Review of "Hospitalization rates and characteristics of patients hospitalized with laboratory-confirmed coronavirus disease 2019 — COVID-NET, 14 states, March 1–30, 2020"

One-Minute Summary

- This report presents age-stratified laboratory-confirmed coronavirus disease 2019 (COVID-19)-associated hospitalizations in the United States during March 1-30, 2020.
- **Hospitalization rate** among the COVID-19 patients identified through COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) was 4.6 per 100,000 population.
- Of the 1,482 hospitalized COVID-19 patients in COVID-NET, **54% were male and 46% female**, with hospitalization rate higher in males than among females (5.1 vs 4.1 per 100,000).
- **Hospitalization rates increased with age** of the 1,482 hospitalized COVID-19 patients:
  - 0-4 years: 6 (0.4%), hospitalization rate 0.3 per 100,000.
  - 5-17 years: 6 (0.4%), hospitalization rate 0.1 per 100,000.
  - 18-49 years: 366 (25%), hospitalization rate 2.5 per 100,000.
  - 50-64 years: 461 (31%), hospitalization rate 7.4 per 100,000.
  - ≥65 years: 643 (43%), hospitalization rate 13.8 per 100,000 (17.2 per 100,000 ≥85 years).
- Among 580 hospitalized COVID-19 patients with **race/ethnicity** data, 261 (45%) were white, 192 were (33%) black, 47 (8%) were Hispanic, 32 (6%) were Asian, 2 (0.3%) were American Indian/Alaskan Native, and 46 (8%) were of unknown race.
- Among 178 (12%) adult hospitalized COVID-19 patients with data on **underlying medical conditions**, 89% had ≥1 conditions. The **most common conditions** were:
  - Hypertension (50%), obesity (48%), chronic lung disease (35%), diabetes (28%), cardiovascular disease (28%).
- Among 167 hospitalized COVID-19 patients with symptom data, the median interval from symptom onset to admission was 7 days (IQR = 3-9 days). **Most common signs and symptoms at admission**:
  - Cough (86%), fever or chills (85%), shortness of breath (80%), myalgia (34%), diarrhea (27%), nausea/vomiting (24%).

- **Main finding:** Older adults have elevated rates of COVID-19-associated hospitalization and the majority of persons hospitalized have underlying medical conditions.

Additional Information

- Results suggest men and black populations might be disproportionately affected by COVID-19-associated hospitalizations, but additional surveillance data is required to better understand the evolving epidemiology of COVID-19 in the US.
- This report uses data from the COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) which conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations among persons of all ages in 99 counties in 14 US states. The catchment area represents approximately 10% of US population.
- These data are preliminary and may change as additional cases are identified.

PHO Reviewer's Comments

None.

Citation

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