



Sep 10, 2020

# Rapid scoping review of measures taken to maintain the provision and the use of essential services for MNCAAH (maternal, newborn, child, adolescent and older person's health)

Lenka Benova<sup>1</sup>, Elise Huysmans<sup>1</sup>, Anayda Portela<sup>2</sup><sup>1</sup>Institute of Tropical Medicine Antwerp Belgium; <sup>2</sup>WHO

1

Works for me

This protocol is published without a DOI.

Lenka Benova

## ABSTRACT

### Purpose of the Work

For the great majority of pregnant women/mothers, newborn, children, adolescents and older people, the most important effects of the COVID-19 pandemic will be indirect. Recent modelling of the indirect effects of the coronavirus pandemic in low- and middle-income countries has shown that under certain service reduction scenarios, reduced coverage of essential maternal and child health interventions can lead to additional maternal and child deaths. Governments need to make difficult decisions to balance the demands of responding directly to the COVID-19 pandemic, while simultaneously maintaining essential MNCAAH services. To support countries in adapting their response to different COVID-19 scenarios, WHO's Maternal, Newborn, Child and Adolescent Health and Ageing (MCA) Department is working closely in collaboration with other WHO departments to engage with countries in developing their optimal response to COVID-19 and reduce the indirect effects on pregnant women/mothers, newborns, children, adolescents and older people (MNCAAH) due to health service disruption.

### Objective

To conduct a rapid scoping review of measures taken to maintain the provision and the use of essential services (facility, community, etc.) for MNCAAH, outcomes (where documented) and lessons learned during past outbreaks including Ebola, SARS and Zika, including anything already available for COVID-19. As initial scoping has shown a limited amount of literature on interventions undertaken, we may also expand the scope to include other large humanitarian events that caused service, transport and other disruptions including such the 2004 Indian Ocean earthquake and tsunami, the 2011 Tohoku earthquake and tsunami and the 2010 earthquake in Haiti.

Our review was guided by the standard principles of Arksey & O'Malley's framework. Arksey & O'Malley's approach can be described as an iterative process involving post-hoc inclusion and exclusion criteria. According to this framework there are five stages: 1) identifying the research question, 2) identifying relevant studies, 3) study selection, 4) charting the data, and lastly 5) collating, summarizing and reporting the results.

### Definitions

#### Target populations

- **Maternal health** refers to the health of women during pregnancy, childbirth and the postnatal period. We also consider broader reproductive care services including family planning and abortion care.
- **Newborn health** refers to health of the baby by the time of birth and the first week of life.
- **Child health** refers to the health of children aged between one week and 10 years (beginning of adolescence). Due to the fact that children under 5 are most at risk, we focused on specific care for children under-five years.
- **Adolescence** is the phase of life between childhood and adulthood, from ages 10 to 19.
- **Older people's health** refers to the health of people age 60 years and over. We are aware that the WHO definition of older people is based on the passing of median life expectancy. However, a chronological age was needed to search in the literature.

#### Essential services

- Essential prevention and treatment services for communicable diseases, including immunizations;
- Services related to reproductive health, including during pregnancy and childbirth;
- Core services for vulnerable populations, such as infants and older adults;
- Provision of medications, supplies and support from health care workers for the ongoing management of chronic

diseases, including mental health conditions;

- Critical facility-based therapies;

- Management of emergency health conditions and common acute presentations that require time-sensitive intervention; and auxiliary services, such as basic diagnostic imaging, laboratory and blood bank services.

#### PROTOCOL CITATION

Lenka Benova, Elise Huysmans, Anayda Portela 2020. Rapid scoping review of measures taken to maintain the provision and the use of essential services for MNCAAH (maternal, newborn, child, adolescent and older person's health) . **protocols.io**

<https://protocols.io/view/rapid-scoping-review-of-measures-taken-to-maintain-bkmrku56>



#### KEYWORDS

Maternal, newborn, adolescent, child, older people, COVID-19

#### LICENSE

————— This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

#### CREATED

Sep 01, 2020

#### LAST MODIFIED

Sep 10, 2020

#### PROTOCOL INTEGER ID

41361

### Searching literature

#### 1 Search locations

Peer reviewed article databases:

- a. Medline
- b. EMBASE
- c. Global Health
- d. Web of Science
- e. Lilacs (<https://lilacs.bvsalud.org/en/>)
- f. JSTOR
- g. Open Edition (French language literature)

References of included articles/resources and searches of networks of papers (using [connectedpapers.com](#))

Grey literature (reports, policy briefs, handbooks, guidelines etc.) - we will reach out to colleagues and networks (such as WHO regional and country offices) to obtain relevant documents, search for key terms using a general internet search engine (Google), and use databases of grey literature, including:

- a. Development cooperation websites: USAID, DFID, CIDA, GTZ
- b. NGO reports (MSF, MDM, CORDAID, MSH, MSI, FHI360 etc.)
- c. Global Alliance for Vaccines and Immunization (GAVI)
- d. Global Fund to Fight AIDS, Tuberculosis and Malaria
- e. Grey Literature Database ([www.greylit.org](http://www.greylit.org))

Other documentation such as presentation slides and COVID-19 webinar transcripts using database from WHO MCA department.

#### 2 Search strategy and terms

Selection of search terms:

A first exhaustive list of search terms was developed with a list of terms capturing 1) key populations, 2) health services, and 3) circumstances (outbreaks and natural disasters). After a first search on Medline, we retained search

terms that allow us to find the most relevant papers. We removed search terms that were returning too many papers assessing clinical outcomes and other unrelated papers. We also removed the terms COVID-19, SARS and coronavirus. We think relevant references already published on COVID-19 will cite papers from previous outbreaks – it might be more efficient to identify COVID-19 related papers through “network” analysis ([www.connectedpapers.com](http://www.connectedpapers.com)) than screening through thousands of additional title/abstracts as the literature on COVID-19 is already extensive (and the term “SARS” identified COVID-19 papers due to the name of the virus “SARS-CoV-2”).

We included the general term “vulnerable population\*” – as this is how our target groups (or sub-groups; e.g. women and children) are often described. A detailed table of the search terms and the removed search terms is shown in Table

**Table 1. Search terms**

Search algorithm: (Population AND health services AND circumstances)

#### 1) POPULATION

Construct	Search terms
Maternal	Maternal OR antenatal OR ante-natal OR prenatal OR pre-natal OR gestati* OR childbirth OR birth OR intrapartum OR obstetric* OR labo?r OR pregnancy OR vertical OR postpartum OR post-partum OR puerper* OR perinatal OR maternity OR reproductive OR family planning OR contraception OR abortion OR miscarriage OR postabortion OR post-abortion OR birth attendant OR skilled birth OR c?esarean OR c?section OR eclampsia OR pre-eclampsia OR preeclampsia OR ferti* OR fundal OR f?tal
Newborn	Newborn OR new-born OR new born OR postnatal OR post-natal OR neonatal OR kangaroo OR low birthweight OR low birth-weight OR pre?term OR prematur* OR post?term OR skin-to-skin OR breastfeeding OR breast-feeding OR lactat* OR formula-feeding OR bottle-feeding OR breastmilk substitute
Child	Child* OR childhood OR infant OR postneonatal OR under five OR under-five OR underfive OR under 5 OR p?ediatric* OR growth OR infant feeding OR infant nutrition
Adolescent	Adolescent* OR teen* OR youth* OR young adult* OR school-age OR young mother* OR young person* OR young people OR young wom?n
Ageing	Ageing OR aged OR older OR elderly OR elder* OR retire* OR senior*
Combination of groups	Vulnerable population*

#### 2) HEALTH SERVICES

Construct	Search terms
Health care	(Health adj3 delivery) OR (health adj3 utili?ation) OR (health adj3 services) OR (care adj3 provision) OR health-care OR healthcare OR (care adj3 worker*) OR (community adj3 worker*) OR obstetrician* OR midwife OR midwives OR nurse* OR (medical adj2 officer*) OR (clinical adj2 officer*)
Health system	Health system* OR health facilit* OR maternity OR referral OR facility-based OR home-based OR school-based OR community-based
Provision/use	Provision OR essential services OR essential healthcare OR indirect effect* OR collateral damage OR maintain* OR resilient* OR strengthen* OR sustain* OR mitigation strateg* OR cash transfer* OR user fee* OR helpline* OR digital OR telemedicine OR tele-health OR routine service*

#### 3) CIRCUMSTANCES

Construct	Search terms
Ebola	Ebola OR EVD
Zika	Zika OR ZVD
Natural disaster	Natural disaster OR Hurricane* OR tsunami OR earthquake OR flood*
Epidemic	disease outbreak* OR humanitarian

1.

#### Database search restrictions:

“Human” only (in databases with this filter available)

Published between 2000 and end date of search

#### Reference management

##### 3 Manage identified references

We will combine all references identified into one reference manager (Endnote), where we will deduplicate the records. After deduplication, titles and abstracts of references will be screened using Covidence by three-four reviewers. We will double-screen a random 10-20% of excluded references for quality assurance. Additional references will be identified through hand searching of the reference lists and using [connectedpapers.com](http://connectedpapers.com) (network analysis).

#### Screening titles/abstracts

##### 4 Eligibility criteria

We will apply the following **inclusion criteria** during title/abstract and full text search:

1. Studies published since 2000 and before the end date of the search (for databases of peer reviewed papers: July 17 2020; for other sources: July 31 2020).
2. Any type of document - research paper (qualitative or quantitative), reviews, editorial or commentary, peer-reviewed paper or not (report, research paper), webinars, newspaper articles. We will also include original research, commentaries, abstracts and opinion pieces; regardless of study design.

3. No restrictions regarding country or language.

We will apply the following **exclusion criteria during** the title/abstract and full text search:

1. Studies assessing clinical outcomes and direct effects since the objective of the study is to focus on indirect effects
2. Studies of animals.

#### Analysis plan

## 5

### Data charting process

To extract relevant data from the references included in full text, a standard template sheet will be used specifying:

- Author(s)
- Year of publication
- Journal or other type of publication
- Time of data collection (year), or source of data
- Country(ies) and site within country(ies)
- Objective of study
- Study design and analysis method
- Targeted population(s) (maternal and/or newborn and/or child and/or adolescent and/or ageing)
- List of the measures taken to maintain healthcare AND positive or negative effects of such measures on MNCAAH service provision or use
- Recommendations and lessons learned for maintaining and/or use of essential health services for MNCAAH
- Any other relevant extraction topics.

Two or more co-authors will extract data from studies included in full text, with double-extraction for 20% of the included papers. Any differences will be resolved through discussion. As is common for scoping reviews, we do not plan to formally assess the quality of included studies.

#### Collating, summarizing and reporting the results

## 6

Descriptive information about the included studies will be summarized in tables. To synthesize and interpret the findings of this scoping review, we will use thematic analysis and narrative synthesis. We will summarize the measures taken and evidence-based recommendations during outbreaks or natural disasters. Based on these findings, we will highlight the measures taken which had a positive outcome for maintaining or use health essential services for MNCAAH.