Milbank Quarterly in Conversation

Episode 2: The Impact of Social Policy on Health

ALAN COHEN: Can social policies affect health? That is the question that my guests today, Emilie Courtin of the London School of Hygiene and Tropical Medicine and Peter Muennig of Columbia University, sought to answer in their June *Milbank Quarterly* article, which systematically reviewed all known randomized social policy experiments in the United States that involved interventions intended to improve health outcomes.

I'm Alan Cohen, Editor of *The Milbank Quarterly*, and in this episode of our podcast, *Milbank Quarterly* in Conversation, we'll be exploring their findings, which seem increasingly relevant in the context of the current COVID-19 pandemic.

So let me direct the first question to you, Peter. What prompted you and your colleagues to undertake this review?

PETER MUENNIG: So, I did a study a long time ago that found that poverty is associated with a larger burden of disease and smoking and obesity combined. We've, as scientists, have looked at a lot of correlational data showing that poverty is a huge predictor of disease and death. So tackling poverty is probably a pretty good place to start if you want to prevent disease and death. But correlational data is probably not enough to go on.

So we began to look at pure welfare experiments and stumbled upon a trove of health data that's sort of buried within these old welfare experiments. And we found a lot of these economic welfare studies do have good health data that had just not been previously looked

at. So we realized that there was enough information there for a metaanalysis, and we're really excited to put one together.

ALAN COHEN: Thank you. Emilie, what are your primary findings?

EMILIE COURTIN: So, as Peter just mentioned, the aim of this review was to try to capture all randomized controlled trials of social experiments that incorporated health outcomes since the 1960s in the U.S.

So we ended up including 38 randomized controlled trials covering a wide range of interventions on life and education and policies, income maintenance and supplementation, welfare-to-work, employment, housing and housing trends.

And I think there are three key takeaways. The first one is that if you look at the overall picture, what you see is that half of the estimates that we have collected demonstrated a significant positive effect on health, 44% had no effect on health, and 7% were associated with a significant worsening of health outcomes.

Second, if you now zoom in on the studies which had a positive effect on health, there are three categories of interventions that really stand out. The first one is early life and education programs. And you can think of intensive early childhood prevention or preschool programs for children from low-income families.

Those programs add positive effect on health outcomes across the board, including a decade after the intervention itself was implemented. So those programs really seem to put children on a different path towards better socioeconomic outcomes and ultimately improved health outcomes, as well.

So, second category of intervention that had a positive effect on health, income and supplementation programs, which were associated with improvements on a range of health outcomes, including self-rated health.

And that was particularly the case for conditional cash transfers, which are interventions that condition the receipt of cash on adopting health-promoting behaviors like going to school for kids or preventive care, for example.

And finally, and perhaps unsurprisingly, health insurance interventions were also associated with consistent improvements in health outcomes. The most famous of these experiments, the Oregon study, showed improvements across a number of physical and mental health outcomes, for example.

And the third takeaway of this review for me is that it's about the evidence that we are presenting in this paper. In many ways, it is almost as good as it gets in terms of the robustness of the design of the studies, because we are focusing exclusively on randomized, controlled trials.

But there is a number of limitations that we do need to keep in mind when we look at the evidence base that we have gathered in this paper. The first one is very important, because it's the idea that most of those trials were not designed with health outcomes in mind. They were designed with education or unemployment in mind as primary outcomes.

As a consequence, three-quarters of the estimates that we are reporting are actually underpowered to detect health effects, if there is an effect.

So to overcome this issue, we focused our reporting on those estimates which are actually powered for health outcomes.

Second, the risk of bias-related to the design of those experiments was high in half of the papers reporting findings from the 38 trials. So the quality of the evidence we have here is high, but as always, it is not perfect.

And finally, we found evidence of publication bias, which means that statistically significant findings were considerably more likely to be published than the null findings.

So to overcome this issue, a lot of our efforts while we were working on this review went into trying to find unpublished reports that did not make it to the peer-reviewed literature. And I think it ended up being a unique strength of our paper that we went beyond the subset of randomized controlled trials that made it to the peer-reviewed literature to hopefully give a fuller picture to researchers and policymakers of the health effects of those social experiments.

ALAN COHEN: Very interesting findings. That, of course, now begs the question of which social interventions have negative effects on health. Peter, would you like to respond?

PETER MUENNIG: Sure. So a big one of those is time limits on welfare programs. This is actually a study I did about a decade ago by linking old welfare reform experiments to mortality data. And we sort of found that in these programs, deaths increased, surprisingly, even as employment and income rose. And I have some speculation about why this is.

You know, when Bill Clinton promised, you know, "End welfare as we know it" -- that's my best impression of him -- the idea was to move people off of welfare and into the workforce so they could earn benefits and work at the same time. And that program, known as Temporary Assistance to Needy Families, did help people into the workforce. It did reduce the welfare rolls, and it did increase income on average.

But some people just can't work, and these include people with, you know, big families, a sick relative that needs caregiving, people with mental health issues or physical health issues that don't qualify for disability, and people without a car.

And so when the time ran out after five years, some of them ended up homeless. And, you know, being homeless is probably not so good for you. So I sort of speculate that that's probably why we saw some excess deaths when we moved from the traditional welfare AFDC to TANF.

ALAN COHEN: Right. Well, Peter, I feel your pain. That's my best impression of Bill Clinton. So let me pose a question to both of you. What would you say are the key implications of your review for policy development, particularly for states or for nations? Who would like to respond?

PETER MUENNIG: I can speak to states. The implications are huge, especially in the United States, where we're very focused on cost efficiency, and we have a polarized political environment. When the government decides to invest in welfare, it is much more likely to achieve something resembling bipartisan support when it's shown to be cost-effective, and it's really difficult to show that antipoverty programs are cost-effective when you're only looking at economic outcomes, because you're basically just transferring money from the government to individuals.

But it can make a big dent in our $1.5 trillion -- plus of government health expenditures in Medicare and Medicaid and VA and all of that. If it can make a big dent in that chunk of expenditures, then it's a whole different equation.

ALAN COHEN: Emilie, would you like to address the issue from the standpoint of nations?

EMILIE COURTIN: I keep going back in my mind to these apparent double standards for the evaluation of interventions across different fields and disciplines.

To give you an example, we would not introduce a new drug to the market without reliable evidence on its efficacy, potential side effects from a medical trial. And yet we do so repeatedly with social policies in the U.S. and many other countries.

But just like drugs, these policies can have a positive effect health, but also negative effects that do need to be evaluated. They are also very costly. They require large investments and resources to be implemented. So we do need to get their design right. So what our review shows is that policymaking in this area does not need to happen in the absence of robust evidence.

So in addition to what Peter already mentioned for the US, our review has implications for policymaking in many other high-income countries, because there is still a reluctance to rely on modernization to evaluate interventions in Europe, for example.

I also hope it will foster development of this type of policy evaluation, as I think that randomized controlled trials can offer clarity on the effect of social intervention on health in a way that other type of evaluation, like quasi-experiments, cannot offer.

ALAN COHEN: Thank you. Given the importance of economic policy, is it fair to say that good economic policy makes good health policy, or in a COVID-19 world, does good health policy make good economic policy?

PETER MUENNIG: I might reverse that and say, you know, in a COVID-19 world, good economic policy especially makes for good health policy. There's a lot of evidence showing that these programs have the ability to reduce both the likelihood of getting a disease and the likelihood of having a less severe disease if you do get it.

And the reasons for this are complicated, but they have to do with, you know, a lifetime of exposure to toxins, poor diet and chronic activation of the, you know, fight-or-flight nervous system, and it's the wear and tear it causes on your immune system.

There is a guy, Sheldon Cohen, at Carnegie Mellon, who spent most of his life randomizing people to receive viruses or not, and he just sort of injects them in their nose. And he found low-income populations are much more likely to develop a cold if exposed to one and to develop more severe symptoms.

And also, he sort of follows this through the body, you know, from genes to the molecules to the cells to the organs and finds that, you know, biological aging and wear and tear on the immune system is much greater in low-income populations.

So if we can, you know, kind of reverse some of those stressors, improve the diet and reduce exposure to some of these toxic exposures, then, you know, we're going to be a lot better prepared to fight a disease when we're infected by it.

ALAN COHEN: Thank you. So also, then, it leads to the question of, does COVID-19 make the need for these policies more urgent? What do you think?

EMILIE COURTIN: Yes, I think it's absolutely the case. COVID-19 has brought total devastation in the labor market, as we know. So data we have that shows that the coronavirus and the lockdown itself is affecting disproportionately low-income households and ethnic minorities.

It was just estimated today by the Federal Reserve that almost 40% of those households making less than $40,000 per year lost a job in March. And those households who are living in poverty really face specific challenges trying to stay afloat during this crisis in face of rising unemployment and income losses.

In addition, those services that they can usually rely on, like food banks, are likely to be severely disrupted at the moment, and they are more likely to not have, or to have lost, health insurance because they lost their jobs. So this is really a time of unprecedented economic misery for a lot of low-income families in the US and across the globe.

What is interesting in our review is that those populations who are currently the most at risk are the targets of a lot of those interventions. For example, a conditional cash transfer program…in New York or in Tennessee increased income and successfully reduced poverty while also improving self-rated health and mental well-being. So this is particularly promising in the current circumstances.

On the contrary, adding time limits to welfare benefits might reduce reliance on welfare in the short run, increase unemployment, but it is also likely to have long-term detrimental effects on health, as Peter just explained.

So what we hope is that this review will be useful for policymakers when they try to think about the different policy options that they have to try to support low-income households.

ALAN COHEN: Yes, we can only hope that policymakers will pay heed to the findings from your study. So, what is next in your research agenda?

PETER MUENNIG: Okay. So we're actually both working on some overlapping randomized controlled trials, original randomized controlled trials of social policy that are designed to collect health outcome data.

And what we're hoping is to look at some much more intensive policies. One of them we call MyGoals. And this is being conducted by MDRC, and it provides pretty large incentives for unemployed public housing recipients to enter the workforce, and also to receive special coaching, called executive function coaching that sort of helps you, you know, set goals in life and keep them and manage, you know, emotional states and things like that.

And we're excited to see what happens. This is a three-year-long intervention, and I think it's probably going to have some big health impacts.

EMILIE COURTIN: Yeah, and I think one other question that is really driving our research agenda is to try to understand who might benefit the most from those programs. We are really interested in understanding how these different social policies impact different pieces of health of different population subgroups and trying to understand better when we should intervene, at which stage of the life of people for how long, and when can they actually expect returns for their health.

PETER MUENNIG: Yeah, and bringing it back to COVID-19, I think we're probably going to be adding some COVID-19 antibody tests and some questions to get at the bottom of -- just see whether, you know, the severity of disease was less -- in people who were treated with these welfare programs.

I think that's pretty important, because, you know, as we saw in Sweden, they just sort of kept everything open, where everyone else around them locked down. And they didn't really need to flatten the curve, because the population was so healthy. They got hit pretty hard, but the population was so healthy that they didn't see that many deaths -- as many deaths as other countries did.

ALAN COHEN: Well, that's very exciting. Good luck with your upcoming research. Thank you for taking the time to speak with us today, and thank you once again for your valuable contribution to *The Milbank Quarterly*.

PETER MUENNIG: Sure thing. Thank you so much for everything you've done for us.

EMILIE COURTIN: Yeah, thank you very much.

ALAN COHEN: You're welcome. Bye-bye.