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Viruela símica: percepción de riesgo de pandemia en Centroamérica

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Resumen

Objetivo: Se presentan datos sobre la percepción de riesgo de pandemia por el brote de viruela símica en Centroamérica. **Materiales y Métodos:** Se utilizó una sola pregunta: ¿En qué medida considera que la viruela del simio podría convertirse en la próxima pandemia? La encuesta se administró entre el 8 y el 22 de julio de 2022. **Resultados:** Los datos indican que existe una baja percepción de riesgo en la población encuestada, solo entre el 22,7 % y 31,1 % de la muestra considera que la viruela símica podría convertirse en la próxima pandemia. **Conclusiones:** Estos datos deberían servir para orientar las acciones de alfabetización de enfermedades y establecer medidas gubernamentales de preparación y respuesta.

Palabras clave: viruela símica; salud pública; epidemiología.

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Monkeypox: perception of pandemic risk in Central America

Abstract

Objective: Data are presented on the perception of pandemic risk due to the outbreak of monkeypox cases in Central America. **Materials and Methods:** A single question was used: To what extent do you consider that monkeypox could become the next pandemic? The survey was administered between July 8 and July 22, 2022. **Results:** The data indicate that there is a low perception of risk in the surveyed population, with only 22.7% to 31.1% of the sample believing that Monkeypox could become the next pandemic. **Conclusions:** These data should serve to guide disease literacy actions and establish government preparedness and response measures.

Keywords: monkeypox; public health; epidemiology.

Viruela del simio: percepción del riesgo de pandemia en Centroamérica

Resumen

Objetivo: Se presentan datos sobre la percepción del riesgo de pandemia por el brote de casos de viruela del simio en Centroamérica. **Materiales y métodos:** Se utilizó una sola pregunta: ¿En qué medida considera usted que la viruela del simio podría convertirse en la próxima pandemia? La encuesta se aplicó entre el 8 y el 22 de julio de 2022. **Resultados:** Los datos indican que existe una baja percepción de riesgo en la población encuestada, ya que solo entre el 22,7% y el 31,1% de la muestra cree que la viruela del simio podría convertirse en la próxima pandemia. **Conclusiones:** Estos datos deben servir para orientar las acciones de alfabetización sobre la enfermedad y establecer medidas de preparación y respuesta de los gobiernos.

Palabras clave: viruela del simio; salud pública; epidemiología.

Introduction

The World Health Organization (WHO), on July 23, 2022, indicated that monkeypox disease constitutes a Public Health Emergency of International Concern (PHEIC), due to the fact

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that more than 16,000 cases had been detected in more than 75 countries, with 5 deaths (Gallegos et al., 2022a; Kozlov, 2022). In a short time, the spread of new infections has expanded to many countries where monkeypox was not endemic. It is a zoonotic virus first detected in humans in the 1970s in Africa, although its existence in laboratory monkeys had been recognized as early as 1958 (Cohen, 2022; Kozlov, 2022). In the last two decades, local outbreaks were detected in different cities such as the United States in 2003, Sudan in 2005, the United Kingdom in 2018 and 2019, Israel in 2018, and Singapore in 2019, among others (Nakazawa et al., 2013; Simpson et al., 2020).

Transmission of monkeypox can occur through contact with body fluids, blood, skin lesions, respiratory droplets from infected animals or people, and also through contaminated objects and clothing (Altindis, Puca, & Shapo, 2022; Walter & Malani, 2022). The spread of infection has been predominantly among men, and particularly in men who have sex with men. Common symptoms include fever, headache, muscle aches, fatigue and swollen lymph nodes. Visible rashes develop on the face and body, which may heal in several weeks. Several antiviral medications have been developed (Velavan & Meyer, 2022), although many are in the experimental phase, and some vaccines are also available, but have not been widely applied. Treatment is focused on the common symptoms, except in severe cases or in at-risk persons who may require antiviral treatment (Osterholm & Gellin, 2022; Rizk et al., 2022). For the time being, low mortality is reported, and people are recovering normally after several weeks, however, there have been some deaths from severe cases (Menezes & Miranda, 2022).

Unfortunately, this new public health emergency overlaps with the COVID-19 pandemic that began in March 2020 and is still ongoing with significant consequences for human health (Gallegos et al., 2020; Gallegos et al., 2022c; Gallegos et al., 2022d; Hemati et al., 2022). Although it has been noted that the spread of monkeypox infections is much less than that reported for COVID-19 (Kozlov, 2022), it still poses a challenge to national public health systems and international health coordination, adding an extra burden of concern. Therefore, this paper presents preliminary results on the perception of the severity of monkeypox among people in three Central American countries. In the Central American region, El Salvador, Costa Rica, Honduras, Guatemala and Panama have already confirmed cases of monkeypox, according to follow-up data from the Pan American Health Organization as of October 3, 2022. Although the prevalence for Central America is currently low (66 confirmed cases), the United States, Canada, and Mexico

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have already recognized 28,699 confirmed cases. It is therefore crucial that policy makers in these countries are well informed and prepared for the potential increase in monkeypox cases.

Materials and methods

We surveyed 1969 adults from El Salvador ($n = 830$), Honduras ($n = 723$) and Panama ($n = 416$) with an average age of 34.9 years ($SD = 13.1$), where 724 were male, 1239 were female and 6 persons did not report their sex. To collect information on the perception of risk for monkeypox, a single question was used: To what extent do you consider that monkeypox could become the next pandemic? Response options were as follows: *I do not know about the virus* = 0; *Disagree* = 1; *Neither agree nor disagree* = 2; *Agree* = 3. This single question was created ad hoc for a much larger study analyzing the impact of the COVID-19 pandemic in Latin America and the Caribbean.

The survey was administered between July 8 and July 22, 2022, prior to the declaration of a Public Health Emergency of International Concern (PHEIC) by the World Health Organization. The data collection procedure was similar in all countries. An online questionnaire was used and distributed through different social networks. Participation in the study was voluntary and there was no reward or financial compensation of any kind. The study followed the ethical recommendations of the Declaration of Helsinki and the protocol was approved by the Ethics Committee of the Universidad Privada del Norte, Perú (registration number: 20223012).

Results

Table 1 shows the results of this survey conducted between July 8 and July 22, 2022, prior to the declaration of PHEIC (Gallegos et al., 2022a). As can be seen, the results indicate that between 22.7% and 31.1% of the sample believe that monkeypox could become the next pandemic. Strikingly, a sizeable percentage of people reported not knowing about this new virus, particularly in Honduras (27.4%).

Table 1

Perceived risk of monkeypox pandemic in Central America

Country	¿To what extent do you consider that monkeypox could become the next pandemic?									
	I do not know about the virus		Disagree		Neither agree nor disagree		Agree		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
El Salvador	162	19.5	163	19.7	247	29.7	258	31.1	830	100.0
Honduras	198	27.4	141	19.5	214	29.5	170	23.6	723	100.0
Panama	41	9.9	157	37.8	123	29.6	95	22.7	416	100.0

Discussion

The percentage of lack of knowledge is in relation to another study carried out in Europe where it was indicated that the state of knowledge about the disease was quite unsatisfactory (Ricco et al., 2022). Lack of knowledge is one of the current challenges that may contribute to increased severity of the disease (Alsanafi, Al-Mahzoum, & Sallam, 2022). Although the case fatality rate of the disease is low, the percentage of unawareness, together with the percentage of people who disagree that "monkeypox" may become the next pandemic (ranging from 19.5% to 37.8%), would suggest that the substantial riskiness of the disease may be being overlooked, compared with others such as COVID-19. Despite the emotional burden of even the COVID-19 pandemic, the emergence of a potentially serious new disease was not associated with the perception of serious consequences.

It should be remembered that these data were collected prior to the declaration of PHEIC, which may vary the future opinions of participants. Nevertheless, the dissemination of these preliminary data may serve to draw attention to the importance of more information and better communication about this new disease. It may also serve to encourage governments to strengthen preparedness and response mechanisms in the face of this new international public health threat (Hemati et al., 2022). Lack of adequate understanding of monkeypox and its characteristics could undermine the development of preventive measures, including potential immunization against the

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disease. In addition, failure to act in a timely manner, with preventive measures, could lead to synergy between pandemics.

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