

## SYNOPSIS

02/03/2020

# Review of “Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study”

**Article citation:** Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. Lancet. 2020 Jan 29 [Epub ahead of print]. Available from: <https://www.thelancet.com/pb-assets/Lancet/pdfs/S0140673620302117.pdf>

## One-minute summary

- Epidemiologic and clinical characteristics of **99 confirmed cases** of 2019 novel coronavirus (2019-nCoV) who were hospitalized in a single-centre in Wuhan, China from January 1-20, 2020 with clinical follow-up until January 25, 2020
- **Direct exposure to the Huanan seafood market** – 49%
  - 47 had long-term exposure (i.e., salesman) and two were shoppers with short-term exposure
- **Male** – 68%; **mean age** - 55.5 years (range: 21-82 years)
- **Chronic medical conditions** - 51%
- **Admitted to the intensive care unit (ICU)** - 23%
- **Died** - 11% (11 patients)
- **Abnormalities on chest images** - 75% bilateral pneumonia; 25% unilateral pneumonia; 14% multiple mottling and ground-glass opacity
- **Most common presenting symptoms** – fever (83%), cough (82%), shortness of breath (31%)

## Additional information

- None of the 99 patients were medical staff
- As of January 25, 2020: 11% died, 31% discharged, 58% remain in hospital

**Other clinical information:**

- Acute respiratory distress syndrome occurred in 17%
  - Of these 17, 11 patients worsened quickly and died of multiple organ failure
- 35% had lymphocytopenia
- No viral co-infections; 1% had a bacterial co-infection and 4% had a fungal co-infection
- Upper respiratory tract symptoms were not common

**Treatment provided:**

- 76% received antiviral treatment, including oseltamivir, ganciclovir, and lopinavir and ritonavir
- 71% received antibiotic treatment
- 19% received steroid therapy
- 13% received non-invasive ventilation and 4% invasive mechanical ventilation
- 9% received continuous blood purification due to renal failure and 3% were treated with extracorporeal membrane oxygenation (ECMO)

Management recommendations are also provided in the article.

## PHO reviewer's comments

This is a case series of 99 hospitalized patients, almost half of whom had long-term exposure to the Huanan seafood market. This exposure history may have contributed to the predominance of middle-age to older male cases. The clinical course described in this article may reflect both the demographics of the patient population and the more severe end of the spectrum of illness based on patients hospitalized with the 2019-nCoV.

## Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of “Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study”. Toronto, ON: Queens’s Printer for Ontario; 2020.

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