UCSF Institute for Global Health Sciences

COVID-19 Research Watch
May 04, 2020

NON-CLINICAL TRENDS

The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study[1]
Analyses of semi-structured, in-depth interviews with nurses and physicians providing care to patients in Hubei province COVID-19 designated hospitals identified three theme clusters: (1) a sense of duty to care for COVID-19 patients, especially amongst nurses, (2) adverse challenges both physically and psychologically as well as feelings of powerlessness and fear of being infected or infecting others, and (3) resiliency through social support and self-management strategies. It is recommended that both comprehensive support services and robust intensive trainings are in place for healthcare workers managing crises.

TRANSMISSION PATTERNS

Epidemiology and transmission of COVID-19 in 391 cases and 1286 of their close contacts in Shenzhen, China: a retrospective cohort study[2]
Symptom-based and contact-based surveillance of COVID-19 cases outside of the Hubei province found approximately half (48%) of patients were male and 91% of cases had mild to moderate clinical severity upon assessment. Contact tracing efforts reduced the time to case isolation by 1.9 days. Contacts were at higher risk of infection (over 6-fold for household contacts and over 7-fold for those traveling with a case) with a reproductive number of approximately 0.4, the household attack rate was approximately 11.2%. Children are at similar risk of infection as the general population and thus should be considered when analysing transmission patterns and control efforts.

Temporal rise in the proportion of younger adults and older adolescents among coronavirus disease (COVID-19) cases following the introduction of physical distancing measures, Germany, March to April 2020[3]
The study analysed the contribution of different age groups to COVID-19 cases over a four-week period in Germany, excluding individuals over 50. There was a relative increase with time in the prevalence of 15-34-year-olds compared with 35-49- and 10-14-year olds. For the age group of 20-24 years, the odds ratio (OR) relative to any other age group was significantly greater (OR 1.32 to those 25-29 years, OR 1.31 to those 30-34 years, OR 1.48 to those 35-39 years, OR 1.55 to those 40-44 years, and OR 1.7 to those 40-44 years), suggesting a potentially growing role of younger adults and older adolescents.

COVID-19 Among Workers in Meat and Poultry Processing Facilities — 19 States, April 2020[4]
Aggregate numeric data on COVID-19 cases and deaths, as well as qualitative on-site and remote assessments in 115 facilities in 19 states found COVID-19 diagnoses in 4,913 (~3%) of workers and 20 deaths. Barriers to facility prevention and control included (1) difficulty with physically distancing workers to at least 6 feet, and (2) in implementing COVID-19-

specific disinfection guidelines - both of which were further challenged by sociocultural differences of workers speaking many different languages, and economic issues of incentivization for individuals to work while sick.

CLINICAL PRESENTATION

Large-Vessel Stroke as a Presenting Feature of Covid-19 in the Young[5]*

Over a two-week period, five cases of large-vessel ischemic stroke were reported in patients younger than 50 years of age diagnosed with SARS-CoV-2 in New York City (compared to the previous year's bi-monthly average of 0.73). The average National Institutes of Health Stroke Scale score for these five cases was 17 (on a scale of 0 to 42), consistent with severe stroke, with only one patient having previous stroke history. Further investigation of the relationship between Covid-19 and large-vessel stroke is required, as this observation of young patients with severe stroke is unusual when compared to hospitalized Covid-19 patients seen in Wuhan. This case report also notes that several patients delayed calling ambulances due to concerns over going to a hospital during the pandemic, which may have contributed to poor health outcomes.

* Note: This correspondence comes from a series of case reports initiated by *The New England Journal of Medicine*, which are evaluated by in-house editors with the goal of rapidly disseminating information on Covid-19 observations.

ADDITIONAL RESOURCES
UCSF Library COVID-19 Research and Information Resources
UCSF Institute for Global Health Sciences COVID-19 Resources
UC Davis One Health Institute COVID-19 FAQs

Note on this Document: This document was assembled by graduate and doctoral students attending the University of California, San Francisco with the intent of facilitating the rapid dissemination of information to the global community in order to help during this time. Harry Lin and Alexandra Keir contributed to these summaries. This work is volunteer based.

References

1 Liu Q, Luo D, Haase JE, *et al.* The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. *Lancet Glob Heal* 2020; : 1–9.

2 Bi Q, Wu Y, Mei S, *et al.* Epidemiology and Transmission of COVID-19 in Shenzhen China: Analysis of 391 cases and 1,286 of their close contacts. *medRxiv* 2020; : 2020.03.03.20028423.

3 Goldstein E, Lipsitch M. Temporal rise in the proportion of both younger adults and older adolescents among COVID-19 cases in Germany: evidence of lesser adherence to social distancing practices? *medRxiv* 2020; : 2020.04.08.20058719.

4 Vol ER, Gibbins JD, Hale C, *et al.* COVID-19 Among Workers in Meat and Poultry Processing Facilities —. 2020; **69**: 1–5.

5 Oxley T, Mocco J, Majidi S, *et al.* Large-Vessel Stroke as a Presenting Feature of Covid-19 in the Young. 2020; : 2008–9.