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When does a major outbreak become a Public Health Emergency of International Concern?

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When does a major outbreak become a Public Health Emergency of International Concern?

Could the pandemic of the century have been averted? The process by which WHO decides whether to declare a Public Health Emergency of International Concern (PHEIC) under the International Health Regulations has drawn criticism. Reports have condemned the 4-month delay by WHO after the international spread of Ebola in west Africa before declaring a PHEIC. The Democratic Republic of the Congo, now experiencing the second largest Ebola outbreak in recorded history, notified WHO of the outbreak on Aug 1, 2018, but WHO required four Emergency Committee meetings, including on Oct 17, 2018 (216 confirmed cases, 139 deaths, and 64% case fatality ratio), and April 12 and June 14, 2019 (four confirmed cases in Uganda). Justifying their response, the Emergency Committee said that “the cluster of cases in Uganda is not unexpected”. A PHEIC was finally declared at the fourth Emergency Committee meeting on July 17, 2019 (2501 cases and 139 deaths, and 64% case fatality ratio), and April 12 and June 14, 2019 (four confirmed cases in Uganda). Delays in declaring a PHEIC could have serious detrimental consequences, lulling governments and donors into a false sense of security, because they could reason that if WHO does not consider the situation an international emergency, then it does not require a surge response.

The legal definition of a PHEIC is clear, as “an extraordinary event that may constitute a public health risk to other countries through international spread of disease and may require an international coordinated response.” The purpose of the declaration is to focus international attention on acute public health risks that “require coordinated mobilisation of extraordinary resources by the international community” for prevention and response.

The PHEIC process requires urgent reform. First, the all-or-nothing nature of the assessment generates confusion. We therefore propose a multilevel PHEIC process with each level defined by objective epidemiological criteria and paired with specific readiness actions. Level 1 PHEIC alert should indicate a high risk outbreak in a single country, with the potential for international spread requiring concerted public health efforts to contain and manage it locally. Level 2 PHEIC should imply that multiple countries have had importations and that limited spread has occurred in those countries. Level 3 PHEIC would indicate large clusters in multiple countries, with evidence of ongoing local transmission. This tiering would provide less ambiguous risk signalling, while also encouraging political interference”, as a Lancet Editorial described Ebola in the Democratic Republic of Congo, adding that “the committee seems to havefavoured local protective ness over global galvanising”. By the time the Emergency Committee declared a PHEIC for COVID-19 on Jan 30, 2020, 7736 cases and 179 deaths had been confirmed in mainland China, with 107 cases confirmed in 21 other countries.

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earlier, proportionate public health measures when they are most effective.

Second, WHO should convene an expert consensus meeting to establish objective, evidence-based epidemiological and containment criteria to transparently guide its decision making processes. The draft algorithm under Annex 2 of the International Health Regulations\(^1\) (appendix) already includes critical elements, but there are also subjective considerations, such as restraints on international travel and trade. The algorithm contains perverse relative weightings, treating the five categories as equivalent.

The clear purpose of a PHEIC declaration is to catalyse timely evidence-based action, to spur increased international funding and support, and to limit the public health and societal impacts of emerging and re-emerging disease risks. In the aftermath of the COVID-19 pandemic, International Health Regulation reform must be an ethical imperative for more rapid and effective responses to novel infectious diseases.

We declare no competing interests.

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