# **Elsevier Public Health Emergency Collection**

Public Health Emergency COVID-19 Initiative

Environ Res. 2021 Feb; 193: 110439.

Published online 2020 Nov 7. doi: 10.1016/j.envres.2020.110439

PMCID: PMC7836796

PMID: 33171119

## Online trade in wildlife and the lack of response to COVID-19

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#### **Abstract**

Wildlife trade has been widely discussed as a likely origin of the COVID-19 pandemic. It remains unclear how the main actors in the wildlife trade chain responded to these discussions and to the campaigns advocating wildlife trade bans. We analyzed the content of ~20,000 posts on 41 Facebook groups devoted to wild pet trade and ran a breakpoint and a content analysis to assess when and how the COVID-19 pandemic was incorporated into the discourse within trade communities. Only 0.44% of advertisements mentioned COVID-19, mostly after WHO declared COVID-19 a pandemic. No traders discussed the role of trade in spreading diseases; instead, posts stimulated the trade in wild species during lockdown. COVID-19 potentially offers persuasive arguments for reducing wildlife trade and consumption. This effect was not demonstrated by on-the-ground actors involved in this market. Bans in wildlife trade will not be sufficient and additional strategies are clearly needed.

Keywords: Behavior change, COVID-19, Online trade, Pet trade, Wildlife trade ban

### **Funding information**

Wildlife Conservation Society (Christensen Conservation Leaders Scholarship), Wildlife Conservation Network Scholarship Program (Sidney Byers Scholarship); British Federation of Women Graduates (Funds for Women Graduates); People's Trust for Endangered Species; Cleveland Zoo.

#### 1. Introduction

home was the concept *babies*. We found this to be due to the number of baby animals being offered as lockdown was deemed a good time to spend with infant animals, as one would have more time to care for them.

We identified a direct pathway between the concepts of *lockdown* and *price* as many of the traders in both countries were offering discounted prices throughout lockdown duration. The theme 'not afraid' represents a facet of the posts, in which commenters encouraged others not to be afraid of the virus, as illustrated in the quotes "*Death is determined by Allah, so don't be scared of corona virus*" and "*Only 'LosGan'* (a prestigious class of bird) *hunters aren't afraid of corona virus*". The themes *not afraid* and *Allah* were only recorded in Indonesian groups; the remaining themes were shared between Indonesian and Brazilian groups.

### 4. Discussion

Although there are yet few examples of confirmed clinical diseases in humans arising from the wildlife trade, this activity may have the potential to pose a threat to public health. For instance, with increased Internet access and transportation, the origins of traded animals can be (and often are) many hundreds of miles from their point of sale (Bell et al., 2004; Bush et al., 2014) and during transportation or sale, species that would not naturally contact each other are often kept close in facilities (Woo et al., 2006; Reed et al., 2004). Those are examples of paths to break existent geographical, ecological or behavioral separations between humans, livestock and wild animals, which increases the likelihood of cross-species pathogen transmission (<u>Johnson et al., 2020</u>). Although the COVID-19 pandemic represents a challenge for human health, it also offers an anthropocentric argument for persuading people to stop wildlife trade and consumption. Our findings show the actors involved in the trade of wild pets discussed the connection to zoonosis at a low rate, despite public outcry generated around COVID-19 and calls for widespread wildlife market bans. Among all landmarks, the WHO declaration of COVID-19 as a pandemic seems to have sparked the most engagement in COVID-19 discussions for both countries. Our breakpoint findings differ substantially to those for the number of comments containing COVID-19 related terms recorded on Twitter by Lopez et al. (2020). In their study, both Portuguese and Bahasa Indonesia comments on COVID-19 peaked when each country had their first case confirmed. It is possible that the WHO declaration may have increased awareness of the risk posed by the virus and influenced the inclusion of COVID-19 related terms in the advertisements (Wise et al., 2020). Considering that many posts addressed concerns about maintenance of sales and delivery services due to a possible lockdown, the breakpoint reflects changes in their logistical and operational arrangements during the pandemic.

Importantly, neither sellers nor consumers discussed the risk of local wildlife trade or human-wildlife interactions as a source of spillover for zoonotic diseases on the monitored online groups. Among the c. 20,000 posts recorded, only one post in an Indonesian group shared a link from ProFauna, an Indonesian wildlife organization, quoting a Chinese doctor,