INTRODUCTION

Value, Politics, and Knowledge in the Pharmocracy

SAN DIEGO, 2008—I was at a life science investment conference devoted to investment opportunities in India and China organized by Burrill and Co., one of the world's leading life science investment funds. Important figures in the Indian biotechnology and pharmaceutical industries were in attendance. The focus of the conference concerned innovation in Indian biomedicine: the need for it, and the lack of it. One speaker was explicit that the biggest challenge to India becoming "innovative" was that it is a democracy. According to her, this led to a "democratic lag." The contrast was drawn to China, which happily could just foist innovation upon its population.

As I listened, I considered the market contradictions that emerged in this conversation. There was talk about the importance of India making novel therapeutics rather than focusing on the prevalent model of reverse engineering generic versions of drugs already on the market, but there was no discussion of how these novelties would be priced to be affordable to the Indian population. There was talk about building global partnerships with multinational drug companies to foster innovative capabilities among Indian companies, but no explanation of the nature of a partnership with powerful entities who are your direct competitors, in a global playing field that is anything but level. And no reflection on how it was possible to talk about innovation without talking about universities. Pricing strategies, competitive

landscapes, and enabling technologies are all fundamental market issues that were being elided, in the name of an innovation that was out there, all powerful, all ready to bestow its enormous benefits upon an ignorant, suspicious, or resistant population.

It was repeatedly emphasized by the investors at the meeting that this innovation was necessary to help the rural poor.

BHOPAL, 2011—Santosh was living in the slums near Qazi Camp in Bhopal. He was fourteen when I met him. His entire life had been lived in the aftermath of December 3, 1984: the night when Bhopal became the focus of global attention because of the deadly leak of methyl isocyanate from a factory owned by the chemical company Union Carbide. I met Santosh at a meeting of gas survivors planning a *rail roko*, an agitation that would involve their lying on railway tracks to stop trains going through Bhopal, to mark the twenty-eighth anniversary of the disaster. Many of the people at the meeting were women in their eighties, who were explaining to others the bodily techniques of lying on railway tracks: how to hold hands together, how to become flaccid when the police came so that they would find it difficult to lift the protesters, how to come back to the tracks once removed, how to congregate. After the meeting, Santosh and I walked as we talked. There was a lake nearby. It was bright green, toxic sludge. Santosh said that no water that the slum dwellers drink is untainted by chemicals and poison; all the water that their animals drink is poison.

In 2010 and 2011, the Central Drugs Standard Control Organisation of India (CDSCO) conducted site inspections of the Bhopal Memorial Hospital and Research Centre to audit three clinical trials that had been conducted there from 2004 to 2008. The hospital was set up in 2004 as part of the 1989 Indian Supreme Court settlement of the 1984 Union Carbide gas tragedy in Bhopal as a tertiary care hospital that would provide free care to gas victims. Since its establishment, it has morphed into a two-tiered hospital. While it still provides free care to victims, it is also a for-profit hospital that makes money by charging private patients who are not designated as victims. The CDSCO reports created a furor, because they suggested that victims of the Bhopal gas tragedy, who had since 1984 been denied any kind of justice or rudimentary provisions for health care, had now been made experimental subjects in clinical trials in the very hospital that had been set up as part of a court settlement to care for them. Furthermore, these were global clinical trials, sponsored by American biotechnology or pharmaceutical companies.

Hence there was a sense not just of violation, but of continued violation by multinational corporate interests.

One resident of the slums told me that he does not go to the hospital anymore, because "they do trials there, and we come out dead."[1] Satinath Sarangi, who runs a free clinic in the slums for the gas victims, subsequently described this to me as a continuation of the "circle of poison" that started with chemical companies and continues to be propagated by pharmaceutical companies.[2] He reminded me that a pharmaceutical company is just another kind of chemical company. Santosh told me, as our conversation continued, that he wants to become a biologist when he grows up, because he wants to do research that can improve the health of people like his who live in the slums.

BOMBAY, 2008—I was talking to Yusuf Hamied, the chairman of Cipla, India's oldest surviving pharmaceutical company. I asked him about the impact of World Trade Organization (WTO)-imposed patent regimes on access to medicines in India. His response: "What a silly question, Professor Sunder Rajan. What we are witnessing is selective genocide."[3]

Representations of Health

It is an obvious truism that there are investments in health across social positions. These investments are variously monetary, bodily, and affective. But what health might mean, how health might be achieved, and what imaginations of social relations and relations of production underlie various conceptions of health differs depending on institutional location, social hierarchy, and power relations. Clinical trials are thought of as benefiting humanity even as they are considered scandalous; hospitals are seen as spaces of cure but also in certain situations as spaces of death; intellectual property rights are argued for as necessary for innovation even as they are decried as being genocidal.

This book seeks to understand the political economy of health in contemporary India as it operates in relation to global biomedicine. It concerns emergent biomedical regimes of experimentation on the one hand, and therapeutic production, circulation, and access on the other. These regimes are operating in political economic environments that are highly capitalized, albeit through different mechanisms, business models, and industrial forms. In turn, these capitalized political economies foreground forms of biomedicine