OpenWHO:

integrate massive online learning into health emergency response



OpenWHO.org is the **World Health Organization**'s first platform to integrate massive open online learning concepts into <u>emergency response</u>.

Successfully launched in June 2017, it now caters to more than 28 000 individual users, targeting frontline health workers.

Emergency knowledge resources

One of OpenWHO's experimental practices of training frontline workers for health emergency response prior to deployment. Essential technical guidance is compiled into an easy-to-use online course format, consisting of video, audio and critical source documents in local languages.

Identify existing materials

Identify the most commonly spoken languages by the affected communities

Identify essential knowledge needed by responders

Existing materials adapted with outbreak-specific recommendations

LIVE on OpenWHO Dissemination through the incident management system^[1] to WHO regions and countries

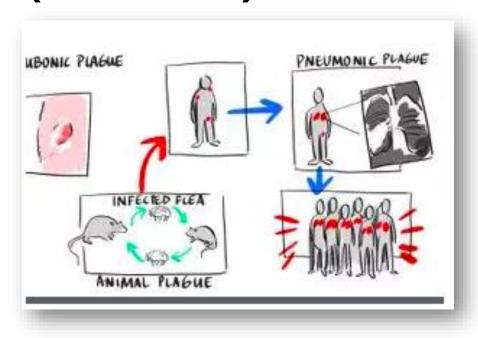
Key findings from three recent outbreaks

Ebola in Democratic Republic of the Congo (May 2017) [2]



Ebola materials repurposed from West Africa context to DRC. Translation of materials into French & Lingala.

Pneumonic plague in Madagascar (Oct 2017) [3]



Knowledge resources adapted from existing plague materials in French, English & Malagasy

Diphtheria in the refugee setting of Cox's Bazar, Bangladesh (Dec 2017) [4]



Page Views

172,681

15,529

14,193

13,444

12,469

8,278

6,625

6,425

6,342

5,554

4,016

% of Total: 100.00% (172,681)

Country

3. Nigeria

India

6. Belgium

10. Ethiopia

Germany

Switzerland

Training clinicians caring for patients during outbreaks in vulnerable settings such as Cox's Bazar.

8.52

Avg for View: 8.52 (0.00%)

34.50%

49.73%

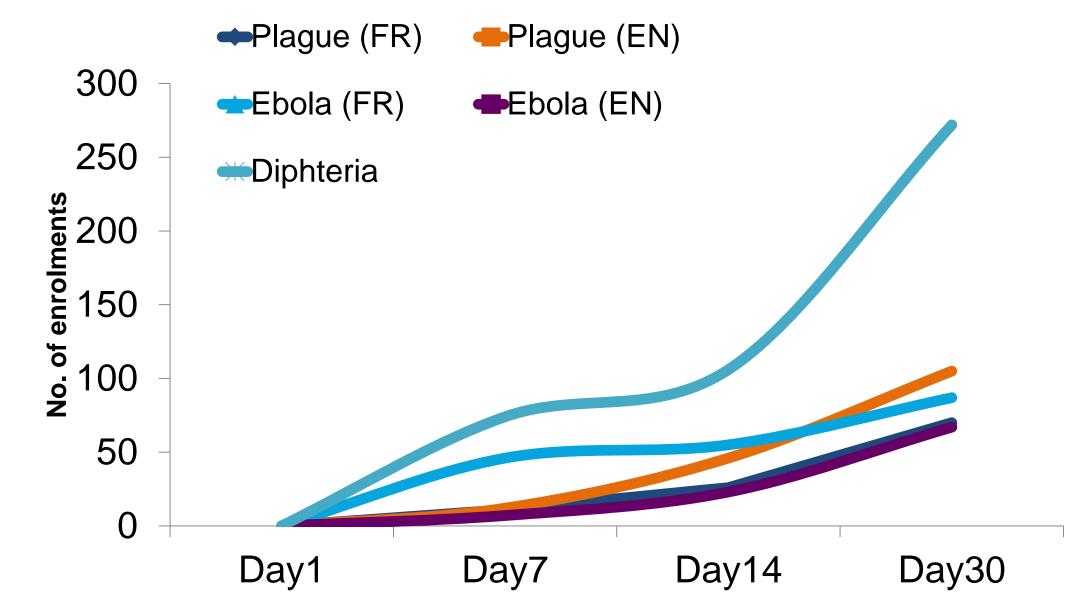
Avg. Page Load Time (sec) \$

-60.27%

-45.76%

-53.39%

-100.00%



Ethiopia 7

Seychelles 2

Kenya 7

Seychelles 2

Alexandra 2

Mozambique 4

South Africa 2

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Data shows rapid enrolment in the Ebola (FR) and Diphtheria courses in the first 7 days after publishing, while user numbers for the other three courses started to grow faster on Day 7, followed by a linear increase until Day 30 when the outbreak started to wind down.

The number of enrolments in the Diphtheria course slowed during the second week, but increased dramatically starting from Day 14. An increase in user traffic from Yemen could be observed, possibly due to simultaneous outbreaks in the country.

The user analysis also revealed that participants represented a diverse range of neighboring countries at risk of potential outbreaks.

Number of user enrolments from neighbouring countries and territories at risk of plague outbreaks.

Map source: WHO Regional Office for Africa

Challenges & future research

Page loading

Learning effectiveness still depends greatly on local internet speed. Loading a course landing page in Europe takes on average 3 seconds; in countries like Madagascar, this can take 24.9 seconds. Improving user performance with limited internet access is a priority.

Image source: Google analytics



Further research

- 1) Live streaming function
- 2) Automated translation
- 3) Produce emergency courses directly in the WHO regions and countries

References

[1] Emergency Response Framework. Second edition. p34. [2] Ebola: Knowledge resources for responders https://openwho.org/courses/knowledge-resources-ebola [3] Plague: Knowledge resources for responders https://openwho.org/courses/knowledge-resources-blague [4] Diphtheria: Clinical management of respiratory diphtheria https://openwho.org/courses/diphtheria-clinical-management