Carol Rao, ScD, looks at pandemic's impact on public health workers

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Featured topic and speakers

In today's COVID-19 Update, a discussion with Carol Rao, ScD, an epidemiologist for the Centers for Disease Control and Prevention (CDC)'s COVID-19 Emergency Response, about the mental health impact the COVID-19 pandemic has had on the public health workforce, including top level results from a new CDC study.

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Speaker

- Carol Rao, ScD, epidemiologist, COVID-19 Emergency Response, CDC

Transcript

Unger: Hello, this is the American Medical Association's COVID-19 Update. Today we're talking with Dr. Carol Rao, an epidemiologist for the CDC's COVID-19 Emergency Response in Atlanta about the mental health impact the COVID-19 pandemic has had on the public health workforce. I'm Todd Unger, AMA's chief experience officer in Chicago. Dr. Rao, thanks for joining us today. You were the lead on a CDC study that looked at the pandemic's impact on mental health within the public health workforce. And I'd love just to start by defining for our audience out there what you mean by the public health workforce?

Dr. Rao: So the public health workforce that we're talking about are these frontline workers. So these are people with boots on the ground. So these are the public health workers at your state, territorial, tribal and local health departments. So these are the people that would be the ones that count and tabulate the number of COVID-19 cases in your communities, develop guidance, advantageous

strategies for your communities, investigate clusters of cases and implement an unprecedented vaccination campaign for this pandemic.

Unger: It's interesting because we've talked a lot about the health care workforce and the impact on mental health that the COVID-19 pandemic has had but I think there's a lot less information about the impact on public health workers. Is that right?

Dr. Rao: So I would say that public health workers in this timeframe or previous to this timeframe, previously, were not really considered frontline health care workers or frontline workers or essential workers. I'm a public health worker and we generally kind of work in the background. So there's not been that much done and looked at as far as incidents of mental health conditions or stress among this population.

Unger: And that's surprising because I imagine that they're experiencing the same level of trauma to some extent that health care workers are. Is that not accurate?

Dr. Rao: Well, that's what we had assumed or that's what we had thought, which is why we embarked upon this survey because there hasn't been any work done previously on this population. But because of the unprecedented prolonged response to this particular outbreak or pandemic, we felt like that there was time to look at this population because it hadn't been done in the past. And we thought that their stressors and trauma would be similar to what's been experienced by health care workers.

Unger: So you've kind of answered the question as to why you undertook the study. Can you just give some basics around when and how this took place?

Dr. Rao: Sure. We did a non-probability based online survey that was anonymous, that was sent out to public health workers across the United States. So we did this between late March and the survey was open for three weeks, between March and April. And 26,000 health care workers, 26,000 public health workers participated in this survey. That's about 10% of the population of this workforce population in the United States.

Unger: Big base size. A lot of people respond to this. We know why you undertook this study. What did you find?

Dr. Rao: So we found that 53% of the people who responded reported symptoms of a mental health condition. So when we break that down by mental health condition, 30% reported symptoms of depression, 32% reported symptoms of anxiety and 37% reported symptoms of post-traumatic stress disorder or PTSD. And in addition, 8% reported suicidal thoughts. And when we looked at the prevalences, the highest prevalences were among people who were under the age of 30, who identified as transgender or non-binary or who identified as multiple races.

Unger: That's enormous. So more than one out of two folks in your survey then responding that had at least one medical condition, huge incidences of depression, PTSD. Were you surprised by this?

Dr. Rao: So the rates of depression and anxiety were very similar to what's been previously reported among the general population and health care workers but what we were surprised at was PTSD. So the prevalence of PTSD was about 10 to 20% higher among these public health workers when compared to the general population and to frontline and essential health care workers.

Unger: You mentioned though there's a much higher prevalence among younger respondents and transgender and non-binary people of all ages. Any clue as to why? Are you still looking at that data?

Dr. Rao: So to tell you the truth, when we look at just the demographics, that actually is very similar to what's been found in the general population for those demographics. So we really think that for this particular group, that it's a lot, much more to do with their workplace factors than their demographic factors.

Unger: When you look at them ... so you're basically saying we're seeing among the public health workforce, similar levels of this kind of trauma. Are the sources of that pretty much the same as we would say at the health care worker at large, or are there other kind of specific drivers that rose to the top?

Dr. Rao: What I would say is that the prevalence of symptoms of depression and anxiety were similar to what's been previously reported in the general population and health care workers, but the prevalence of PTSD was the one that was pretty significant for us because that was higher. That was 10 to 20% higher than what's been previously reported among general population and frontline and essential health care workers.

Unger: And do you see the drivers of that, similarities, differences? What's behind it?

Dr. Rao: So when we look at workplace factors, about 90% of the people who responded said that they worked directly on COVID-19 activities, with 60% of them reporting working over 40 hours a week on average since March 2020. And that's a pretty long time. And the severity of symptoms of each adverse mental health condition increased with increasing time spent at work. So over 40 hours and also that the proportion of time that they spent of their day working on COVID-19. So the longer hours they worked, over 40 hours, and the more time that they spent, or the more portion of time that they spent working on COVID-19, increased risk with a match with increasing severity of symptoms of a mental health condition.

We asked about traumatic events that stresses experience since March 2020 at the start of the pandemic, both personal and job related. What we found was that 12% reported receiving job related threats because of their work, and that a quarter reported feeling bullied, threatened or harassed

because of their work. A quarter also experienced stigma and discrimination because of their work. And I think that these numbers are very unusual for any work population and that should be addressed.

Unger: Working on COVID-19 is really taking a toll on this workforce. When you think about burnout and mental health issues coming out of this, we see among the health care workers, we talked a lot about physicians and this problem, kind of not wanting to seek help or talk about this as a problem. Is that something you also see in the public health workforce?

Dr. Rao: So we don't know much about burnout among this population before the pandemic, but when speaking to burnout during the pandemic, we found that public health workers who were unable to take time off when needed, were nearly twice as likely to report symptoms of a mental health condition. And among those who were not able to take time off, the most commonly reported reasons were because there was no coverage at work. They were worried about falling behind on their work. And more than 50% said that they felt guilty about taking time off from work. And about 18% said that their employer did not allow them to take time off from work because there was so much to do. So taking time off from work wasn't necessarily just a management issue but it was this particular workforce's personal reasons of not wanting to leave behind their work.

Unger: I would say, not being able to take time off is a problem for almost anyone and those people are not dealing with COVID-19 patients, or really the potential toll of loss of lives. That's very heavy. When you think about what you now know and you think about the longer term implications for public health due to the pandemic and kind of beyond, what kind of implications do you see?

Dr. Rao: So we know from the literature that increases in mental health symptoms among workers have been linked to increased absenteeism, high turnover, low productivity and low morale, which could influence the effectiveness of public health organizations during emergencies. So these results have implications regarding not only the workforce's health, which is critical, but also how their health might affect the ability of the public health organization to respond. So mental health of public health workers is a critical issue for emergency response.

Unger: And is there anything coming out of the study or anything you've learned about ways that we can lessen the burden on our public health workforce?

Dr. Rao: So one of the ways to address mental health in the workplace is NIOSH. NIOSH, which is the National Institute for Occupational Safety and Health, recommends a hierarchy of controls when it comes to managing workplace stress or managing mental health. And it focuses mostly on the work processes and tasks. So it's to eliminate, reduce and manage in that order. And we know that job strain is highly related to psychological stress of workload and low decision, low control over decision-making process. And I think these are things that probably are out of control of a public health worker during a time of a pandemic but there are strategies we could use to reduce, address mental health symptoms among public health workers in emergency responses. For example, expanding staffing

size, amending flexible work schedules to reduce the need for long work hours and then to encourage workers to take regular breaks.

In addition, employee assistance programs could be evaluated and to become more accessible to, to these workers. And in particular to destigmatize the request for mental health assistance. What we found was that 20% of respondents said that they needed mental health services but did not get it. I'd like to emphasize that providers should not focus solely upon the individual but rather on its systems and processes. Telling people that they should take breaks, sending emails that EAP is available, still puts the burden on the individual. So as this survey shows that this is a very dedicated workforce population, where many felt guilty about taking leave. So in addition to workplace support, I would encourage that public health workers be regarded as essential and frontline workers that they are, and they are assisted by their communities and by their health care providers.

Unger: Big recognition to all those public health care workers out there on the front lines. Public health obviously not something that we can take for granted and the work that this force puts in to take care of folks out there is greatly appreciated and obviously up against a lot. So thank you so much for the important work that you and your team have done to help quantify the toll that this has taken. And hopefully we'll learn from that so we can have a better future out there. Dr. Rao, thanks for joining us today. That's it for today's COVID-19 Update. For resources on COVID-19, visit ama-assn.org/COVID-19. Thanks for joining us, please take care.
