COVID-19 infection also require ventilatory support. CCHFV can also be transmitted to HCWs dealing with CCHF patients due to inadequate use of N95 masks, improper hand hygiene, and inappropriate removal of gloves, gowns, and masks after handling blood or tissue products of infected patients.

The WHO should collaborate with the Ministry of Agriculture and Forestry of Turkey to arrange programs to eradicate the tick population in areas where a high number of CCHF cases have been reported. Prevention measures against CCHF outbreaks in Turkey should focus on the education of individuals at increased risk of infection and the supply of personal protective equipment (PPE) to the at-risk population. Awareness campaigns regarding personal protective measures should be encouraged among the general public to avoid tick bites. People should be advised to wear light-colored clothing covering both arms and legs and to use insect repellents to minimize exposure to tick bites. Integration between clinicians and public health workers is required to control all aspects of the outbreak and to manage the growing health crisis in the country.

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COVID-19” without language and manuscript type restriction (PROSPERO registration CRD42021271507). The inclusion criteria were "patients with confirmed positive COVID-19 AND with confirmed positive CCHF. There were 33 publications when duplications were removed. After screening titles and abstracts, 11 full-text articles were assessed for eligibility. Two case reports were included the final analysis after excluding the reports not meeting inclusion criteria.4,5 The analysis showed only 2 case reports of COVID-19 and CCHF coinfection from Turkey (Table 1).4,5 It is a rare occurrence.

Differential diagnosis of COVID-19 includes several viral and bacterial diseases such as influenza, adenovirus, human metapneumovirus, Mycoplasma pneumonia, Legionella pneumophila, and Streptococcus pneumoniae. In areas where CCHF is endemic, this viral disease is included in the differential diagnosis. CCHF may mimic multisystem inflammatory syndrome in children (MIS-C) associated with COVID-19. Severe COVID-19 pneumonia in adults has several clinical, laboratory, and radiographic features in common with CCHF.

Two reviews have discussed that the COVID-19 pandemic may have negatively affected the diagnosis and management of other illnesses, including CCHF. An additional 2 reports from Pakistan focused on the potential threat of CCHF due to mass gatherings during the Eid al Adha holiday. However, there is no evidence that CCHF cases increased following Eid al Adha in Turkey. One observational study noted increased CCHF cases after the COVID-19 pandemic began in 2020 compared to previous years in eastern region of Turkey. On the other hand, the health infrastructure in the country allows the effective diagnosis and management of CCHF and no burden of CCHF or COVID-19 cases is overwhelming the capacity of the healthcare system in Turkey.

In conclusion, our systematic review showed that coinfected cases of COVID-19 and CCHF are rare. However, there appeared to be no difficulty with diagnosis, hospitalization needs, and treatment of the patients with CCHF during COVID-19 pandemic in Turkey, in contrast to the comment issued by Mehmood et al. The need for an evidence-based approach is clear.

### Table 1. Patients Coinfected With COVID-19 and CCHF Reported From Turkey

| Author          | Age, y | Sex | Signs & Symptoms | Examination | Abnormal Laboratory Findings | Tick Exposure | COVID-PCR | CCHF-PCR | Thorax CT | Treatment | Outcome |
|-----------------|--------|-----|-----------------|-------------|-----------------------------|---------------|-----------|-----------|-----------|-----------|---------|
| Buyuktuna SA, et al4 | 35     | Female | Fever, body pain | Body temperature 38 °C, respiratory rate 22, other examination is normal | Leukopenia, thrombocytopenia, increased levels of ALT, AST, D-dimer, CRP, prolonged INR | Yes         | +        | +        | Cystic bronchiectatic changes in apical, posterior, and anterior segments of upper lobe of the right lung and superior and posterior segments of lower lobe of the left lung | Favipiravir | Survived |
| Dulger AC, et al6 | 65     | Male  | Dry cough, myalgia and fever | Oxygen saturation 95% on ambient air, other examination is normal | Pancytopenia, increased levels of ALT, AST, D-dimer | Not described | +        | +        | Multiple bilateral peripheral ground-glass opacities | Favipiravir | Survived |

Note. PCR, polymerase chain reaction; CCHF, Crimean–Congo hemorrhagic fever; CT, computed tomogram; ALT, alanine transaminase; AST, aspartate transaminase; CRP, C-reactive protein; INR, international normalization ratio.

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