# Narrative 1 The Stanford–Santa Clara County Methamphetamine Task Force

Lawrence McGlynn

This is a story of an academic physician collaborating with social workers, other health professionals, and local organizers to establish solutions for a community highly affected by HIV/AIDS and methamphetamine abuse.

# **Central Moment**

I have made the walk from the Civic Center BART station to Davies Symphony Hall dozens of times, winding my way through four blocks of the homeless and hungry. One evening in 2004 as I hurried along the familiar trek, a skeleton of a man wearing an unbuttoned shirt, swimming in threadbare khakis, and engaged in an angry conversation with himself was briskly walking on a head-on collision course towards me. Ten feet of distance granted me recognition of this man's face. His empty eyes and sunken cheeks could not distort my memory. Two feet of distance provided him recognition of my face. His self-dialogue ceased and he ran away. I knew this man as a patient who had sat in my office on countless occasions, but 3 months earlier he had vanished. A graduate degree in engineering did not prevent him from becoming HIV-positive nor shield him from methamphetamine. That evening I sat in the symphony while he was running in the Tenderloin, a neighborhood of drugs, guns, and violence. That same evening I appreciated how the strings

L. McGlynn, M.S., M.D. (🖂)

Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, CA, USA e-mail: lmcglynn@stanford.edu

<sup>©</sup> Springer International Publishing Switzerland 2015 L.W. Roberts et al. (eds.), *Partnerships for Mental Health*, DOI 10.1007/978-3-319-18884-3\_1

needed the woodwinds, the percussions needed the brass, and together, beautiful music was created. I had to let go of the idea that I could fix this on my own. This man and those like him needed a full orchestra.

# Introduction

In *Madness and Civilization*, Foucault described the role leprosy played in European society. Lepers, recognized as ones to be feared, were an excluded class and existed both physically and culturally on the outer edges of the "healthy" community.

At the end of the Middle Ages, leprosy disappeared from the Western world. In the margins of the community, at the gates of cities, there stretched wastelands which sickness had ceased to haunt but had left sterile and long uninhabitable [1].

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS), not unlike leprosy, has had a physical and a cultural presence. Community-based groups founded early in the epidemic, most notably ACT UP,<sup>1</sup> expressed concerns that those living with HIV were being viewed as second-class citizens, ostensibly ignored by the government in the 1980s and avoided by the society at large. The groups encouraged challenging the status quo and sought to empower the afflicted, many of whom were themselves members of these organizations.

Today the treatment of HIV/AIDS has allowed those with the virus to feel optimistic about the future. They are living longer, returning to work, and having children. The optimism is appropriate, as the HIV viral load<sup>2</sup> can be controlled with medications. Absolute CD4+ T cell counts<sup>3</sup> in many cases can be brought into the normal range. Difficulties, however, still remain. Stigma continues in many communities and has been identified as a risk factor for depression [2]. Cognitive impairment, fatigue, and sexual dysfunction are common complaints. Some patients with these symptoms have learned to look outside allopathic medicine for relief. Eastern medicine has been used in HIV since the beginning of the epidemic, when there were no medications available, and has included acupuncture and herbal remedies. Other treatments, however, may or may not safely ameliorate patients' health. Methamphetamine use, which temporarily increases energy, concentration, mood, and sexual function, has become a path to feeling better for some HIV-positive individuals. Unfortunately it is not without significant physical, mental, or public health risks. Academic and community groups have recognized these consequences and have come together in many of the affected regions to address this barrier to the health of those living with and without HIV. The Stanford-Santa Clara County Methamphetamine Task Force adopted the mission of reducing methamphetamine use in the San Francisco Bay Area, with a particular emphasis on those living with, or at risk of acquiring, HIV.

<sup>&</sup>lt;sup>1</sup>ACT UP, the AIDS Coalition to Unleash Power, formed in New York in 1987, in part, to make available treatment for those living with HIV/AIDS.

<sup>&</sup>lt;sup>2</sup>The number of HIV RNA copies per milliliter of blood plasma, and an important parameter of immune function.

<sup>&</sup>lt;sup>3</sup>As HIV disease progresses without medications, this count will characteristically drop, leaving the individual vulnerable to opportunistic infections.

# **How Did I Get Here?**

The memories of aromatic eucalyptus trees growing in the hills of Dominican invite me to think more deeply about childhood, leading me back to wonderful recollections, but once again deceiving me and re-inciting the pain. I remember cardboard slides and lizards. I remember nuns walking in pairs on warm summer evenings. I remember picking pomegranates from our neighbor's tree. I remember the Westminster Quarters lofting out of St. Raphael's campanile, the bells subsequently chiming a designated number of times to specify the hour on the clock.

But I also remember when the ringing was accompanied by visions of stars and feelings of dizziness, nausea, and shame. I knew it was not the church bells. A simple melody could not possibly activate so many regions of my then 12-year-old brain. More than likely it was a rock, a ball, or a fist with which someone had once again bashed me in the head. Rare was the witness who would protest the attacks, or even help me up. I would clumsily rise on my own, dissociated from the laughing spectators. Those beautiful Marin County children, abundant in numbers and impeccably dressed in parochial school uniforms, were able to fire stinging barbs with amazing accuracy. The events would replay themselves in waves of anticipation on Sunday nights and oftentimes felt more painful than when they actually occurred. Children in my position would consider suicide. Others would turn to drugs for pain relief, and sex for validation. Some would become sick and die before they turned 20.

# The Virus

I struggle to say with certainty when I first became aware of the existence of HIV. Life was becoming good for me, as I was now riding on a trajectory from the bullying in Marin to newfound acceptance in San Francisco. Some new force, however, was spoiling the celebration. Young, otherwise healthy gay men in the San Francisco Bay Area were falling ill. The ones who were not bedridden might be seen walking tenuously with canes, perhaps also attempting to cover up the reddishbrown plaques of Kaposi's sarcoma.<sup>4</sup> Rummage sales would spontaneously appear on any sidewalk in the Castro,<sup>5</sup> the sad faces of the vendors reluctantly parting with boxes of well-worn Levis, leather jackets, and flashy disco albums. Local reports of

<sup>&</sup>lt;sup>4</sup>Kaposi's sarcoma is a tumor caused by the human herpes virus 8, and one of the AIDS-defining illnesses.

<sup>&</sup>lt;sup>5</sup>The Castro is a neighborhood in San Francisco with a large number of LGBT residents and businesses.

"gay cancer" would become national news. In 1982, Tom Brokaw and Robert Bazell offered one of the first network news reports on AIDS:

Scientists at the National Centers for Disease Control in Atlanta today released the results of a study, which shows that the lifestyle of some male homosexuals has triggered an epidemic of a rare form of cancer [3].

With that report and the deaths of so many San Franciscans, I appreciated the power of the word *cue*. Those events reignited my fear that the world was not a safe place, especially for a person like me. A growing suspicion of gay people, seen by some as a community of disease and culpability, was the sentiment that had now infected the mainstream. My cue was the bell ringing in my head telling me to run and hide in the safety of academia and begin a new chapter in my life. Was I leaving behind a sinking ship full of friends and fellow San Franciscans crying for help? This feeling was the burden I would carry with me into medical school.

Carlos and Carmen Vidal just had a child A lovely girl with a crooked smile Now they gotta split 'cause the Bronx ain't fit For a kid to grow up in Let's find a place they say, somewhere far away With no Blacks, no Jews and no Gays There but for the grace of God go I [4]

### Welcome to Harvard

Anatomy at Harvard Medical School was a gift. We were four students per cadaver being led by Professor Farish Jenkins, who, before each lecture, would use colored chalk to create detailed polychromatic drawings rivaling the artwork of Frank Netter.<sup>6</sup> The laboratory was full of beautiful people who willed themselves to advance medicine. Bodies with HIV, however, were not acceptable. We would see the tarred lungs of smokers and the girth of the morbidly obese, but we would not see the coalesced lesions of PML<sup>7</sup> in a person who died from AIDS.<sup>8</sup>

A series of experiences during my clinical years would sublimate my lingering sense of guilt into choices reflective of my profound desire to help those living and dying with HIV. Seeing patients with Jerome Groopman<sup>9</sup> at the Deaconess; studying

<sup>&</sup>lt;sup>6</sup>Frank H. Netter (1906–1991) was an American surgeon widely known for his medical illustrations.

<sup>&</sup>lt;sup>7</sup>PML stands for progressive multifocal leukoencephalopathy, a disease of the white matter of the brain, seen almost exclusively in those who are immunocompromised.

<sup>&</sup>lt;sup>8</sup>Medical schools may not accept an anatomical gift for a variety of reasons, including autopsy, embalming, emaciation, obesity, advanced decomposition, and a history of contagious disease, including HIV/AIDS.

<sup>&</sup>lt;sup>9</sup>Dr. Groopman has been a staff writer for *The New Yorker* since 1998 and is Chair of Medicine at Harvard Medical School, Boston, MA.

suicide in HIV/AIDS with Alexandra Beckett<sup>10</sup> at the Beth Israel; watching the expertise and sensitivity of Marshall Forstein<sup>11</sup> as he utilized the razor-sharp virtual scalpel of a psychiatrist to enter the subcortex of a 46-year-old transgendered woman with AIDS—these were the experiences that would erase any doubts I had about where I belonged in the field of medicine.

#### **New York City**

Fifteen years after the report on *NBC Nightly News* [3], I was a first-year internal medicine resident at St. Vincent's Medical Center in New York's Greenwich Village, arguably the heart of the HIV epidemic. The hospital was one of the first to address and treat HIV and AIDS in the 1980s and was featured in Tony Kushner's play *Angels in America*. By 1986, one third of the hospital's beds were filled with those with AIDS [5]. Some of those who would survive into the next year received high doses of zidovudine, the first antiretroviral medication approved for HIV, AIDS, and ARC.<sup>12</sup> By the time I stepped into the hospital in 1996, many of those with HIV/AIDS continued to require hospitalization. Central nervous system involvement was common in these patients. Performing lumbar punctures would become a routine procedure for most of us interns.

The work was physically and emotionally exhausting. Thankfully the majority of my attending physicians at St. Vincent's were compassionate, patient, and sensitive men and women. Others were not. As if possessing divining rods, those clinicians recognized my weaknesses and pimped<sup>13</sup> them out of me. At times I felt hatred and anger towards those doctors, but in the same minute I was grateful to them for working with the people I cherished so much. I learned a lot that year, but perhaps the toughest lesson was accepting the reality that even health care providers could harbor bigotry. I always looked forward to seeing one particularly smiley and cherubic MICU<sup>14</sup> nurse with a Jamaican accent. One evening I overheard her referring to a patient struggling to stay alive as "another faggot with AIDS." Her voice suddenly sounded like a mistuned violin bringing cacophony to an otherwise flawless performance. Fighting the battle with her did not seem to be a choice available to me at that moment. As an intern, I was keenly aware that a nurse could make my life wonderful or miserable, or so I told myself. In truth, fear overtook my judgment and I regret it deeply. To this day I mentally fight the battle with that nurse when I am stuck in traffic, when I have insomnia, and when I have nothing better to do. Perhaps even in the symphony I am hypervigilent for the one instrument or performer who misses a note and reduces the hues of my thoughts from countless grays to the immaturity of black and white.

<sup>&</sup>lt;sup>10</sup> Dr. Beckett is an HIV psychiatrist at Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, MA.

<sup>&</sup>lt;sup>11</sup> Dr. Forstein is an HIV psychiatrist at Cambridge Hospital Campus of Cambridge Health Alliance and Harvard Medical School, Boston, MA.

<sup>&</sup>lt;sup>12</sup> ARC is AIDS-related complex.

<sup>&</sup>lt;sup>13</sup>The meaning of the verb form of *pimp* includes the practice of asking a student questions for the purpose of testing his or her knowledge and is otherwise referred to as the Socratic method.

<sup>&</sup>lt;sup>14</sup>An MICU is a medical intensive care unit.

# **Back to Harvard**

For an internist, time with patients can seem too brief. Looking to my future in HIV/ AIDS, I wanted to continue training as an internist, but I also recognized its limitations. My longing for more time-just a little more time-was a feeling that also resonated among my dying patients and their families. I made the decision to return to Harvard and enter the psychiatric residency training program at The Cambridge Hospital.<sup>15</sup> With this opportunity I was able to continue learning internal medicine but had the gift of more time with patients as I focused on the complexities of the central nervous system and human behavior. It was the perfect fit. In my final year of training I served as chief resident of the Zinberg Clinic, The Cambridge Hospital's multidisciplinary HIV unit. Team huddles at Zinberg were ahead of their time and offered the opportunity for collaboration between staff, providers, and community members. Huddles also gave us the necessary time to garner moral and emotional support from colleagues, as many patients with AIDS were continuing to die in heartbreaking numbers in the late 1990s. I finished residency in 2000 and accepted an academic-clinical position at Stanford University after being away from the West Coast for 8 years. This opportunity came with a huge amount of happiness about returning home, but also the irrational fear that I would find a postapocalyptic San Francisco consisting of deserted streets, dead gardens, fading Victorians, and the realization that I was too late.

### Welcome to Stanford

As I transitioned from residency to my first position as a new attending physician at Stanford, I was to split my time between San Jose, California, and Stanford. Partners in AIDS Care and Education, otherwise known as the Ira Greene PACE Clinic, is a Stanford training site located in San Jose and serves as the largest public health medical facility in Santa Clara County dedicated to those living with HIV/AIDS. It is a community clinic staffed with physicians, therapists, social workers, a nutritionist, a pharmacist, nurses, and a team of benefits counselors. Many of the patients are uninsured or underinsured, over 50 % of whom are Hispanic. Most of the staff members speak Spanish and several speak Vietnamese, both languages commonly heard in the clinic and the surrounding community.

I found my office in the PACE Clinic to be ideal, blessed with a tall but narrow window facing the Santa Cruz mountains. I was scheduled to work at the PACE Clinic on Mondays, Wednesdays, and Fridays. On my first day the clinic manager brought me a catalog of acceptable office art and sterile institutional furniture. My notion of becoming ensconced in a wood-paneled space with a couch, swivel chair,

<sup>&</sup>lt;sup>15</sup>The Cambridge Hospital is now referred to as the Cambridge Hospital Campus of Cambridge Health Alliance.

and oil paintings of Dutch peasants and hunting dogs was not to be realized. Instead, I opted for a large leatherette La-Z-Boy knockoff and two Diego Rivera posters in frosted metal frames. I could not have been happier. The first poster, *Baile en Tehuantepec* ("Dance in Tehuantepec"), shows the working class of Mexico happily dancing, drenched in a sea of bright colors. The second poster, *Cargador de flores* ("The Flower Carrier"), portrays a woman standing above a kneeling man, hands reaching towards him as he is attempting to carry a large bushel of flowers. Would I be the woman helping my patient carry his burden, or the man inviting my patient to pile her troubles on my back? Maybe my roles would change.

On Tuesdays and Thursdays I would spend my days at Stanford in the Positive Care Clinic, a smaller facility serving insured HIV-positive patients and located in a one-story bungalow across from the Stanford Hospital. My practice at both clinics filled up quickly, but within a matter of months the demand for appointments was slowing down. Why was my quiet, distant yet reflective approach not working? Some accused me of being judgmental in my silence. This interpretation could not have been further from the truth. Behind my icy façade, I was cheering these survivors and crying for their losses. I wanted to tell them I loved them and thank them for not giving up. I wanted to tell them that they reminded me of people I knew long ago. My positive countertransference was raging, but so was their negative transference. I learned that I had to be real and soften my boundaries. Silence became dialogue. Handshakes became hugs. Nods became laughter. I used as much tissue as the patients. Business turned around and my biggest challenge has been ending my sessions on time.

#### p = mv

Momentum is the product of mass and velocity. How does one calculate the mass of suffering? How can one measure the velocity of an epidemic that began decades earlier and continued to take lives? This linear, conserved quantity carried the dying from the 1980s and 1990s to the 2000s. Although the life-saving cocktail of medications was now becoming more widely available, the momentum had already been established and was too powerful for many of the war weary to successfully battle.

I had seen death as a medical student and as a resident, and it was never easy. But now I was a Stanford attending physician and these were my patients. There was the young man rejected by his family who would come in, close his eyes, and sleep for his allotted half hour. I convinced myself that this treatment was therapeutic, even if only to serve as a chance for him to escape from his reality. Perhaps it was therapeutic for me too. I would not take my eyes off of him, sharing his peace, and quietly hoping he would never die. Within 5 months he lost the battle. There was the woman with four children, at most five teeth in her mouth, and an unforgettable beauty and sweetness to her face that the deep creases could not hide. Her addiction to methamphetamine gave her enough energy and paranoia to distract her from the painful knowledge that the system now had custody of her children. She lived for 2 years after I met her. And then there was the young man who had lymphoma in his brain and a devoted mother by his side. Over the course of 6 months he would gradually lose his ability to recognize me. Our relationship went from office visits to home visits, and culminated with my delivering the eulogy at his funeral. Memorials and services were the norm, and each brought with it a new set of loved ones trying to say goodbye too soon to the sensitive young man or brave young woman they had just lost. For some attendees, however, closure was beyond their reach. Within each church, hall, or synagogue one would notice that lone person sitting in the back corner, shoulders hunched with angst, and head bowed heavily with regret, never again having the opportunity to apologize for rejecting the deceased.

# Tina

As the momentum was slowing in 2003, evidenced in part by fewer obituaries in the *Bay Area Reporter*,<sup>16</sup> the medical community would deservedly celebrate the research accomplished and the antiretroviral cocktails now available. Many patients did not need to see their primary care providers every week or month, for now they could get back to their lives and decrease the frequency of their laboratory and clinic visits. My practice, however, became even busier. People who had been living with impending death for so many years now needed to face their own sense of guilt, loss, and symptoms of posttraumatic stress. These feelings, at times referred to as the Lazarus Syndrome, have been likened to the suffering of Holocaust survivors, people who watched their families and friends die and fully expected to follow, but instead were at once freed to a changed and lonely world [6]. A new picture was emerging, one which would begin to define the next chapter of my life at Stanford. The life-saving medications were reducing the number of cases of dementia, but the prevalence of the milder forms of cognitive dysfunction was increasing. Some were also suffering from lipodystrophy,<sup>17</sup> leaving the affected feeling demoralized and exposed. Hypogonadism was not uncommon among the male patients, characterized by sexual dysfunction and depressed mood. Medications such as exogenous testosterone could help some with this condition. Many, however, were turning to "dealers" for relief. Patients found a treatment that gave them energy, increased their libido, improved their attention and concentration, and allowed them to feel pleasure, even if for a limited period of time. This choice, however, did not come without a cost.

During the period of 2003–2005, the use of methamphetamine was becoming more obvious at the PACE Clinic and, to a lesser extent, at the Positive Care Clinic. The drug was relatively inexpensive; however, many would obtain their supply in

<sup>&</sup>lt;sup>16</sup>The *Bay Area Reporter* is a weekly newspaper in San Francisco, California, for the LGBT community. The obituary section would recount the lives of many of those who died from AIDS or AIDS-related causes.

<sup>&</sup>lt;sup>17</sup>Lipodystrophy is a disfiguring condition characterized by lipoatrophy of the face and limbs and lipohypertrophy of the abdomen and dorsocervical region and is caused in part by certain older antiretroviral medications.

exchange for sex. For others, 20 dollars was the price for a "bag" containing approximately four "hits," enough to keep some people high for several days. Our patients would present themselves to the clinic desperately wanting to sleep or escape the psychosis. Weight loss and poor dentition were not uncommon. A large number had lost their homes, jobs, and relationships, and many were facing criminal charges for drug possession or theft. I was amazed that these patients would show up for their appointments at all. Still, it was almost impossible to predict the demeanor and appearance of the methamphetamine-intoxicated patient. Some patients seemed calm and focused. The "tweaker" stereotype, however, accurately described many who were using the drug chronically. I would see psychomotor agitation as I attempted to make sense of their pressured speech, much of which was nothing more than verbal responses to internal stimuli. Their paranoid delusions were complex dramas involving the FBI, hidden cameras, spying neighbors, and perhaps their nosey psychiatrist secretly monitoring their behavior. Some had delusional parasitosis, convinced that their bodies were covered in bugs. Open sores on their faces and arms were common and evidence to them that the "bugs" were eating their flesh. The PACE Clinic has a small room with a microscope that the infectious disease doctors use to examine specimens. This microscope was now being used more frequently to look at the pieces of lint or clothing fibers that the patients believed were parasitic creatures devouring their skin.

Some patients would stop taking their HIV medications when they were on a "run."<sup>18</sup> Others would continue to take their medications but would also take other drugs, including gamma hydroxybutyrate ("GHB" or "G"), ketamine ("K"), marijuana, benzodiazepines, and MDMA (3,4-methylenedioxy-*N*-methylamphetamine, also known as "ecstasy," "E," or "X"). Because methamphetamine can cause erectile dysfunction, patients would also use phosphodiesterase type 5 inhibitors (including sildenafil, tadalafil, and vardenafil) and amyl (or butyl) nitrate ("poppers"), the combination of which can be lethal.

"Party and play" (PNP) was frequently the venue in which people, MSM<sup>19</sup> in particular, would use methamphetamine. A typical PNP meeting would include two or more men using methamphetamine (and likely other drugs) and having sex. Because methamphetamine affects judgment, patients were presenting with evidence of engaging in unprotected sex, including higher rates of syphilis, gonorrhea, chlamydia, and Hepatitis C. New HIV infections were increasingly due to PNP methamphetamine use. In fact, almost one in three MSM who tested HIV-positive in 2004 said they had used crystal methamphetamine, representing nearly triple the rate of those MSM who had tested positive for HIV in 2001 [7]. As researchers were learning more about methamphetamine, the picture became increasingly alarming. Literature was confirming what we were learning from our patients: the drug not

<sup>&</sup>lt;sup>18</sup> A "run" is a period of time, generally multiple consecutive days, in which the individual will use methamphetamine without abstinence.

<sup>&</sup>lt;sup>19</sup>MSM refers to men who have sex with men.

only stimulated arousal but also decreased sexual inhibition and led to the seeking of multiple sex partners and riskier sexual practices, including unprotected intercourse [8]. Those who did become infected with HIV were at an increased risk of depression and fatigue [9], symptoms that may have led patients to seek methamphetamine to feel better. Methamphetamine withdrawal could then lead to further depression and fatigue, and the user might then have sought more methamphetamine to combat those symptoms. Researchers during this period were also learning that long-term, heavy use of methamphetamine was damaging the neuronal brain cells already injured by HIV, leading to cognitive impairments, chronically altered mood states, and persisting psychosis [10].

Although the effects of methamphetamine were being discussed in our clinic's case conferences as if it were a new player on the scene, the drug had been around for a long time. The first known synthesis of methamphetamine from ephedrine was in Japan in 1893, following the formulation of amphetamine in Germany in 1887 [11]. During World War II, branches of the German military used methamphetamine extensively. Eventually physicians in America would recommend amphetamines for weight loss, depression, fatigue, and hyperactive disorders. Cheaper forms of methamphetamine, synthesized in part from 1-phenyl-2-propanone.<sup>20</sup> would become available decades later and called "crank."<sup>21</sup> Production of crank decreased in the 1990s. New methods of synthesis, however, created a more potent drug in larger quantities. This product would be called Ice, Tina, Crystal Meth, or just meth. It could be smoked, slammed,<sup>22</sup> snorted,<sup>23</sup> eaten, or "booty bumped,"<sup>24</sup> and synthesized in garages in small quantities or in remote facilities in larger quantities. Pseudoephedrine, a principal component in the production of meth, was being bought up in increasingly larger quantities from pharmacies [11]. We wondered if the effects we were seeing in the PACE and Stanford Positive Care clinics was limited to our region or if this pattern was nationwide.

Reports from the Arrestee Drug Abuse Monitoring Program showed that three California counties (Sacramento, San Diego, and Santa Clara) consistently ranked among the top five sites nationwide for the percentage of arrestees testing positive for methamphetamine at that time. In 2003, 36.9 % of San Jose adult male arrestees tested positive for methamphetamine at the time of booking [12]. Those male arrestees who admitted to using methamphetamine reported an average of 8.1 days per month of use of the drug [13]. In 2003, amphetamine/methamphetamine accounted for 47 % of adult admission to residential or outpatient treatment facilities in Santa Clara County [12].

 $<sup>^{20}</sup>$  Also known as P2P and phenylacetone, 1-phenyl-2-propanone is an organic compound with the chemical formula  $C_6H_3CH_2CCH_3$ .

<sup>&</sup>lt;sup>21</sup> *Crank* is a term derived from the "crankcase," reportedly where dealers using motorcycles would hide the drug.

<sup>&</sup>lt;sup>22</sup> Slammed refers to intravenous administration.

<sup>&</sup>lt;sup>23</sup> Snorted refers to nasal insufflation.

<sup>&</sup>lt;sup>24</sup> Booty bumped refers to injection into the rectum.

What we were seeing in our clinics reflected the high rate of methamphetamine use in Santa Clara County. New infections could be attributed to meth use, not only in young MSM but also in older men who had practiced safe sex since the beginning

"For me it was most difficult to see those patients who had survived so much, including discrimination, bullying, rejection, unemployment, and the death of loved ones, now turning to meth. These vulnerable souls were hurting themselves, perhaps recreating familiar situations and feelings." of the epidemic and now had been introduced to Tina. For me it was most difficult to see those patients who had survived so much, including discrimination, bullying, rejection, unemployment, and the death of loved ones, now turning to meth. These vulnerable souls were hurting themselves, perhaps recreating familiar situations and feelings.

Mood disorders were becoming more difficult to treat in those using meth, and some of our patients would ultimately commit suicide. Psychosis resulted, in part, from the surge of dopamine due to the methamphetamine. Antipsychotics were unable to block these dopaminergic tidal waves flooding my patients' synapses. Best practices for treating methamphetamine abuse in the HIV population were still in their infancy. Approaches that held some promise included cognitive behavioral therapy and contingency management.<sup>25</sup> Medications, including some antidepressants and stimulants, were being investigated for their efficacy in reducing the urge to use methamphetamine. We were building a fairly good understanding of methamphetamine, including its effects on dopamine and the nucleus accumbens,<sup>26</sup> and yet we were feeling as vulnerable as our patients. Physicians were demanding evidence-based treatments. We wanted to see our patients thriving. We, however, were seeing our community becoming a public health nightmare.

## **Joining Forces**

"Dr. McGlynn, can you see the patient in Room 1?"

As the only psychiatrist for the PACE and Stanford Positive Care clinics, I was finding work becoming overwhelming, but my passion never wavered. The internists and infectious disease specialists were trained to focus on CD4 counts, HIV viral loads, and the latest antiretroviral medications, so they depended on me to help manage the emotional, behavioral, and cognitive changes they were seeing in their patients. Cases of sexually transmitted diseases and medication nonadherence continued increasing. Physical ailments normally seen in older adults were now affecting younger patients. When the body is in meth-induced sympathetic overdrive, the myocardium can only tolerate so much strain. As a result, ventricular enlargement and heart failure were being seen more and more in meth users of all

<sup>&</sup>lt;sup>25</sup>Contingency management offers reward incentives for negative toxicology screens.

<sup>&</sup>lt;sup>26</sup>The nucleus accumbens is a region of the basal forebrain involved in pleasure.

ages, leading to permanent disability and loss of a sense of purpose. Chronic dehydration was leading to renal dysfunction and exhaustion. Although science was conquering HIV, meth was conquering the community. I was feeling completely impotent. My patients kept coming back to me asking for help, and yet it seemed that I—we—had nothing to offer.

In 2004 during a staff meeting, I vented my frustration and the need for more assistance. Our clinics did not have enough money to hire an additional psychiatrist. My coworkers wanted to help, so we decided to start meeting weekly to discuss meth and come up with ideas on how to understand the changing community and what we could do for them. We called ourselves The Crystal Meth Task Force, and the group included two social workers, a nutritionist, our pharmacist specialist, and me. After 2 months we were down to four members. The nutritionist dropped out after another month, stating, "I don't feel like I'm useful here." The remaining social worker, Niki Stalder-Skarmoutsos, a feisty and energetic young woman, and I moved forward on our own. I have heard Mozart's String Duo No. 1 for Violin and Viola in G Major and knew that amazing music could come from just two instruments. We, however, had no money except for in-kind funding from the PACE Clinic and realized the only way we were going to make something of our task force was to get our hands on real money.

Pharmaceutical companies manufacturing antiretroviral medications have made a concerted effort to help the communities they serve. The first grant we applied for was from one of the larger companies, and we were awarded \$3,000. This seed was just what we needed to get us motivated to seek out more funding. Santa Clara County Department of Alcohol and Drug Services (DADS) announced a Request for Proposals, seeking applications from county-based agencies targeting substance use in the region. Between the two members of the Crystal Meth Task Force, we wrote up a thorough proposal.

A crucial element of our application was a solid needs assessment of the county's LGBT and HIV communities. Unfortunately this was lacking, but we pushed forward without it. We referenced other groups targeting methamphetamine use in San Francisco, Montana, San Diego, and Los Angeles. At that time, multimedia campaigns were hot, so we decided to use that approach as our platform. We cited the Montana Meth Project, for example, which had a very moving campaign focusing on youth at risk. We referenced San Francisco's project targeting the use of meth in the gay community and their "Dump Tina" campaign. We quoted morbidity and mortality statistics wherever we could find them. We provided case examples and how they affected our clinic and community. DADS found it compelling enough to award us the grant. We now had \$225,000 to use over the next 3 years. Our first task was to build up our group. We reached out to the corrections (Santa Clara County Main and Elmwood Jails), The Health Trust (community agency including social workers and nurse case managers working with the HIV population), AIDS Legal Services, and private HIV providers. We also invited interested consumers. We understood that the local men's bathhouse was experiencing problems with meth use in its facility, so we invited its health educator. In the first meeting we filled up the

Organization	Number of participants	Credentials (if Applicable)	Interest
Stanford University	5	MD, PsyD candidates	Public health, academic research
Santa Clara Valley Medical Center	3	MD, MSW	Public health
Health Legal Services of Santa Clara County	1–2	JD	Public health, legal services, criminal implications
The Health Trust	5	MSW	Public health, community services
Santa Clara County Public Health Department	2	МРН	Public health, HIV testing
The Watergarden	1	Health Educator	Community impact
Santa Clara County Department of Corrections	1	MD	Criminal implications, public health
Department of Alcohol and Drug Services	3	PhD, MS	Substance abuse services
Community members	15		Public and community health, substance abuse services

Table 1.1 Stanford–Santa Clara County Task Force Members

room with almost 40 individuals. The meeting was exciting and energized. We had physicians (including one of the internists from the Main Jail), lawyers, social workers, nurses, pharmacists, and community members (Table 1.1). People wanted to be heard. Our initial goals were to create a public awareness campaign for Santa Clara County. We hired a creative consultant and came up with our first logo, which had the theme "Stop, Don't Stop!" capturing the ambivalence of the methamphetamine user. At some point in the midst of presentations, gay pride festivals, and AIDS walks, members voted on a logo and website name change to StopDontStart.org, because our members felt the "don't stop" portion of our first logo sent a mixed message. We created brochures and T-shirts and appeared on local television shows. At the same time, we understood that part of our mission was to educate providers and the community. We developed educational programs and workshops, which we delivered to many organizations, including Planned Parenthood, corrections, public schools, pharmacies, health care agencies, and community centers where those living with HIV gathered. The Santa Clara County Board of Realtors invited us to present at their annual convention, because many landlords were finding their properties being used for the manufacturing of methamphetamine. In order to centralize our programs, we created a website. Two portals were made available, one for providers and the other for community members. The providers' portal offered links and referral information. The consumer/community member portal provided education about methamphetamine and links to find treatment in Santa Clara County.

The newly renamed Stanford–Santa Clara County Methamphetamine Task Force was busy. During our first year of funding, I gave a presentation for a group in San

Bernardino that was also facing huge problems with meth. One of the physician attendees challenged me, saying, "How can you speak here as an expert when you haven't done any meth research yourself?" After my bruises healed, I realized there was a lot of frustration out there and also recognized that we needed to start conducting our own research to understand our particular community. Maggie Chartier, a student in the joint doctoral psychology program between Stanford University School of Medicine and Palo Alto University, had a background in public health and an interest in methamphetamine abuse. She joined our task force and spearheaded a qualitative and quantitative exploration into the community of HIV-positive MSM using methamphetamine. We wanted to understand the motivations for initiation, abstinence, and relapse. We ran focus groups of methamphetamine users and dealers (some participants fulfilled both roles). We began to understand the mindset of our population and were able to share it with others through publications and conference presentations. I was most struck by one of the qualitative findings-that our participants had strong values but that methamphetamine would cause them to compromise those values. I continue to use this theme in therapy with our patients.

Maggie completed her doctoral dissertation based on the research and successfully encouraged other graduate students in the program to continue her work. Our group also explored other factors in methamphetamine abuse, such as the role of hypogonadism.

Having the funding from DADS gave our task force a certain amount of cachet as we applied for other grants, most of which we were successful in obtaining, although none have exceeded \$25,000. Nevertheless, we remain grateful for the funding, which allowed us to continue our work. Our latest research was a joint project with the Stanford School of Medicine Division of Infectious Diseases and Geographic Medicine. In this project, we wanted to focus on the acceptability of HIV testing for those at high risk of becoming infected. Most of our previous work focused on the MSM community. In our new endeavor, we wanted to gather data on women and Latino men in San Jose, California. We approached two of the busiest residential treatment facilities in Santa Clara County, Vida Nueva (for Latino men) and Mariposa Lodge (for women), and our project was warmly received. We prepared interactive HIV/Meth educational programs in English and Spanish for the residents. I would present the medical portion, while one of our community members would relate his powerful life story. We conducted pre- and post-testing knowledge assessments that revealed the efficacy of our teaching approach. The findings, however, were sobering. Although the vast majority of the residential clients were being treated for methamphetamine addiction and at high risk for HIV infection, they were not getting tested for the virus. These results has led our task force into new directions, establishing a more solid relationship with the Santa Clara County Department of Public Health, but continuing with our original mission of reducing methamphetamine use and new HIV infections in our region. Sublimation has once again stepped into my life, transforming my feelings of helplessness as a provider to becoming an active community physician.

# **Outcomes and Effectiveness**

Grantors typically, and understandably, request periodic progress reports. Budgets are tedious but those data are tangible and, for the most part, readily available for these reports. Well-defined mission statements, goals, and accomplishments are also easily generated. The task force has received very positive feedback from those who participated in educational programs, focus groups, and community events. But what has been its overall impact? We continue to meet our goals of proposed deliverables. Carefully prepared programs are presented to providers and the community. Our research has been published in peer-reviewed journals and presented at domestic and international conferences. But what about the community impact? The Montana Meth Project (MPP) is the largest task force of its kind and was rated the third most effective philanthropy in Barron's 2010 rankings. Measures of MPP's efficacy, however, have been challenged, although most agree that it has been successful in bringing the dangers of methamphetamine to the consciousness of many regions, both urban and rural. What remains unclear is the public health impact of the MPP's activities. These data represent our challenge as well. There continue to be methamphetamine-related arrests and emergency department presentations in Santa Clara County. Data from 2000 to 2008 present a mixed picture, but methamphetamine continues to dominate substance abuse admissions in Santa Clara County.

The number of new HIV infections has remained constant over the past several years and is largely driven by MSM. A substantial number of newly diagnosed, HIV-positive MSM patients presenting to the PACE Clinic identify sex under the influence of methamphetamine as their main risk factor for acquiring the virus.

Therefore, despite the efforts of the task force, methamphetamine continues to pose a significant public health risk to our community. One cannot help but conclude that the task force's efforts have failed to demonstrate a significant impact on the basis of the numbers presented earlier. Other measures, however, have sustained our energy. Requests for repeat performances and presentations continue to come from schools, community agencies, and clinics locally and from other regions. Based on findings from pre- and post-test evaluations, new medical providers are not receiving sufficient training in medical schools to deal with methamphetamine use disorders. Many are not aware of the connection between methamphetamine and HIV. Community members are coming to our presentations and learning how to understand and find help for friends and family members struggling with methamphetamine addiction. Local high schools have looked to the task force to provide educational programs for youth who may be at risk for using the drug. So although the data indicate an ongoing problem of methamphetamine in the community, those who are on the frontlines as providers and community members continue to view the task force as necessary and relevant. These less tangible data may be what ultimately define our effectiveness, as well as provide the motivation to continue the work that we do.

# Conclusion

Transference, a concept notably explored by Sigmund Freud, may be defined as "the redirection of feelings and desires and especially of those unconsciously retained from childhood" [14]. Choosing friends, lovers, and careers may be influenced by positive and negative experiences from childhood, and transference may facilitate this process. As a psychiatrist, I experience very positive feelings when I am sitting with a vulnerable soul who happens to have HIV and feels trapped in the cycle of methamphetamine. All of my patients have HIV and have been hurt in some way at some time; receiving their HIV diagnosis may be just one injury in a long list of others, and they may view the use of meth simply as a way to relieve their pain, even if for a day or two. I want to wrap my arms around these patients and protect them. I want to tell them that they are safe with me and that I will do my best to help them. I want to tell them everything will be okay. Perhaps I am telling myself the same thing as I think about their mortality.

Foucault's writings on leprosy in the Middle Ages could easily apply to HIV/ AIDS in the twentieth and twenty-first centuries. We have seen an illness become known for its medical and cultural implications, while the infected seemingly exist on the fringes of "normal" society. Methamphetamine-use disorders complicate HIV disease and, in the eyes of Foucault, would push its victims even further into the margins of society.

Methamphetamine continues to be produced in large quantities and marketed to the most vulnerable in society, including those with HIV. The Combat Meth Act of 2005, which legislated tougher regulations of products containing ephedrine, pseudoephedrine, and phenylpropanolamine, brought additional awareness about the problem of methamphetamine abuse in the United States. We are reminded that the drug's path of destruction affects us all—from having to produce identification when buying cold products in pharmacies, to seeing our communities experience increasing levels of crime, disease, homelessness, and suffering.

Methamphetamine is a complex medical, public health, and legal challenge that has been present for decades. I believe the role and mission of organizations like the Stanford–Santa Clara County Methamphetamine Task Force will continue to remain relevant in a community affected by methamphetamine and HIV/AIDS. As Foucault reminds us, diseases with medical and cultural implications will leave behind changes that society may not have anticipated. The union of academic and community organizations are essential in the understanding of, and approach to, treating complex

"...these organizations provide the means for an individual to transform one's frustration and helplessness into action by mobilizing a group with a shared mission."

diseases. These marriages are especially important when addressing the societal implications, including stigma, behavior, law, and public health. Finally, speaking from my own experience, these organizations provide the means for an individual to transform one's frustration and helplessness into action by mobilizing a group with a shared mission. "Physician, heal thyself."<sup>27</sup>

<sup>&</sup>lt;sup>27</sup>Luke 4:23.

# References

- 1. Foucault M. Madness and civilization: a history of insanity in the Age of Reason. s.l. New York: Pantheon Books; 1964.
- Grov C, Golub SA, Parsons JT, Brennan M, Karpiak SE. Loneliness and HIV-related stigma explain depression among older HIV-positive adults. AIDS Care. 2010;22:630–9.
- Bazell R (Reporter), Brokaw T (Anchor). Early studies on AIDS. NBC Nightly News, June 17, 1982. Available at https://archives.nbclearn.com/portal/site/k-12/browse/?cuecard=916. Last accessed 23 Feb 2015.
- 4. Darnell A, Nance K (Writers), Machine (Performer). There but for the grace of God go I. New York: RCA Victor, 1979.
- Boynton A. Remembering St. Vincent's. *The New Yorker*, May 17, 2013. Available at http:// www.newyorker.com/culture/culture-desk/remembering-st-vincents. Last accessed 23 Feb 2015.
- France D. Holding AIDS at bay, only to face 'Lazarus Syndrome.' *The New York Times*, October 6, 1998. Available at http://www.nytimes.com/1998/10/06/science/holding-aids-atbay-only-to-face-lazarus-syndrome.html. Last accessed 23 Feb 2015.
- 7. O'Brien Q. Methamphetamine use by HIV-positive men. National HIV Prevention Conference. Atlanta: Centers for Disease Control, 2005.
- Colfax G, Coates TJ, Husnik MJ, Huang Y, Buchbinder S, Koblin B, et al. Longitudinal patterns of methamphetamine, popper (amyl nitrite), and cocaine use and high-risk sexual behavior among a cohort of San Francisco men who have sex with men. J Urban Health. 2005;82: i62–70.
- Markowitz JC, Kocsis JH, Fishman B, Spielman LA, Jacobsberg LB, Frances AJ. Treatment of depressive symptoms in human immunodeficiency virus-positive patients. Arch Gen Psy chiatry. 1998;55:452–7.
- 10. Chang L, Ernst T, Speck O, Grob CS. Additive effects of HIV and chronic methamphetamine use on brain metabolite abnormalities. Am J Psychiatry. 2005;162:361–9.
- Yudko E, Murray-Bridges L, Watson-Hauanio S. History of methamphetamine. In: Yudko E, Hall HV, McPherson SB, editors. Methamphetamine use: clinical and forensic aspects. Boca Raton, FL: CRC; 2003. p. 4–10.
- 12. Department of Alcohol and Drug Services. Treatment admissions and discharges: adult system of care, FY 2003. San Jose, CA: Santa Clara County; 2003.
- National Institute of Justice. Arrestee Drug Abuse Monitoring Program. Washington DC, National Institute of Justice, 2003.
- 14. Webster's New Collegiate Dictionary 8th Edition. 1976.