Ignoring Data Delays Our Reaction to Emerging Public Health Tragedies Like 13 Reasons Why

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To the Editor We applaud Niederkrotenthaler and colleagues for adding another layer of evidence that 13 Reasons Why is harming the public by pushing some individuals toward suicide. However, their dismissal of some of the earliest evidence on this subject deserves a revision not because it undermines their central claim but because it makes it even stronger and can make psychiatric epidemiology more actionable in the future.

Our October 2017 study in JAMA Internal Medicine provided the first evidence for what some suspected at the time but for which there were no data: 13 Reasons Why increases suicidal outcomes. Google queries reflective of suicide ideation increased substantially immediately after the show’s release. This included searches for “how to commit suicide” (up 26%), “commit suicide” (up 18%), and “how to kill yourself” (up 9%). While the authors make reference to our study, they dismiss it as simply tracking the show’s popularity and excluded the study when presenting a detailed summary of all “available studies that present quantitative findings” in Table 1.

Dismissing search query surveillance undermines our scientific principles to rely on data when making health care decisions. One of the added values of search query surveillance over traditional sentinel surveillance is timeliness. 13 Reasons Why aired for an additional 646 days between the publication of our study and the study by Niederkrotenthaler and colleagues. Another added value is mining search queries allows psychiatric researchers to understand what people are thinking and when they are thinking it across billions of observations without any obtrusive instruments. Therefore, it follows that suicide search trends are correlated with actual suicides, something the authors’ findings, and the 6 additional studies they make reference to, also attest to by mirroring our earlier conclusion. Such correlations also extend to many other health phenomena. For instance, search queries for HIV predicted increases in HIV testing more than a year before traditional data were available.

Should our attitude be to discount available early data when the consequence is more suicides? Imagine if the public health community promoted our early results; might Netflix have been compelled to act sooner?

An openness, rather than dismissiveness, to search query surveillance (and other novel big media data) in the future will potentially make the public health community more responsive to the acute needs of the public it serves. The next time we are faced with an emerging crisis that can only be clarified with data, a well-executed search query–derived study might again provide the earliest empirical evidence and should be taken as a serious call to action.

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