An Exposure Exposé: Talking Healthcare Accessibility and the Future of Crowd Control Weapons Research

INTERVIEW WITH: PROFESSOR ROHINI HAAR

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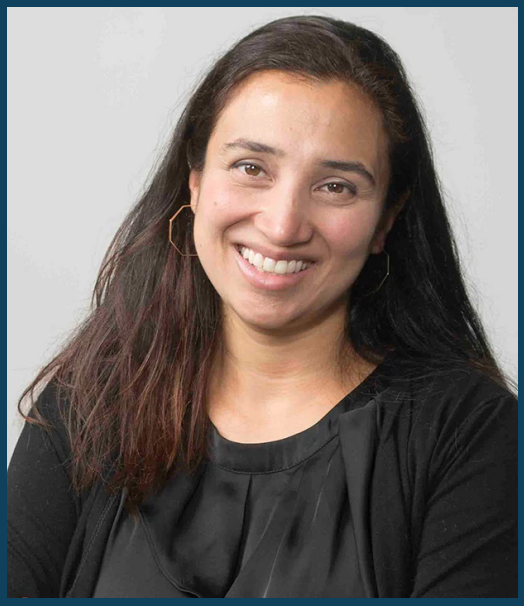
***Dr. Rohini Haar, MD, MPH**, practices emergency medicine, lectures in the Berkeley schools of law and public health, and serves as a research fellow in the Berkeley Human Rights Center. Haar's expertise in health and human rights inform her research interests, including the health impacts of crowd control weapons. Haar notably investigates human rights violations and the safety of health workers and health services in conflict.*



BSJ: What drove your interest in health and human rights? How did your career in emergency medicine contribute?

RH: I got interested in college, and I think I was in my sophomore year when I knew I wanted to be a physician. Okay, let me put it this way: I knew my parents insisted I become a doctor, and anyway, I was super excited about medicine, but I was also interested in political science. One year, I was in a class called "International Human Rights" and there was a physician there who was speaking about his work in pathology and forensics and using medicine to document human rights abuses. I had an actual moment while he spoke thinking, this is it, that's how I mix the two interests. This is what I want to do. And so I just worked and learned from him. I tried to use every opportunity I could to further that path, using medicine and science to make the world better but specifically to adhere to human rights laws. I feel like medicine is the skill that allows me access to that.

BSJ: How do you think the development of acute stress responses (like harm, chronic PTSD, and fight or flight) to tear gas exposure will impact the generational health of Palestinians?

RH: In 2014, I started working on tear gas and crowd control weapons in general. The more I knew, the more I was shocked that these weapons are not really regulated anywhere, and yet they cause massive harm to the people who face crowd control weapons on a daily basis.

In 2016 and then again in 2023, we published a report on the health impacts of crowd control weapons, titled "Lethal in Disguise." Colleagues in Palestine at UNRWA (United Nations Relief and Works Agency) had found that report, and they reached out asking, "Do you guys know what is going on in the West Bank?" I had done work in the West Bank a long time ago, but I was not aware of what they were describing specifically. They said that in these refugee camps around Bethlehem, they are using tear gas every day. They really initiated the study; they had the team and wanted the expertise to study this in their space.

When you ask about the acute stress reaction in psychology, I had come at it from a very medical angle of being like, okay, there are rashes, there are corneal abrasions and burns, and there are severe injuries from the canisters. Then you go there, and they are like, "We know all that, we are getting it every day. Now what?" I realized that it was not so much of an acute stress reaction but more like a chronic acute stress reaction from this near-constant exposure.

Around Bethlehem, there is this one refugee camp, Aida Camp. There are a lot of soldiers there, and there is a lot of friction. The density of the community means that when tear gas is fired into the streets, it goes everywhere. Since it is a refugee camp, people do not have sealed windows and air conditioning; it is all open, and mostly cement buildings. They are exposed to tear gas, not just on the streets, but in their homes. That psychological component was so much bigger than I thought it would be.

BSJ: How is psychological harm research advancing the accuracy and efficacy of crowd control weapon effecting documentation?

Figure 1: Cover photo of *No Safe Space*. Two Israeli soldiers fire tear gas into the Aida refugee camp of the West Bank in 2014.

RH: Psychological harm comes from all kinds of abuse and torture. When I started practicing emergency medicine, the real focus, even ten to fifteen years ago, was on the physical effects because they are obvious and easier to document. You can see cigarette burns, a broken arm, bruises from a rubber bullet, or torture from detention. Psychological harm is more silent because it is harder to directly correlate the harm to the cause. However, there is a growing literature base on this topic, and the more data we collect, the more we can cite that data and show that psychological harm from crowd control weapons is very real.

For most people harmed, especially with less lethal weapons that do not cause permanent physical injury, psychological harm is the primary issue. But even more so, I was just in Chile and Colombia doing cases around protest, and these folks face real physical injuries as well. One man lost an eye with a rubber bullet, and another who worked with his hands lost the function of his whole arm. They suffered physical harm, but it is really the psychological sequela of this harm that is hurting people in so many ways- they can't work, for example. We always take a psychologist on our missions because their ability to understand the nuances of psychological harm is much deeper than mine.

BSJ: What are the characteristics of limitations imposed on Palestinians seeking care for injuries from crowd control weapons?

RH: It is really hard to get care for so many reasons, but let me just name two. In the West Bank, there are different areas, and between the areas, and sometimes even within the area, there are checkpoints. So if you want to get care, the ambulances have to go through the stop checkpoints. There are arbitrary times that they have to sit and wait. You can get in an ambulance and take three hours to go a mile and a half because there are so many checkpoints; you can understand how frustrating that is, and sometimes that is not useful.

Second, back in 2017, the Palestinian Red Cross Society was saying they run the ambulances, but if there is a protest, the IDF will keep the ambulances far away. Sometimes they will attack ambulance workers so they feel like they are at risk. There was a situation a few months ago where soldiers came inside the hospital and attacked someone, but frequently they would come inside and get the medical records. So there is a fear of being treated because they can get your

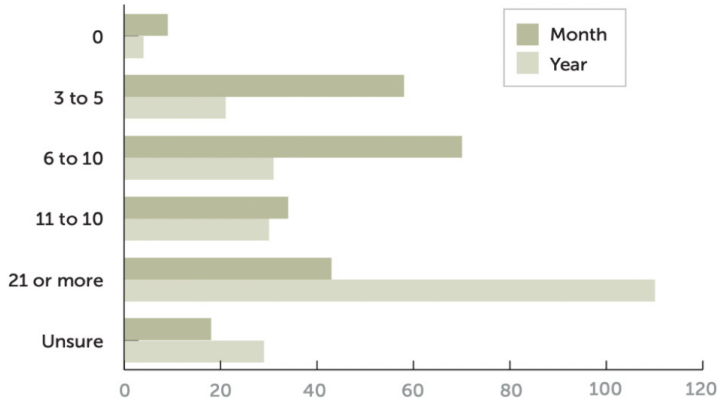


FIGURE 3 Reported number of exposures (n=232)

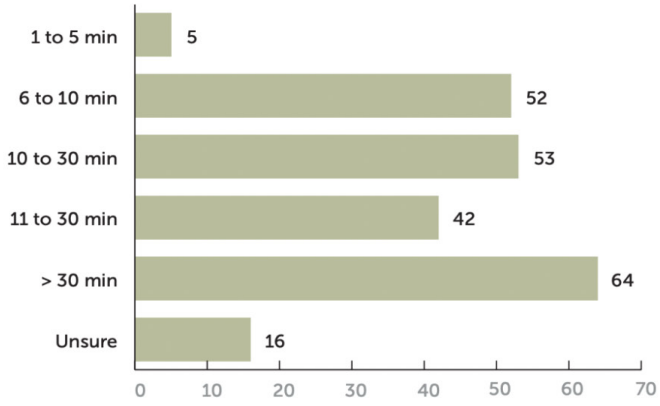


FIGURE 4 Length of time of exposure in incidents over the past month (in minutes) (n=232)

Figure 2: Two hundred thirty-two participants in the Aida and Dhesheh regions in the West Bank were exposed to tear gas to varying degrees of length in minutes.

name, and then they know you were involved in the protests. That is happening all over the world, not necessarily just the medical record piece, but this idea of surveilling protests and going back and arresting people. These are all chilling issues; I would say the vast majority of hospitals are functional, and a lot of people are going to them, getting care, and then providing what they can. But it is a lot less well-funded than hospitals in the US.

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BSJ: How does the physical violence faced by asylum seekers in detention or militarized zones, such as what is being seen by Gazan refugees as well, impact their long-term mental and neurological health?

RH: When you apply for asylum in the United States, you have to show that you have been persecuted. There are five different reasons for persecution. One of the primary claims is that you have to show that there's a specific and credible threat to you, and people often show that by getting asylum evaluations when they come to the United States, where they document that they have been injured or gone through all this trauma.

	(*N*, %)
Loss of Consciousness	31 (41%)
Multiple Head Injuries	27 (36%)
Mechanism of Injury	
Blunt Trauma	75 (100%)
Asphyxiation (strangulation, drowning)	3 (4%)
Signs and Symptoms	
Sleep Dysfunction	46 (61%)
Headache	31 (41%)
Anger/Irritability	14 (19%)
Cognitive Challenges	21 (28%)
Vision changes	9 (12%)
Hearing Changes	13 (17%)
Physical Scar in Head Region	30 (40%)

Figure 3: The most common characteristics of head injury in a sub-sample of 75 individuals, grouped by qualitative themes (N = number of individuals). Head injury data was pulled from the 200 medico-legal affidavits analyzed. Reported percentages were adjusted for age and gender.

Often, when you are seeking asylum, you do not have all this medical paperwork from your hospital confirming that this happened to you. The problem is when you have a traumatic brain injury, sometimes you do not remember specific things. They can give you graphic details about what happened during that moment, but they might not be able to tell you what year it was.

If they go to court and cannot provide the immigration judge with an exact date of what happened, they might not take your case. Our article was trying to establish that head trauma causes memory loss and that this was a common occurrence, so it should not be a major factor in determining an asylum claimant's credibility.

BSJ: What are the main barriers asylum seekers face when trying to access appropriate medical care in their countries of origin and in the U.S.? How can U.S. policy adapt to dismantle the barriers?

RH: From a clinical point of view, it's complicated. Getting insurance is messy. Imagine coming to a new place and being expected to pick between Aetna and Blue Cross. Here is the cost of this and what it covers. Even if you had a job, that is not straightforward. If you're a documented immigrant you could get the insurance, but if you're undocumented, those avenues are not open to you. Often you have to get on some sort of Medi-Cal, or what the state has available for you.

So that's one step. The other is clinical. There are all these language and knowledge barriers. Here's a personal example: Every time my grandmother went to the doctor in India with a headache, they'd give her B12 shots. When she came to the US and didn't get the same treatment, she lost trust in the US system. With the language barrier, poor explanations, and different cultures, it was so hard for her. There are many cultural issues around what's acceptable and how diseases are understood and described. Structurally, a lot of immigrants are afraid of getting public care because of a public charge rule. How it works is if you're in the visa application before you get legal, green cards, and if they show that you had to use state assistance, like public care, Medicaid, or welfare, that could be counted against you. You could be considered a drain on our state and our country. So people don't want to get on public care.

If you're undocumented, depending on the field of work you're in, you're working long hours, so you might not be able to seek healthcare. You entrust your information with the government in a public hospital. A lot of this is not as much of an issue in California because I think there's been a lot of work done here on the positive side. If you're in another state, like Texas, this could be a real issue for you.

BSJ: How does the structure of the legal system, in combination with the reliance on asylum-seeker testimony, fail to address the health nuances of people suffering from cognitive impairments and head injuries?

RH: It's very state-dependent—immigration in the United States. Again I am not the immigration expert; I am coming at it from a medical standpoint. There are two completely different judicial systems in the United States. If you are seeking immigration approval, those judges are not in the judicial system. They are in the executive branch as appointed immigration judges, and they are often appointed at the state level. If you are seeking asylum in Atlanta,

Georgia, those judges can be so different from judges in California or New York, where I used to work. What they approve and what they consider a credible threat, persecution, or an appropriate claim for asylum, are different; it is discretionary. Also, in this executive immigration, you do not have a right to a lawyer. There are no rights like Miranda rights. Someone can just be 18 years old and walk in there and try to represent themselves, so there are all these structural issues. I think, ultimately, you have to understand that the immigration system was not created by anyone trying to get more people into this country. The whole system is meant to keep people out, and that is what it does.

BSJ: What does the future of crowd control weapons policy and research methods look like? What international call to action will catalyze the change you envision?

RH: Crowd control is hard because it is truly both local and international. Our research methods are still nascent and retrospective. Most of what I have done is literature reviews around injuries. The Palestine project was one of the few that was an in-person field study. What I would like to do is more in-person field studies to fully capture the nuances of human experiences—not just what can be derived from medical literature. The other piece that would be ideal but require a lot of resources is a prospective study. So you set up a system for people to input when they've been injured or hurt, and somehow it's well known or common enough that people are real-time sharing data. That is hard because you are not going to show the whole world. The change I envision is progressively more protection of free speech and assembly rights, and better regulation of the manufacture, trade, and use of crowd control weapons—they cause real injuries and are overused around the world.

I think, ultimately, you have to understand that the immigration system was not created by anyone trying to get more people into this country. The whole system is meant to keep people out, and that is what it does.

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