exceed applicable daily subsistence allowance (DSA) rates, depending on the location, as promulgated by the International Civil Service Commission (<https://icsc.un.org/>).
- Unexpected travels shall be treated as above.

10. Payment Schedule

No.	Payment	Tentative schedule	Remarks
1.	25%	October 1, 2021	Upon submission and acceptance of research protocols for each country
2.	40%	December 1, 2021	Upon completion of data collection in each country and submission and acceptance of raw, merged datasets
3.	25%	February 14, 2022	Upon submission of clean, merged dataset, and draft country reports
4.	10%	May 31, 2022	Upon submission of final country reports, PPT, and draft manuscript, and delivery of virtual dissemination presentations at country and regional levels

- The payment schedule must be based on completed deliverables.
 - If the bidder wishes to propose an alternative payment schedule, it must be included in the financial proposal. The final payment schedule is to be reviewed and agreed with UNICEF.
 - Payment terms 30 days net upon receipt of approved invoice.
-