

Spiro Pantazatos:

My name is Spiro, I have a background in training in health informatics, brain imaging, and biomedical data science. I primarily work in brain imaging in the psychiatry department at Columbia University.

John Kirby:

Tell us the name of the paper that you've recently written and what it's about and tell us what spurred you to write it.

Spiro Pantazatos:

The preprint is COVID vaccination and age stratified all-cause mortality risk. I wanted to research that topic because there is not too much in the literature regarding the adverse effects of vaccines. There's a lot about the benefits. But the risks and the potential harms, in my view is not well covered in the scientific literature. And I started researching it as a consequence of my university mandate. So the methodology that I used was actually inspired by the colleague ... my colleague on the paper Herve Seligmann. He had been publishing similar reports using European data, where he would take vaccination rates that were published, publicly available across 20 or so European countries, and correlate those with mortality data. Different countries have different populations, so you have to adjust the mortality rates to account for that. So he was basically looking at correlations between vaccination increases for a given percentage across countries with mortality in those same countries a few weeks later. He was basically finding that there seemed to be an increase correlation between vaccination rates and mortality within the first six weeks of vaccination. And then after six weeks, there tended to be a negative correlation. So a presumably a protective benefit of vaccination. But those first five weeks were the interesting part, I didn't quite believe his, his data, because it kind of went against everything, the sort of primary emphasis that the vaccines are safe and effective. So I was only going to believe it if I could replicate it myself using the US data. So if I could use a completely independent data set. So the US CDC publishes spreadsheets of vaccinations, so actually how many vaccines were administered across states. And they also publish a spreadsheet that with mortality, so COVID and non-COVID deaths in total deaths in each state in terms of age stratifying, the data, the idea was to see if there was a different effect of the vaccines across different age groups, just like with the Coronavirus can have very different effects across age groups. So I did a similar analysis to his using US data. And I essentially found and was able to replicate his main finding, which was an adverse effect or a positive correlation between the vaccination in a given month with mortality the next month. So in other words, states that had more vaccine doses distributed in a given month, tended to experience higher mortality in the next month, relative to other states that had fewer vaccine doses. So between February and August of 2021. This approach depending on what parameters you assume it estimates between 150 180,000 deaths due to the vaccine, in about half a year, when most of the vaccines were rolled out, we estimated a vaccine fatality rate of 0.4%, which is 20 times higher than the VAERS-based estimate of 0.002%. VAERS stands for the vaccine adverse event reporting system. So it's a passive reporting system that's meant to capture safety signals with the vaccines. And health care providers are required to report any type of adverse event following vaccination, regardless of whether they think the vaccine caused it or not. So there's one 2010 study, a famous study that suggested that potentially only 1%, as few as 1% of the actual adverse events are being reported or captured by the system. I used my estimate to create an estimate of the underreporting factor. So comparing the numbers that I was

getting with my method, with the actual numbers in VAERS, my numbers were about 20 times higher. So in this case, I would say 5% of the deaths seem to be captured by VAERS.

John Kirby:

So for all of 2021 How many deaths are you estimating?

Spiro Pantazatos:

So I'm actually, I'm actually working on that data right now. So I'm ... I'm working on an update of that analysis to run from September through February, last month. Boosters do seem to be having an effect, potentially worse effect, as might be predicted, given that there seems to be a this dose response effect. So the more doses you have, the more likely it appears that you're going to have an adverse effect. And so this was seen with the first two doses, most people had their severest reaction to the second dose. And it seems like it's not going to be any different with the third dose.

John Kirby:

So when you compare 2020 to 2021, all-cause mortality, how did you factor out COVID as a cause of death?

Spiro Pantazatos:

Sure. Yeah. So that's a great point. And that was raised by some of my colleagues that were rebutting sort of the claim that the vaccines were causing the deaths. So the another interpretation is that as a COVID, wave hits, and people see people getting COVID and dying, they then go out to get vaccinated. So it could be that there's this reverse effect going on where the deaths are actually causing or resulting in more vaccinations. So one ... so two ways. So we addressed that possible alternative explanation for this statistical association is one ... is we controlled for case rates. So in the model, in the linear regression model, we included a term that actually co varied for case rates across states that controlled for the effects of case rates. And we still saw the same effect. So the case rates didn't seem to be driving the effect that we're observing. The second way we controlled for it is in the same spreadsheet that CDC provides that gives you the total number of deaths per state, it also gives you the number of estimated COVID deaths and non-COVID deaths. So you can actually parse out the non-COVID deaths and run a similar analysis as that being your outcome variable. And when you do that, you still see a similar pattern.

John Kirby:

So what about the effects of lockdowns and you know, depression and drug abuse etc.

Spiro Pantazatos:

Lockdowns would have an adverse effect, we know that they've had an adverse effect in terms of suicide and increase in other types of death because of the ... the lockdowns. So, so an additional way that we controlled for that indirectly is by using the 2020 death counts. So that indirectly takes into account any state wide variations in pandemic response measures, if you will, like lockdowns masking, so if there's any statewide variants that could account for the differences in more mortality.

John Kirby:

So for that first half of 2021, was all cause mortality above that of 2020.

Spiro Pantazatos:

So interestingly, actually, when I looked at the data, in 2021, for the first half, there might have actually been an overall decrease in overall mortality. So about an 11%, slight decrease in mortality relative to 2020 when the pandemic first hit, so there could be all sorts of explanations for that. We knew how to treat COVID better. So there's, you know, better improvement in that area. Also, I think, some lockdowns, lockdowns were being released in some states. So there were so there explanations for why there was a slight decrease in average mortality relative to 2020. But once you account for that baseline shift, that ... that ... that sort of overall decrease, what we're really interested in is, is there still an effect of the vaccination across states

John Kirby:

Recently, we read that the CEO of one America insurance admitted that mortality in the working age group that is to say 18, to 64, was up 40% in 2021, which apparently is unheard of.

Scott Davidson (video quote)

"We are seeing right now the highest death rates we've ever seen in the history of this business, not just at OneAmerica, the data is consistent across every player in that in that business now. This is primarily working age people, 18 to 64, that are in ... employers ... like all the employers on ... on the screen here. And what we saw just in third quarter, we're seeing it continuing to fourth quarter is that death rates are up 40% over what they were pre pandemic. Just to give you a an idea of how bad that is, a three sigma or a one in 200 year catastrophe would be 10% increase over pre-pandemic."

John Kirby:

So having examined all-cause mortality, does this observation fit your findings?

Spiro Pantazatos:

I would say it's consistent. So I read that report. It's ... it's interesting ... it's important to note that he was referring to pre pandemic, so a 40% increase relative to pre-pandemic era, so 2019 and earlier. So that implies that he's including 2020, in that assessment. And so it's, it's still, there's a lot of other variables to parse out, because the vaccines weren't rolled out until the end of 2020. Without doing this sort of analysis that we did recently is difficult, difficult to parse out, okay, what ... what proportion of those 40% are actually due to vaccines versus other things that were different in 2020, relative to 2019,

John Kirby:

As you understand actuarial tables that insurance companies, use and when you hear them say that, for instance, a 10% rise in all-cause mortality would be a once in 200 year event. And then you see that this is 40%. I mean, what thoughts run through your mind? I mean, as you as you deal with an industry whose business it is to count mortality rates and causes, it's sort of it's somewhat shocking, right, that that they seem so shocked?

Spiro Pantazatos:

Yeah, well, the first thought, I guess, is I don't want to believe, and I think nobody wants to believe it. But we have to, if, you know, especially given that the, you know, the vaccine companies are talking about a fourth booster already, and they're ... we'll probably keep trying to sell them for as long as they can.

News anchor (video quote)

"So you've seen some of that data on a fourth dose, a second booster shot, you think it will be necessary."

Bourla (video quote)

"Right now, the way that we have seen, it is necessary ... a fourth booster. Right now, with the protection that you're getting from the third, it is good enough, actually quite good for hospitalizations and deaths is not that good against infections, but doesn't last very long."

Spiro Pantazatos:

So at some point, we're going to have to face potential reality that a significant portion of ... of these deaths are being caused by the vaccines.

John Kirby:

So what's been the reaction to the paper? Are you able to publish it?

Spiro Pantazatos:

Yeah, I've been submitting it to a lot of journals. And it's been desk-rejected by, by most all of the medical journals that have submitted it to. Desk-rejected, meaning they don't send it out for peer review, that the editor just decides they don't want it. Typically, the reasons they give are not that substantive. So they generally say, Oh, this isn't the focus of our journal, or we have too many COVID related submissions. You know, you'll probably do better with another journal, you know, this sort of the pat, sort of responses. And my cover letter specifically asked for substantive reasons. And I didn't find those to be very substantive. So when I have time I try to appeal those responses. Sometimes I get a more a better reason. By better, I mean, more constructive reason that helps me improve the manuscript. So I saw ... so ... but really the job of the editors to validate the work, and if it's important, and clearly, I feel this is this is very important work. And in my view, the editors are not doing what they're supposed to be doing in terms of validating the work. So meaning sending it out to peer reviewers who are specialized and able to evaluate the work.

John Kirby:

So what do you think could be motivating their inattention?

Spiro Pantazatos:

Yeah, so I came across an article from 2005. And I believe it was in "PLOS Medicine," was a former editor highlighting a problem with journals and that they had, in his view, they had become sort of these advertisement arms in ... for pharma companies. So because they had relied so much on income from ... from pharma industry, they were reluctant to publish anything that was critical. So at least as of 2005, I think the model was that if they published a clinical trial

from a company that said their drug worked, or was effective and safe, the company would often promise to buy lots of reprints, and that's where the income came from. So if they, they were able to publish a company's paper, the indirect sort of promise was that the company was going to buy lots of reprints, so that's why I don't take it ... you know, I'm not too surprised when I when I get rejected. In a large part, I was sending the papers to these editors, because I was ... I wanted them to see this research. So even if they didn't publish it, at least they were reading it. And at least the word could get out that way.

John Kirby:

Yeah, but what about among your colleagues, when you say what you're working on when you talk about this work? And the findings, what do they say?

Spiro Pantazatos:

Mostly, they recognize that the work is important. I have gotten a few comments that, you know, this isn't directly related to the field that I work in. And so some say, Well, you're not funded to do this work. Generally, you're funded to do to do a certain type of work in a certain type of field on a certain topic. And, you know, with this paper, I did work overtime, extra hours. So it's not ... it wasn't part, it wasn't my direct purview, in terms of the ... the work that I that I funded to do, which is about, you know, valid concern. But, but other than that ...

John Kirby:

It's valid in so far as in this day and age, people are meant to be sort of drastically narrow in their areas of focus.

Spiro Pantazatos:

Yeah, not so drastically, you know, I feel like I do have a flexibility, you know, enough so far, like, knock on wood, enough of academic freedom to, to pursue important questions related to public health. The if you work if your research at a biomedical university, you know, I can't find a topic, I can't think of a topic that's more important, at this point, to focus on, saying that you have to have a certain credential or a certain type of tag or title to be able to say something on a certain topic, unfortunately, is also part of the reason we got into this mess, I think. And, you know, that's one lesson that I think will be important going forward is, is not to give so much weight to people just based on their ... their title, but to the actual contents of what theirs, they're saying, you know,

John Kirby:

So what is the cost benefit ratio at this point? I mean, in other words, are you saying that the risks far outweigh the benefits?

Spiro Pantazatos:

The paper is saying that the risks in terms of mortality of the vaccine for ages below 50 appear to be, if our estimates are correct, appear to be the same order of magnitude as the risks of the virus. And this is assuming the risk of the virus hasn't changed throughout the pandemic, and there's evidence to show that it's become less lethal, the Omicron is much less lethal than previous variants. So even using estimates that give that bias sort of the death risk for the virus a little bit higher, it seems, even though both estimates are low, the risks of the vaccine are relatively low in

absolute terms, but the infection risk is also low in absolute terms. So it doesn't make sense to give a treatment if your risk is about the same as the risk of no treatment. And we know, of course, that there's also other early treatments that can help that are much safer. So given that, I would say that the risks outweigh the benefits.

John Kirby:

Especially for young people.

Spiro Pantazatos:

Especially for young people.

John Kirby:

And you've seen that the Surgeon General of the State of Florida has made a similar recommendation. What do you think of that?

Spiro Pantazatos:

Oh, yeah, that's great. I would extend it to younger ... more age groups, not just children. So yeah, but that's a good start.

John Kirby:

You mean older age groups?

Spiro Pantazatos:

Yes. Yes, yes. And I think there needs to be more, a lot more safety data on the boosters. So there was one paper I was circulating on my university, which prompted them to mandate the booster. It was a, it was a paper that was out of Israel, and the paper ... the author's themselves, say, you know, we don't you don't have safety data to report that's for future studies. And they didn't even report safety data all-cause mortality. They just focus on the narrow sort of reduction in COVID mortality.

John Kirby:

So as you sat there, you know, in the ivory tower as it were with your colleagues, and here comes operation warp speed, the arrival of these brand new never before tested on even a few people, let alone millions of people gene therapy vaccines, did they not have some hesitancy? Did they not wonder at all? Or were they not at all frightened? Even a little bit?

Spiro Pantazatos:

Yeah, that's a good question. I would actually say that I was one of those people that thought the vaccine was the thing that was going to get ... get us out of this, and I sort of I remember thinking to myself, right. I'm just going to stay locked up in my apartment until the vaccine comes up. And that was actually my plan for a large part of the early part of the pandemic. And it was not until the vaccines started to be mandated that I started to think a little bit more critically. So I think initially, I was hesitant because my brother's a biomedical scientist, his wife is a farmer Coco's kineticist. And he's a, he's a proteomics, specialist. And, and, and they were hesitant.

John Kirby:

So how did you overcome your fear of the virus?

Spiro Pantazatos:

I ... I was researching this paper by Levine and also come across the paper by Ioannidis, looking at the infection fatality rate across age, so I was really looking at the actual risks in terms of numbers. And when I started digging into those papers, I started realizing that the ... the, you know, the virus is not as lethal as ... as

John Kirby:

CNN was ...

Spiro Pantazatos:

Yes. CNN. And other networks would like me to ... I mean, I think, you know, I think I think we all remember those images of freezer trucks. And in the beginning of the pandemic, especially, you know, it hit New York the hardest. So I think that was that had left a very indelible impression. And so I think people were operating under that sort of mentality.

John Kirby:

So even for a man with your background and profound education in statistics, for instance, that imagery was enough, right?

Spiro Pantazatos:

Oh, yeah.

John Kirby:

Looking back, it's sort of shut off the rational parts of our minds in a way.

Spiro Pantazatos:

Yeah. Yeah. I mean, it's, it's, I mean, it's rational. I wouldn't necessarily say that, I would say, it's, we, you know, we make our judgments based on available evidence that we have ... have to us. And if certain evidence, if we're only shown one type of evidence, that's all we can go on. But at some point, you know, you have to follow an inner intuition, I would say it's, you know, if you have some, something that's causing doubt, you should listen to that voice,

John Kirby:

Have the events of the past two years altered, perhaps even radically altered, your sense of the sciences themselves, your sense of how professional science is being conducted, academic science?

Spiro Pantazatos:

You know, since being in grad school, I've always had an appreciation for how science can be spun. Especially to make it into certain top journals. You know, fitting a certain story or a narrative often is the primary focus, and not necessarily the rigor of the science. So I had been trained in that sense to be critical of research in my own field. So I definitely always had that orientation, that there's a lot of less than rigorous science that's being published and not

questioned as much as it should be. In this case ... this case is not that much different, except, you know, the stakes are much higher. And in this case, I felt it was worth the time and effort to try and expose that aspect of the scientific process. If you look at the ethical guidelines for biomedical publishing, they state that an editor's job is to take into account the importance of a piece of work to its readership, and to the public at large, in addition to validating the work, so if the work has a high importance, then they have a duty to validate the work and to consider it. So I think that's in many ways, I think that's ground zero, sort of, into how we got into this mess. Also, policies like they have at medRxiv, where if you read that their FAQ, they actually explicitly state that certain manuscripts will not be posted if they challenge preexisting public health policies related to immunization. So they actually say that they won't post certain papers, if they if they're seen as challenging public health policies as it relates to immunization.

John Kirby:

This is the most political I've ever seen science be!

Spiro Pantazatos:

Yeah. Yeah. I mean, that's, that's a strategy to sort of stigmatize when people don't want, sort of, truth to come out, you know, they use ways to try to stigmatize people's views as a strategy. You know, hopefully people can start seeing through that, and they do their own research. And one by one, that's, hopefully how we get out of this to me. I mean, it's science, if you just keep it on ... focus on the science and the actual data, I mean, this data in our preprint is publicly available. So anybody with experience in Applied Statistics can replicate our findings in a day or two, depending on how much training they have. So we make the data available, they just have to double check that it matches the CDC website. And then they can run their own analysis and verify the results for themselves.

John Kirby:

No, and I appreciate the tact you've taken just because it seems like there's ... there's an additional problem, which is the extreme hesitancy on the part of certainly of doctors and nurses even, though maybe less so nurses, to attribute death to the to any vaccine. In other words, they ... they just don't see it as an issue. The idea that there's only one science, right, it's Tony ...

Spiro Pantazatos:

Trademark, trademark ...

John Kirby:

Yes, that's right. And it comes ... it is dictated from above, that seems to fly in the face of a long, understood definition of science, which is that is it's got to be falsifiable. It's got to be it's in flux. You know, we've read Thomas Kuhns' "Nature of Scientific Revolutions," we know that this is an evolving as a TV scientist, how do they get away there's only this science and that's, and how to, without the entire scientific community going, Wait a second? I mean, this is like the ... the same old orthodoxy trap that was the issue with the Catholic Church. Yeah. And ...

Spiro Pantazatos:

Yeah.

John Kirby:

Why didn't they see, Oh, that rhymes with that?

Spiro Pantazatos:

Yeah. I mean, you know, I think part of the answer is that, you know, scientists are humans and humans are vulnerable to this sort of same social pressures that create dogma. Groupthink, I think is a big issue. So there's definitely still groupthink going on. And most scientists don't have time. They're so specialized. And they may not be able to devote the time to really dig into the literature, they've just come to trust that whatever they read, is trustworthy. Especially if it's in if it's in high impact journal, those scientists that are on TV. Yeah, they may have the title. But yeah, it's ... it's doubtful whether they, you know, one wonders whether they actually believe what they're saying, or is it ... do they believe it, and then they're refusing to really look at the other side? Or it could just be that they're, they believe it, and they wouldn't look at the other side, if they only had someone questioned them or, which is, you know, the view that I would take, there's a realization on their part that they wouldn't be getting as many media opportunities if they had changed their ... sort of their tone.

John Kirby:

When you think about, like 180,000 people were just killed by this thing. And, you know, you consider some evidence that it was the whole crisis from the beginning was planned out and conceived by people whose interests have been totally followed up with, and then the military's involvement from the beginning, very seldom do you have the military that involved with something that everybody in the population is going to come into contact with way that could kill them?

Even the virus or the vaccine ... the shot?

You could argue that the virus was also ...

Spiro Pantazatos:

Yeah.

John Kirby:

But do you ever wonder whether it's even about COVID at all? I mean, like, they're getting everybody ...

Spiro Pantazatos:

Yeah

John Kirby:

... no matter the risk, to line up and take it ...

Spiro Pantazatos:

Yeah. Yeah. Sure. I mean, that's a good question. Yeah. That's, I think one reason why the safety signals haven't been sort of respected in terms of stopping a trial, I think, is because there might be other sort of reasons that people are invested in these vaccines. So yeah, so the whole digital

passport thing. I've seen commercials, like actual commercials where companies are investing. They think that's going to be the next big, big thing that you'll have some kind of digital passport.

Digital ID advertisement (video quote)

Hello, everyone! Meet Lucy, student in psychology, and me, her digital ID wallet issued by the government to offer a wide range of identity services. In fact, I'm a handy way of proving and protecting her identity, both online and face to face. Let's have a closer look and what I can do, I can help governments to better communicate with citizens. Right now. I'm reminding Lucy of the appointment she needs to schedule for her mandatory vaccination.

Spiro Pantazatos:

And so I think there's ... there's so many entities that are sort of invested in that as a wave of the future, that maybe there was so much incentive not to actually look at the, you know, the lack of sufficient safety of the vaccines. So that in my mind is sort of the most likely explanation for why this has gone on for as long as it has.

John Kirby:

What do you want the takeaway to be from your paper and in general?

Spiro Pantazatos:

I think there's a lot of scientists and academic ... academicians out there that do know better, but they might not have the ... they might be afraid to speak up because people have lost their jobs and people have suffered consequences for speaking against the narrative or coming out with findings that don't support the narrative. So my message is to have faith that the scientific method ultimately will prevail. So if you have confidence in your scientific approach, ultimately, no matter what may happen in the short term, ultimately, things will go your way, even if it's not something that you may have expected. So don't be afraid to tell the truth. That's it.