

New Study Indicates COVID-19 Death Risk May Be Lower Than Previously Estimated

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By Patrick Goodenough

ALEXANDRIA, Va.—A study by infectious-disease experts at the University of Hong Kong and Harvard University found that the probability of dying after developing COVID-19 symptoms is about 1.4 percent—significantly lower than the 3.4 percent estimate cited by the World Health Organization in early March.

The report comes as the number of deaths worldwide attributed to the novel coronavirus passed the 10,000 mark overnight.

A real-time database compiled by the Center for Systems Science and Engineering at Johns Hopkins University (JHU) reported early Friday a cumulative 244,500 confirmed cases since the outbreak began, with more than 86,000 recoveries so far.

The paper, submitted to a journal but awaiting peer review, looks at cases in Wuhan, the Chinese city where the coronavirus was first detected late last year.

Figures like the 4.3 percent cited by WHO on March 3 are based simply on dividing deaths by the total number of confirmed cases. As such, they do not take into account the many likely cases not known or not reported—the asymptomatic, undiagnosed infections.

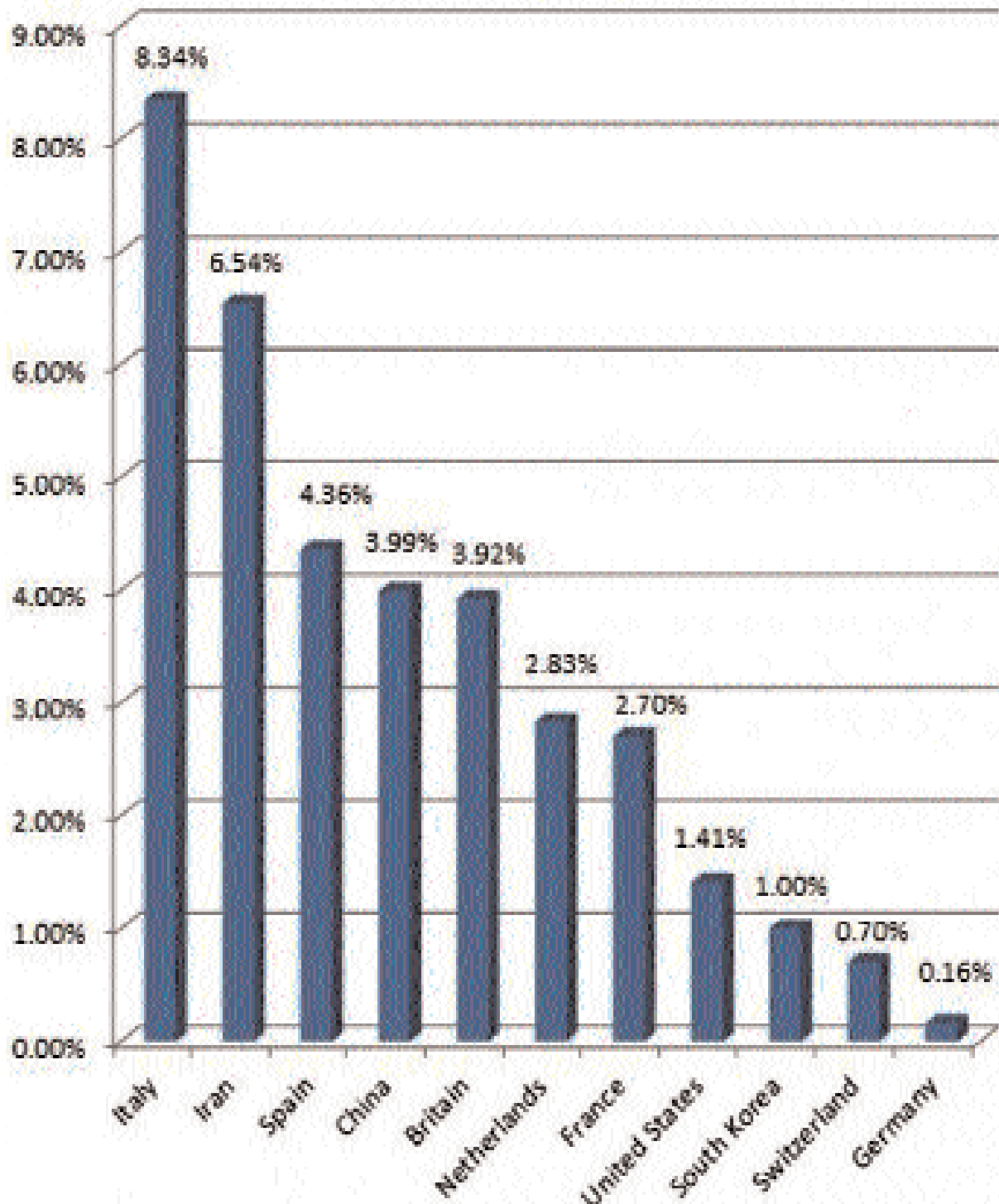
(Using that simple measure of dividing deaths by cases, today’s JHU figures deliver a 4.1 percent rate worldwide. Using WHO’s latest figures, that rate for the 11 countries with the largest number of confirmed cases ranges from a low of 0.16 percent for Germany, to a high of 8.34 percent in Italy, with the United States towards the lower end of the scale, at 1.41 percent.)

The researchers at Hong Kong University’s School of Public Health and the Harvard T.H. Chan School of Public Health examined what is known as the symptomatic case-fatality risk or sCFR, described in the paper as “the probability of dying from the infection after developing symptoms.”

As other studies have already indicated, they found that the chances of dying for those with symptomatic COVID-19 increased for older patients: For those aged 65 and over, the risk of death among symptomatic infections was 2.7 percent (with low and high estimates of 1.5—4.7 percent).

COVID-19 deaths as a percentage of the number of confirmed cases, for the 11 countries with the largest number of cases.

WHO figures as of March 19, 2020



Graph CNSNews.com

But, for those aged 15-64, the rate was just 0.5 percent (with low and high estimates of 0.1–1.3 percent for the 15-44 group, and 0.2–1.1 percent for the 45-64 group).

The sCFR rate overall for those aged 15 or older was therefore 1.4 percent (with low and high estimates of 0.8–2.0 percent).

Joseph Wu of the University of Hong Kong and his colleagues said they considered only the 15-and-over population, “given empirical reports of only very rare observations of cases below age 15 years.”

In another hopeful sign, the researchers argued that the symptomatic case-fatality risk elsewhere could be even lower than their estimates for Wuhan, on the basis that other areas may be better prepared because of experiences learned in the early stages of the outbreak, and also taking into account the availability of potentially better treatment options as time passes.

Wu and his colleagues wrote that the “fatality risk estimates may not generalize to those outside of that original epicenter [of Wuhan], especially during subsequent phases of the epidemic.”

“The experience gained from managing those initial patients and the increasing availability of newer, and potentially better, treatment modalities to more patients would presumably lead to fewer deaths, all else being equal.”

According to WHO, data from China found higher mortality rates in those over 80 years old, and in patients with underlying conditions, especially cardiovascular disease, diabetes, chronic respiratory disease and cancer.