

**The Impact of 9/11
on
New York City's
Substance Abuse Treatment
Programs:
A Study of Patients and Administrators**

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October 2003

FOREWORD AND ACKNOWLEDGMENTS

This retrospective study on the impact of the September 11, 2001, terrorist attacks (hereafter referred to as 9/11) on New York City's drug abuse treatment programs and their patients was conducted by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) during the period from December 2002 to April 2003. The study was funded by MasiMax Resources, Inc., through its contract from the National Institute on Drug Abuse (NIDA) entitled, "State and Local Epidemiology and Information Development," Contract No. DA-1-5514.

NIDA and the Substance Abuse and Mental Health Services Administration (SAMHSA) provided funds to MasiMax Resources for conducting this study.

The authors wish to acknowledge the financial support and technical guidance provided by MasiMax Resources, NIDA, and SAMHSA. Special thanks are extended to the 16 substance abuse treatment program administrators and the 75 program clients for their time and assistance in making this study possible and for providing valuable insights into the impact of the terrorist attacks on their lives and programs.

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EXECUTIVE SUMMARY

A retrospective study of the impact of the 9/11 terrorist attacks on New York City's drug abuse treatment programs and their patients was conducted by the New York State Office of Alcoholism and Substance Abuse Services during the period from December 2002 to April 2003. The primary objectives were to identify problems encountered and lessons learned from the terrorist attacks so that treatment agencies are more prepared to respond to future crises should they occur. The following summary highlights the study's findings based on interviews with 75 patients and 16 administrators who participated from 15 treatment programs, randomly selected to represent the New York City methadone, drug-free outpatient, and residential programs. In addition, the study included secondary analysis of treatment admission data collected prior to and immediately after the 9/11 attacks. The summary also underscores the wide-reaching implications of these findings. The page numbers below specify where more detailed information regarding findings can be found in the text.

Problems Experienced by Treatment Programs

All of the treatment programs in the study experienced problems related to 9/11:

- Of the 15 sampled treatment programs, 12 remained open on 9/11 and the days following. The three programs that closed were drug-free outpatient programs. Six of the seven methadone treatment programs remained open later than usual to accommodate patients who had travel problems and "guest" patients who could not reach their programs (see page 19).
- The major problems that treatment programs faced after the events of 9/11 were problems relating to their staff (13 of 15 programs), telephone communication (7 of 15), and financial matters (5 of 15) (page 20).
- According to the program administrators, the major issues concerning their patients related to mental health status (12 of 15 programs), relapse (11 of 15), and retention in treatment (5 of 15). Four of the six drug-free outpatient programs that rely on third-party payment and reimbursement were affected by a decline in patient census (pages 23; 25).

The findings from the study show the vulnerabilities of drug treatment modalities at a time of crisis. Some of the weakness that rippled through the treatment systems may be attributed to staff members who were ill-prepared to deal with the emergency and telephone communication that frequently failed. Drug-free outpatient treatment programs were affected more than other modalities by the problems, closures, decreases in census, and ensuing financial problems in the immediate aftermath.

Special Problems Regarding Methadone Maintenance Treatment Programs

The special problems faced by the methadone programs included the following:

- Given the risks involved in dispensing methadone, the dilemmas faced by methadone program administrators on 9/11 were (1) accommodating guest patients when it was difficult to verify dosage because of telephone outages and (2) making decisions about take-home medication for

both regular patients and guests. Obstacles to travel were widespread throughout the city (page 26).

- Programs differed in their policies to dispense methadone when dosage levels could not be confirmed, and in granting take-home privileges. There was no uniform policy regarding the dispensing of methadone (pages 26–28).

The findings show the necessity for well-thought-out and widely disseminated guidelines for dispensing methadone—a very potent drug—in times of emergency when dosage confirmation is not always possible and when daily travel to programs may be exceedingly difficult. Most administrators had a difficult time balancing patients’ critical need for methadone and assuring that the drug was administered appropriately. It was reported that one-third of methadone patients in some programs regularly use illicit substances, and methadone diversion also remains a problem in various parts of the city.

Drug Use Among Patients

The 9/11 attacks affected many patients in terms of drug use, recovery, and mental health. There were many incidents of relapse and escalated drug use on and after 9/11, which may or may not have been related to the attacks.

- One-half of the patients in drug-free outpatient programs and 37 percent of the methadone patients reported using illicit drugs on and after 9/11. Some administrators of methadone maintenance programs reported that relatively high percentages of patients had used illicit drugs prior to 9/11. Men reported higher rates of relapse than women for all treatment modalities; however, women were more likely to report being emotionally affected by the attack on and following 9/11 and were more likely to be prescribed medication (see pages 29; 24–25; 36; 48). Those experiencing Post Traumatic Stress Disorder (PTSD) were also more likely to use drugs.
- Twenty-two (63 percent) of the patients interviewed in methadone treatment were prescribed other drugs for anxiety, sleeping problems, and other mental health issues (page 48).
- The patients who relapsed (i.e., used drugs in addition to methadone) while in methadone maintenance programs reported being less significantly affected by the attacks than those in other types of programs, 40 versus 11 percent (page 36).
- Methadone dosages were increased for eight patients who had experienced relapse, had considered using drugs, or had increased anxiety and/or fear due to the attack. Six of those who had their dosage increased were men, and five had relapsed. They were not, however, necessarily the individuals who reported being most emotionally affected by 9/11 (page 31).
- More than one-half (55 percent) of the patients attributed their relapses to events on and following 9/11. Others (45 percent) indicated relapse was part of a general pattern or that there were other significant stressors in their lives at the time, such as being homeless, living in a shelter, or being diagnosed positive for the human immunodeficiency virus (HIV) (pages 29; 33).

- Men who were in treatment programs on 9/11 were more likely to relapse than women, 67 versus 11 percent (page 28).
- Thirty percent ($n=10$) of those who did not relapse attributed their resolve to remain clean to focusing on their families. Nine of these were women with children. The depth of the tragedy forced many to confront mortality and reassess the direction of their lives. Relapse may have been mediated by access to treatment programs and a focus on family, particularly children (page 30).
- A sizable minority of patients (28 percent) reported an increase in alcohol use on 9/11 and in the days and weeks afterwards. Sometimes this was in conjunction with drug use (page 33).

Since crises affect drug users in different ways, it is critical for staff to be able to identify and reassess those at higher risk for relapse (men, individuals in drug-free outpatient programs, and individuals with a history of PTSD), while remaining aware that all patients may be at risk for relapse. Drug and alcohol use, mental health, and treatment plans for all patients should be reassessed following a crisis, and supportive services and other appropriate interventions should be provided.

Mental Health of Patients

There was a range of responses to questions about mental health, with some patients being at higher risk for severe reactions and trauma than others.

- Seventy-two percent of the patients felt personally affected by the attacks. The depth of the impact was associated with their proximity to the Towers, personal experience of loss, history of previous trauma, and identification with victims. Forty-one percent indicated that they felt somewhat affected by 9/11, and 31 percent reported being extremely affected. Patients who felt they survived the attacks and/or witnessed the destruction were more likely to display signs and symptoms of emotional disturbance, guilt, and trauma, and were later diagnosed as suffering from PTSD. Two patients reported having mental breakdowns, 10 suffered from PTSD, and 5 experienced panic attacks. A few individuals had experienced flashbacks related to Vietnam, rape, and, in one case, a murder committed in self-defense (pages 36; 43).
- Women were more likely to report being extremely affected by the attacks—38 percent compared with 28 percent of the men. Women were also more likely to be prescribed medication. Ninety-two percent of the women who reported being extremely affected were taking prescription medication (pages 36; 48).
- More than one-half (40) of the 75 patients reported being prescribed drugs for an array of symptoms (e.g., depression, anxiety, and insomnia). Some administrators were very concerned about patients being prescribed addictive medications such as benzodiazepines (pages 48; 25).
- Although symptoms of depression and PTSD among many respondents may be on the decline, continued alerts and threats associated with terrorism and disseminated by the media contributed to chronic stress, lingering anxiety, and possibly relapse (pages 40–42).

- Although counseling sessions became more common and frequent following 9/11, not all patients' counseling needs were fully met. Four individuals indicated they had not had an opportunity to discuss their fears and problems following the attacks on 9/11 and did not receive the counseling needed (pages 50–52).

Since crises affect the mental health of drug users in different ways, it is critical for staff to be able to identify and reassess those at higher risk for mental distress (women, individuals in residential programs, and those with a history of mental illness or personal loss). All drug abuse patients must be considered at risk for mental health problems even if they did not show mental health symptoms before 9/11. The lingering effects of 9/11 resulted in chronic stress for many individuals. Drug treatment programs need to reassess the physical and psychological well-being of all patients following a crisis and be in a position to provide supportive services and other appropriate interventions that address both the immediate and lingering impact of crises. In particular:

- Patients need greater access to bereavement counseling.
- Individuals suffering from PTSD need greater access to therapeutic interventions that do not solely rely on prescription medications.
- Patients in residential programs need greater access to either onsite services or referrals to bereavement and/or PTSD services (pages 52–53).

Availability of Support Services from External Sources

- Support services to assist treatment programs after 9/11 were available from OASAS (cited by 13 of the 15 programs), emergency Medicaid (9 of 15), and the federally supported mental health program, Project Liberty (5 of 15) (page 53).
- OASAS provided financial assistance, guidance to methadone programs, and literature on trauma and recovery. Emergency Medicaid assistance was given to drug abusers to pay for treatment without delay and a minimum of processing for at least 6 months. Project Liberty social workers and psychologists provided disaster, trauma, and critical incident counseling and training (page 54–56).
- An analysis of treatment admissions data showed a statistically significant increase in Medicaid funding for New York City patients, especially at a time of job loss for patients (Appendices A, B). A 7-percent increase in admissions occurred between autumn/winter and spring/summer (2002) periods following 9/11 (Appendix C).
- The findings indicate the value of readily available support services, such as emergency Medicaid and Project Liberty. These services played a vital role; they continue to be needed years after the attack because of the lingering nature of unemployment and psychological problems.

Lessons Learned

- The main lessons learned and the recommendations made by treatment program administrators concerned the need for more mental health services (discussed by 10 administrators), the need for improved communication between facilities and with patients (7), and the need for disaster planning (5) (pages 56–59).
- Although administrators learned much from their experiences on 9/11 and the aftermath, there is a need for guidelines and “best practices” and disaster planning, including communication with and reaching out to patients and other treatment programs in the event of another crisis.

INTRODUCTION

The New York State Office of Alcoholism and Substance Abuse Services conducted a study on the impact of the 9/11 terrorist attacks on New York City drug treatment programs and their patients. The study examined a random sample of 15 substance abuse treatment programs, representing all New York City programs. Given the wide-reaching effects of the attacks, the relapsing nature of substance abuse, and the importance of treatment for substance abusers, this study was structured to assess the impact on both patients and programs in a systematic way. It aimed to answer the following questions:

- What problems did agency, staff, and patients confront on and after 9/11?
- How were problems addressed?
- What sources of help and information were needed and what was received?
- Based on what was learned from 9/11, how are agencies currently prepared in the event of future disasters?
- What recommendations can be made as a result of these experiences?

The sections that follow include a literature review and a detailed report on the study's findings from the perspective of patients and program administrators—all relating to the impact of 9/11 in New York City. Also, the several appendices include a secondary analysis of treatment admission data comparing time periods before and after 9/11.

1. LITERATURE REVIEW

The 2001 attack on the World Trade Center (WTC) was the most deadly and destructive international act of terrorism ever experienced in the United States. The impact of the attacks on treatment programs for substance abusers in New York City is multifaceted and includes a variety of mental health issues, such as Post Traumatic Stress Disorder (PTSD), depression, anxiety, and other psychological problems, as well as alcohol and substance abuse. In addition, the 2001 WTC attack was followed by transportation problems, ongoing threats of terrorism, and a difficult economic environment with increased unemployment.

Mental Health and Terrorism

Terrorism, in the form of mass violence, is aimed at harming large numbers of people, or destroying property or other resources, to intimidate groups or populations in pursuit of a goal that the terrorists deem important. Its impact is affected by a number of other factors: geographic proximity of the event, the degree of exposure to the event, an individual's history of trauma or psychological problems, and the length of time since the event occurred. In the case of the 9/11 WTC attacks, survivors, witnesses, and rescue and recovery workers were at greater risk of experiencing trauma than other people living in the United States who watched the attack on television or who had less exposure to the attack and its aftermath (American Psychological Association, Dr. Silver press release May 15, 2002). Furthermore, studies have found that women (Stein and Myers 1999), minorities, low-income groups, and people in poor health had more difficulties emotionally recovering from the events of 9/11 (National Opinion Research Council October 2001). In addition, disaster workers are at increased risk of PTSD (Ursano et al. March 1999).

Those directly affected by disasters tend to have higher rates of post-event psychiatric disorders (North et al. 1999; Green et al. 1990). For example, in studies based on analysis of the mental health effects in New York City by proximity to the WTC, Research Triangle Institute found that residents living closest to the site, below Canal Street, experienced the highest concentration of psychological problems, with 20.0 percent reporting symptoms consistent with PTSD and 16.8 percent indicating symptoms associated with depression. The Research Triangle Institute also conducted a study in seven different metropolitan areas and determined that the prevalence of probable PTSD among people in New York City on September 11 was 11.2 percent, compared with 4.3 percent for the Nation as a whole (Schlenger et al. 2002).

While increased exposure to a disaster was found to exacerbate distress, individuals did not need to be present at the event to experience symptoms of stress (Schuster et al. 2001). A survey by RAND Health found that 90 percent of Americans reported symptoms of stress immediately following the WTC attack, and about 40 percent gave answers that suggested severe stress (Rand Health Archive September 2002).

People with psychiatric disorders are particularly vulnerable to developing symptoms of PTSD. A study conducted by Brown University 2–3 weeks after the WTC attack found that 33 percent of psychiatric patients at Rhode Island Hospital showed significant PTSD, compared with only 13 percent of the medical patients (Turner 2002).

Substance Use and Terrorism

The relationship between drug use and trauma is difficult to assess. Stress has been found to be a major contributor to the initiation and continuation of substance use as well as relapse. Many studies, however, have been unable to establish a causal relationship between the two (Brady and Sonne 1999). Studies of the epidemiology of stress and drug use indicate that terrorist acts can have psychological impact for years after a specific action, and the psychological impact of such acts can far surpass any physical morbidity (Everly 2000). These studies have identified a range of psychological effects and adverse behaviors associated with traumatic events, including general distress, PTSD, and substance use (Stein and Myers 1999).

PTSD, which affected survivors of the 9/11 attacks, is a multifaceted disorder with a number of associated features, including guilt, anger, depression, substance use, and other anxiety disorders (Blake 1993). The high rates of alcohol and other substance use disorders among patients with PTSD suggest that the two are functionally related to one another (Brown and Wolfe 1994). Traumatic events therefore may directly affect alcohol and substance use and may indirectly affect it by elevating levels of stress and PTSD and also contribute to a relapse of substance use (Jacobsen, Southwick, and Kosten 2001).

An August 2002 assessment, conducted by Samaritan Village, a residential drug-free treatment program, found that many clients in drug treatment programs who had no previous mental health symptoms reported symptoms following the disaster. Overall, there was an increase of mental health problems associated with PTSD in this client population after 9/11. Forty-four percent reported one or more new symptoms. Ten percent of those without depression prior to 9/11 reported depression following 9/11. Similarly, 16 percent of those without previous sleeping problems experienced sleeping problems after the event, and 15 percent without previous anxiety experienced anxiety after the WTC attacks.

Not all studies on the relationship between disasters and substance use find a correlation between the use of alcohol and disasters. Unlike rates of most other diagnoses and problems, rates of alcohol abuse or dependence appear to be no higher among survivors of mass violence than in survivors of natural disasters (National Center for PTSD 2001). Rather, more commonly, alcohol is used occasionally as a way of coping among about 15 percent of the population on average. Select groups that had significant problems with alcohol before a disaster are likely to have problems with alcohol use after the disaster. These rates range from 6 to 40 percent. Survivors of trauma who experience psychological disorder—13 to 40 percent—often used alcohol to cope with disasters.

Research on the effects of disaster on rates of substance use indicate that trauma and stress can lead to anxiety and depression, which affects substance use by people already using drugs or alcohol; yet, there are virtually no new cases of drug abuse related to disasters (National Center for PTSD 2001). Studies that followed the bombing of the Murrah Federal Building in Oklahoma City, for example, found only minimal increases in alcohol use or dependence and no new onset of substance use (alcohol or drug) disorders (North et al. 1999). There was, nevertheless, a high prevalence of other psychological disorders. For example, 34 percent experienced PTSD and 13 percent had new onsets of major depression disorder. Smith et al. (1999) found a 1–2-percent increase in alcohol use in two communities in the Oklahoma City metropolitan area following the bombing of the Federal building.

Other studies found a 5-percent increase in the use of alcohol 3 months later and a 3-percent increase 1 year later, and concluded that the symptoms and effects of stress can persist for years (Pfefferbaum 1999; Smith et al. 1999).

In contrast to these findings, the relationship between stress and drug abuse behaviors has been documented following natural disasters and acts of terrorism. Studies on patients in drug treatment programs and other health settings have found that stress is a factor leading both to drug use and the escalation of use to abuse (Brown and Wolfe 1994).

A survey by the New York Academy of Medicine conducted 5 to 8 weeks after 9/11 found an increase in alcohol and marijuana use among New York City residents. Alcohol use increased nearly 5 percent from the week prior to 9/11 to the week afterwards. Marijuana use increased from 4.4 to 5.7 percent after 9/11. Those who reported substance use were also more likely to suffer PTSD. While the increase in substance use was not significantly different for men or women, it was found that age, household income, and marital status were associated with increases (Vlahov et al. 2002).

An exploratory study conducted internally by one OASAS-funded drug treatment agency found that 76 percent of clients who were actively using drugs (approximately 41 percent of all clients) before the attacks reported a change in drug use. Of those clients entering treatment after 9/11, 33 percent indicated an increase in drug usage, 28 percent reported a decrease, and 2 percent reported relapse. Seventy-one percent of self-identified drug users either entered treatment, increased their use, or relapsed following 9/11. Prescription drugs are also commonly used to cope with stress attributed to disasters. There was also an increase in lifetime nonmedical psychotherapeutic use among persons age 12–17 (Substance Abuse and Mental Health Services Administration 2002).

Services and the Terrorist Attacks

Many States and cities witnessed an increased demand for drug and alcohol treatment immediately following the 9/11 attacks, although estimates vary greatly. According to *Pulse Check*, demand for drug treatment services increased in New York City and at other sites around the country (Office of National Drug Control Policy, 2002). OASAS reported that New York City had the most substantial increase (OASAS, U.S. Secretary of Health and Human Services, reported in Entertainment Industries Council). The city's Health and Hospital Corporation, which operates 30 substance abuse treatment centers, reported that the demand for its services had risen 5 percent the 2 months immediately following 9/11 (Messina 2001). Another study indicated no changes in substance use treatment utilization in New York City and no statistically significant increase in adults classified with distress or a disorder (Office of Applied Studies, SAMHSA December 2002).

Other Factors Affecting the New York City Area

The attacks on the WTC have affected the region in many ways other than the psychological impact. An exploratory study, conducted internally by one OASAS-funded drug treatment agency, found that 10 percent of the clients reported that their housing was affected and 54 percent of employed clients said their employment was affected. Studies have identified positive effects associated with 9/11 and certain coping mechanisms that are considered to be helpful. Positive consequences

included closer relationships with family members and greater appreciation of the freedoms that our country offers (*Associated Press*, September 11, 2002). An online survey conducted by Christopher Peterson at the University of Michigan found that almost a year after the attacks, people were feeling and expressing more gratitude, kindness, love, leadership, spirituality, and teamwork (Talan 2002). National pride reached unprecedented levels. It was also found that people who engaged in “active coping strategies,” such as giving blood or attending memorial services, had lower stress (*Associated Press*, September 11, 2002).

2. METHODOLOGY USED IN THE 9/11 STUDY

This study was designed to obtain an understanding of the impact that the 9/11 attacks had on treatment program patients and administrators from their own perspective. The following sections detail the study’s design, its findings for patients and administrators, and the resulting conclusions and recommendations.

Methodology

A random sample of 15 treatment programs, referred to as Program Reporting Units (PRUs), was selected to represent New York City’s treatment agencies, the 5 counties, and types of modalities or treatment services in New York City (exhibit 1). The sampling frame was based on patients enrolled in PRUs located in New York City on January 1, 2002. Only patients who used a substance other than alcohol as their primary substance of abuse at admission and who were at least 18 years of age on January 1, 2002, were included. The sample was proportionate to the three major types of services, i.e., drug-free outpatient, methadone, and residential. The sample included six drug-free outpatient, seven methadone, and two residential programs. There were three programs in the Bronx, three in Brooklyn, six in Manhattan, two in Queens, and one on Staten Island. Programs were similarly allocated to services within each borough, subject to the constraint on treatment system totals. The sample contained three additional restrictions. The census of patients in the sampling frame at the program had to be at least 50 to ensure that sampling of patients would be feasible; the sample was limited to one program per agency; and only agencies serving adults 18 years and older were selected.

Exhibit 1: Characteristics of the 15 Sample Programs

Agency	Location	Census	Primary Substance
Residential 1	Manhattan	79	Crack
Residential 2	Bronx	111	Heroin
MMTP 1	Bronx	364	Heroin
MMTP 2	Manhattan	274	Heroin
MMTP 3	Manhattan	318	Heroin
MMTP 4	Manhattan	149	Heroin
MMTP 5	Brooklyn	289	Heroin
MMTP 6	Brooklyn	427	Heroin
MMTP 7	Queens	697	Heroin
Drug-Free Outpatient 1	Manhattan	73	Crack/cocaine
Drug-Free Outpatient 2	Manhattan	87	Crack
Drug-Free Outpatient 3	Bronx	102	Marijuana
Drug-Free Outpatient 4	Richmond	74	Cocaine
Drug-Free Outpatient 5	Brooklyn	105	Crack
Drug-Free Outpatient 6	Queens	63	Marijuana

Based on the sampling plan, OASAS invited the 15 agencies to participate in the study. Letters were sent to each agency identifying the study sponsors, the purpose of the study, the interview process (including the fact that the interviews would be taped and transcribed), how the interviews would be conducted, the relevance of the information, incentive payments, and the protection of confidentiality. Follow-up contacts were made with each Program Director to assess their interest in

participating in the project. Twelve of the 15 original agencies from the initial random sample agreed to participate in the study. Three sites in Manhattan were unable to participate, so three replacement agencies were selected based on the sampling plan. Once the agreements were reached, a date was set to interview the Program Director or Administrator and five patients (selected randomly) in each PRU. A team of three interviewers conducted a total of 92 open-ended interviews with 16 administrators and 76 patients. There was, however, incomplete data on one respondent. The details of the study and the interview were explained to participants and consent forms were used. (See Appendix D for consent form and Appendix E for interview guides.) All interviews were face-to-face, in a private setting, and in the style of a discussion. This provided interviewees with an opportunity to talk about subjects of special interest and concerns. Each interview was recorded, and the tapes were transcribed and analyzed with other taped interviews. While participants were provided an incentive of \$20.00 to compensate them for their time, they were reassured that a decision not to participate would in no way affect the services that they were receiving or would receive in the future.

Interviewers periodically met to debrief about the process and the content of the interviews. Once interviews were completed and transcribed, the transcripts were coded for the purpose of content analysis. Content analysis of the transcripts involved use of a qualitative analysis software program, Ethnography. Classic qualitative data analysis techniques were used to identify patterns and emerging themes. The analysis process began once a critical mass of data was available for review.

Steps were taken to make sure that patients/subjects were randomly selected. As part of the selection process, the sample included employed and unemployed patients. In addition, the sample included patients who were in treatment on 9/11 and patients who entered treatment after 9/11. Research staff coordinated with agency staff to interview patients. Interviews were scheduled on days and times when caseloads were representative of the overall patient population. Five patients from each agency were interviewed.

At methadone maintenance treatment programs, every third or fourth patient was approached to assess their interest in participating in the study. At the drug-free outpatient programs, every third patient leaving a regularly scheduled support group was approached. In two cases, the agency requested that interested patients sign up on a sheet posted in the hall or circulated following a group. Patients were then randomly selected from the list. At the residential sites, administrators made the arrangements in advance to ensure that residents' schedules were not disrupted. All patients were informed that their participation was voluntary. Five of the 81 patients sampled were not interested in being interviewed.

Overall, the sample selected reflects the population at each service modality in terms of the patients' age and gender (exhibits 2 and 3). However, more White patients and slightly fewer Hispanics and Blacks were interviewed, making the sample less than fully representative of the ethnicity of the patients attending the programs. Approximately 65 percent of all patients interviewed were in treatment on 9/11, but not necessarily in their current program. Methadone patients had been involved in their programs on a long-term basis. Many of the patients in the residential programs had been mandated by the courts and were usually there for several months. The drug-free outpatient programs tended to serve patients on a short-term basis. Many of these patients were recently admitted to treatment.

Exhibit 2: Demographic Characteristics of Male Patients from the 15 Sample Programs

Modality	Males (Percent)	Age (Mean)	Ethnicity Percent			
			White	Black	Hispanic	Other
Residential	73	38	12	62	26	-
Methadone	66	37	30	29	38	3
Drug-Free Outpatient	55	37	1	50	49	-
Overall Average	65	37	14	47	38	1

Exhibit 3: Demographics of Sampled Female Patients Interviewed from 15 Sample Programs

Modality	Females (Percent)	Age (Mean)	Ethnicity Percent		
			White	Black	Hispanic
Residential	80	34	20	50	30
Methadone	63	41	22	47	30
Drug-Free Outpatient	53	42	35	55	10
Overall Average	61	39	26	43	32

3. FINDINGS

In this chapter, findings are presented from the interviews/discussions with 16 program administrators and 75 patients from 15 substance abuse treatment programs.

TREATMENT PROGRAMS

Problems Experienced by Treatment Programs

Treatment program administrators provided a perspective on the impact of 9/11 on the treatment programs and their ability to perform at a highly stressful and uncertain time when many issues and problems came to the fore. It not only was necessary to respond to the needs of patients but also to personal needs, the needs of staff, and sometimes the needs of the larger community. All administrators interviewed were at their program sites or nearby on 9/11.

Administrators were asked about the ability of their programs to function on 9/11 and on subsequent days and weeks, the effects on their patients and staff, help and assistance received, the needs that still remained, and the lessons learned from the experience. Questions were tailored to the different program modalities.

Treatment Availability

As exhibit 4 shows, 12 of the 15 sampled programs remained open on 9/11. Subways and buses stopped running in many areas, bridges and tunnels were closed, and some streets were blocked off, creating a difficult maze for patients and staff to negotiate.

Exhibit 4. Treatment Availability on September 11, 2001, by Program Modality

Modality (N)	Programs Remaining Open	Programs Closed
Methadone (7)	7	–
Drug-Free Outpatient (6)	3	3
Residential (2)	2	–
Total (15)	12	3

The three closures were drug-free outpatient programs. One was near the disaster site in Manhattan and was evacuated. Another, in Manhattan, had few patients coming in for services and decided to close when, *most people were evacuating Manhattan*. A program in Queens decided to shut down since, *there were no patients coming for services and we were all scared*.

The seven methadone programs in the sample—three in Manhattan and four in the other boroughs—remained open; six extended hours so regular patients who had difficulty traveling and “guest” patients who could not get to their methadone programs could be medicated.

The sampled residential programs—one in Manhattan and one in the Bronx—remained open, providing shelter and food for their residents. Some residents were off the premises on 9/11, working at jobs and keeping appointments in various New York City locations. Each site had more

than 75 residents, and on any day, 10 to 15 percent are offsite. Most of the residents were able to get back to their programs or a related facility. Some walked many miles to return to their programs.

There was particular urgency for the methadone and residential programs to remain open. New York City’s methadone clinics serve a large volume of patients—93 clinics serving more than 37,000 patients—with medication that prevents opiate withdrawal. Also, since most methadone clinics opened at 7 a.m. or earlier, most staff members were already on duty when the attack was taking place, and thus, did not encounter travel problems getting to work. Each residential program site was home to more than 75 residents, where shelter, food, and 24-hour supervision were provided. A major responsibility for residential program administrators was assuring that each resident was safe and accounted for. In contrast, the drug-free outpatient programs generally opened at 9 a.m. By then, patients were already experiencing travel problems as well as the enormous shock of the day. The urgency of getting to these programs on 9/11 or the days afterward may not have been great, especially when the city was still feeling the aftershock.

Of the 15 programs in the sample, 8 are associated with hospitals. As a consequence, these hospital-based programs took direction from their hospitals. One administrator commented, *No, we didn’t close at all. Because we’re a hospital. We stay until instructed to leave.* The three drug-free outpatient programs that remained open were also associated with hospitals.

All of the treatment programs had a television set or a radio turned on, updating the news and re-running the images of the disaster. Although some administrators questioned the advisability of patients viewing or listening endlessly to the distressing events, both staff and patients were inexorably drawn to the news.

Staff Problems

Exhibit 5 shows three types of problems that programs experienced on 9/11 and sometimes in the days, weeks, and months afterwards. Staff problems were identified by 13 of the 15 programs, followed by communication problems (7 of the 15 programs), and financial problems (5 of the 15 programs).

Exhibit 5. Problems Experienced by Treatment Programs on 9/11 and Afterward, by Modality

Modality (N)	Staff Problems	Communication Problems	Financial Problems
Methadone (7)	6	4	1
Drug-Free Outpatient (6)	5	2	3
Residential (2)	2	1	1
Total (15)	13	7	5

The staff problems identified included mental health problems, as well as general work-related problems. The mental health problems were fear, depression, and anxiety, especially during the first week after 9/11.

According to most administrators, the effects on staff were much like those experienced by patients. One administrator summed it up as follows:

I think in that first week, I don't know how much we helped the patients as much as we needed help ourselves...I hate to admit it but it's just really the truth, you know, that we were no different than the patient. We were no different.

One administrator talked about staff members who were experiencing mental health problems during that week. One residential program administrator remarked, *We made sure the residents were taken care of but we also took care of each other.* Although several programs offered counseling services to their staff, few staff availed themselves of these services. Some administrators thought that staff may not have wanted to reveal their receipt of psychological help.

Administrators also mentioned more informal methods of help. For instance, one administrator had *an open door policy ...If you need to talk about anything or you are upset about something, come in and talk to us.*

Five administrators received training that was offered as part of the Federal Emergency Management Administration assistance provided in New York City. The training, including critical incident stress debriefing and other trauma-treatment therapy, was not only helpful in dealing with patients, but also helpful to staff in dealing with personal problems.

One-third of administrators remarked that some staff members did leave their jobs after 9/11 or were absent from their jobs for one reason or another. Whether these decisions were related to the WTC tragedy was not clear. One administrator commented, *My instincts tell me that some of it has to do with stress but that 9/11 changed everybody's perspective and individual value system and certain things that were extremely important to individuals became less important.*

In contrast, a residential program administrator felt that work-related issues have had an impact on program staffing:

You know when we pay a staff member \$23,000 a year and tell them you have to work weekends and your shift is 3:00 to 11:00, sooner or later they are going to get some experience and then go work 9:00 to 5:00 Monday through Friday some place for a little more money or even the same money because of quality of life issues. So I think that there are serious work force issues.

Some staff members who reside in the New York City suburbs or New Jersey became fearful of traveling, afraid to ride on subways, cross bridges, get around in the City—and finally decided to leave their jobs to work closer to home.

Communication Problems

One of the major communication problems was telephone communication failure. Of the 15 programs, 13 had a working telephone system, which may have included cellular telephones. Nevertheless, there were so many outages throughout the system that communication with patients and other facilities was difficult at best.

The two programs with intermittent or non-working telephone systems were located in Manhattan (methadone program) and Staten Island (drug-free outpatient program). Telephones were especially important for methadone programs for patient contact, staff contact, and interfacility contact. Methadone patients needed to call their programs to find out if they were open, where they could go for medication if they could not get to their programs, and how to verify dosage requirements if they had to go to another location. One methadone program administrator observed, *They were anxious to know how they were going to get medicated because the trains stopped.* Some patients were already concerned that they were experiencing opiate withdrawal.

Telephone communication was also vital to drug-free outpatient program patients and staff. One drug-free outpatient program administrator talked about the phone contacts held with her patients. Since her program was near the disaster site and phones were not working for 3 weeks, staff used personal cell phones to contact patients, *We had a lot of therapists actually doing phone sessions from home.* The air and the smells that lingered in parts of the city were *not the greatest at that point. So we provided counseling to patients by phone as much as we could.*

Residential patients felt cut off from their families and needed to call home to check on their well-being. A residential program administrator, whose phones were working, explained:

We allowed everyone to call their families... Once we got a better understanding of what was going on, everyone was allowed to do that, because there was that concern and that request from a lot of our patients. You've got to remember, from what we were understanding at that time, things were pretty much at a standstill in terms of transportation and movement within the city so there was not a lot they could do.

Financial Problems

The third problem identified by staff of five programs was financial loss stemming from 9/11. These administrators talked about the drop in client census in their programs on the days and weeks following 9/11. One drug-free outpatient administrator described the situation:

We were hurt substantially because no one was coming in. Our payment is through people showing up and third-party insurance payments. So the fact that we were paying payroll and all of our expenses with no income coming in for several weeks really put us in a very dire situation financially. So that was the biggest impact.

The two other drug-free outpatient program administrators also mentioned a decrease in revenue resulting from the initial drop in the number of patients attending the program. In addition, one administrator noted that New York City funding had been disrupted. The administrator reported:

Right now we are owed more money than we've ever been owed. Right now we're still affected by 9/11 because the city is no longer going to be funding substance abuse because of the great debts incurred in the city.

Programs that relied mainly on Medicaid reimbursement had fewer financial problems. Emergency Medicaid enrollment took place almost immediately after the disaster. Patients who would normally

have waited several months to process Medicaid applications, and patients who were having problems gaining approval prior to 9/11, received Medicaid benefits effortlessly within days. Although this was temporary—lasting about 6 months—it eased the financial burden for methadone programs especially.

Patient Issues

As exhibit 6 indicates, the mental health status of patients was the major issue, followed closely by relapse and then retention in treatment.

Exhibit 6. Patient Issues Since 9/11 According to Program Administrators, by Program Modality

Modality (N)	Mental Health	Relapse	Retention
Methadone (7)	6	6	–
Drug-Free Outpatient (6)	5	4	4
Residential (2)	1	1	1
Total (15)	12	11	5

Exhibit 6 shows that 12 of 15 program administrators had serious concerns about their patients’ mental status. All programs had at least a few patients showing extreme distress. As one administrator described, *Patients felt completely hopeless. They were very sad. They didn’t know where to turn, or what to do. It was a really sad event for them.*

Of the 12 programs that remained open on 9/11 and the days that followed, it took a week or more to resume normal activities. One methadone program administrator reported that patients would come to be medicated and then leave abruptly. She described the program as a *ghost town*. Another administrator emphasized the uncertainty: *Everybody felt that immediate sense of loss and the uncertainty. You know, what’s going to happen next. Are we safe? Are we not safe?*

Although these responses on the surface may not have been different from those felt by “the man on the street,” several administrators explained that the impact of 9/11 must be considered in light of the longstanding trauma in lives of patients. An administrator of a methadone program said:

They have been dealing with stress, critical stress all their lives... a lot of our patients. Look at where they come from, the upbringing they had, the type of environment that they had to survive in to support their habit.

Possibly as a consequence of prior and current trauma, some patients showed extreme emotions. Other patients showed little reaction to 9/11. Some administrators attributed such responses to the traumatic lives of their patients as giving them the ability to cope with many disastrous situations. One administrator explained,

I think that the longer you experience that stress the more capacity you can have to deal with it...I think that a lot of our patients had a bit more at their command than the average person who led a shielded life, and really hasn’t experienced much trauma.

Still other administrators felt their patients were so concerned with their own problems that 9/11 lost its devastating impact. For example, a drug-free outpatient program administrator described her patients' perspective as follows:

You know when you're disadvantaged and you've had no support your whole life, you've been abused and you've been homeless, you've sort of been in a 9/11 situation throughout. It's just that one more thing.

In contrast, some patients had a very difficult time on that day, with the event triggering past events:

The incident seemed to bring back a lot. Physically, sexually abused as children, those sorts of incidents have been brought back to their attention...you know laid dormant for a while and then got exacerbated again.

Veterans were mentioned several times by administrators as having a particularly difficult time. An administrator in a residential program spoke about their veterans' program and the effects of 9/11, *You know, it was a replication of the post-traumatic stress for them. The actual event.* Another administrator mentioned a Vietnam veteran in her program who continues to be troubled: *We had one Vietnam vet here who was very upset. He was like going back to those times more than usual but he is still here and he's still going back to those times.*

As discussed earlier, some patients had difficulty getting back on the subway. An administrator in a drug-free outpatient clinic quoted a patient who said, *I need time. I'm afraid to take the train.* This patient eventually did return to her program.

Although most patients seemed to recover from the initial shock, some administrators expressed concerns about PTSD. There does not seem to be a standard method that programs use to assess PTSD. One methadone program administrator confided: *It would be based on interviews with patients admitted or seeking help, many indicating, I need to increase my methadone, or I can't sleep now. I'm having this problem with sleep and with eating and I'm having nightmares, and I'm just not right. We want to know why.*

In contrast, another administrator uses strict criteria based on DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, 4th Revision*). Most programs may have the ability to access psychiatric services if PTSD is suspected—some of the services are from hospitals with which they are associated and others are obtained from offsite mental health consultants.

Another patient issue that was identified by 11 of the 15 program administrators was relapse and the use of illicit substances among patients after 9/11. Although the residential program administrators in the sample did not see evidence of relapse in their population, nearly one-half of the methadone program administrators and more than one-half of the administrators of drug-free outpatient programs reported an increase in *positive urines among patients.*

Three of the seven methadone program administrators stated that under normal circumstances, perhaps one-third or more of their patients used illicit drugs. In the months after 9/11, however, a

pattern began to emerge in most of the methadone programs showing increased positive toxicology for benzodiazepines, mainly Xanax and Valium. One administrator explained:

They seek medication, substances that are addictive that they should not be using. So there was some increase in the use of these substances.

Another methadone administrator described his agency's policy regarding benzodiazepine use:

We don't believe in prescribing anything in the benzodiazepine family as an anti-anxiety medication initially. The doctor would really go through a series of other medications. The program frowns on benzodiazepines, but the reality is that this particular drug that does work for specific patients.

Drug-free outpatient program administrators speculated that since fewer patients were attending their programs in days, weeks, and even months after 9/11, the likelihood was that some had relapsed and were again using alcohol and drugs. One administrator confided, *I think they were drinking or using drugs, you know, and not dealing with it.* Another administrator explained that, *Some people tended to try to cope by drinking, but I wouldn't say that was the majority.*

Retention problems were reported by 5 of the 15 programs. Confirming patient findings presented later in this chapter, four of the six drug-free outpatient program administrators generally reported a downturn in census in the year following 9/11. One drug-free outpatient administrator, who has seen a recent upturn in patient admissions to her program, noted an increase in benzodiazepine abuse among patients newly presenting for treatment:

We saw an increase in benzodiazepine admissions. That was because of the increased anxiety symptoms. They may not have made that connection but we see it.

The treatment programs in the sample closest to Ground Zero or the WTC disaster site experienced other retention problems. Concerned about contaminants, a patient who had lung problems was *reluctant to come back because of the air quality.* Another patient who had a psychiatric disorder was hesitant to get on a subway train to go to her program. She eventually overcame her fears.

Some methadone patients switched to programs closer to home after experiencing the ordeal of not being able to get to programs near their work site in Manhattan. As a consequence, some methadone programs lost patients while others gained patients.

Other problems experienced by patients as a consequence of 9/11 concerned their jobs. Many patients working in the World Trade Center area lost their jobs. With the need for workers to clear the disaster site, some patients were able to gain employment and earn fairly good wages. However, working at Ground Zero clearing sites with human remains created other problems for which some patients needed additional treatment. With stricter security checks, some working patients lost their jobs because closer scrutiny revealed irregularities in their background. Approximately 61 percent of all patients were unemployed and many were on public assistance. For these patients, financial loss associated with 9/11 was not an immediate concern. The goal of going from "welfare to work" seemed more and more remote for many patients.

Special Problems Regarding Methadone Maintenance Treatment

Disruptions in Normal Procedures: The Dilemma

Clearly, methadone maintenance treatment programs faced many challenges on 9/11 and the days following. Under normal circumstances, New York City methadone clinics medicate patients daily or on some scheduled basis with take-home medication. The daily dosage for methadone patients in New York City can be as little as 5 milligrams or as much as 300 milligrams or more. Dosage requirements are determined by a program physician working with the patient to arrive at a dosage that averts feelings of opiate withdrawal. Take-home privileges are given when patients show themselves to be trustworthy, remaining drug-free for a lengthy period of time and being gainfully employed. Given concerns around diversion (the selling of methadone on the street) and the requirement to meet strict Federal regulations, methadone administrators are cautious in supervising their patients. Recent deaths caused by methadone overdose made administrators even more cautious.

On 9/11, most programs tried to follow their normal procedures, despite the shock and chaos caused by the day's events. As stated earlier, six of the seven methadone programs remained open and extended hours to accommodate their own patients who experienced travel difficulties, as well as guest patients whose programs were damaged and also had travel problems.

Programs faced a twofold dilemma. One was to accommodate guest patients whose dosage had to be verified, a problem at six of the seven methadone programs. The second involved making decisions about take-home doses for patients—their own and guests. Four of the seven methadone program administrators spoke of concerns about overdosing guest patients as well as the likelihood of diversion of the drug among all patients.

The Crisis Response

The approach methadone treatment administrators used to respond to the guest patients' needs was to first try to verify the patients' dosage requirement by calling their programs and speaking to a knowledgeable person who could verify the dosage. Given the communication problems of the day and the days following, this effort was not always successful and sometimes extremely frustrating. For several administrators, there was no confirmation:

We medicated patients based on whatever they said their dosage was. That's what we gave them that day. For the most part, patients were very honest. Afterward, when the telephone lines were up, we called the patients' methadone programs to verify that the dosages were correct. The patients were honest.

Only one administrator reported that the system worked well:

I really see this as something that worked out rather than a problem that wasn't solved, so we're talking about people coming from other clinics. All we needed to do was verify their dosage. Just a phone call.

Take-home doses also became an important issue on 9/11 and subsequent days, given patients' travel problems. Decisions about take-home privileges were handled in different ways; they varied by procedures already in place and by patients' availability of transportation to methadone clinics. One program had a plan in place that worked well for that program:

We have a procedure in place, a disaster plan. In this plan, for all of our patients who are on whatever pick-up schedule they are on in response to an external disaster, we would default all patients to a frequency of attendance, one less than what they would normally be scheduled; this would afford them additional take-home and not require them to attend the clinic daily...That plan is already in place, so technically I have a listing of all my patients on a five-times a week schedule; in response to a disaster, they are all defaulted to a four-time a week schedule and are given an additional take-home to accommodate them for that one day.

Another administrator discussed the difficult process that his program went through to come up with individualized decisions about take-home methadone:

In response to 9/11, we had determined to give a large number of patients additional 'take-home' because we suspected that they would be unable to gain access to Manhattan the following day...it was just a matter of reviewing the individual patients for their merit and their need, taking diversion into account, and making a determination to give what number of bottles to what patients based on all those variables, and then getting a doctor's order. Then in addition to that, we had the patients who were coming in who were unknown to us who came from programs downtown and we had to get doctor's orders for those patients as well.

When it came to the decisionmaking, there were two fundamental approaches to take-home medication. One was a lenient approach justified in the following way:

We gave them to everybody ...At that point we were all equal. All lives are important. I didn't care what you were doing that was right, wrong, good, or bad. At least I know I gave you the medication you need to sustain yourself.

A few administrators, concerned about diversion of take-home methadone, used a stricter approach:

There's an issue with diversion ...If you're actively using and you're using cocaine and you're buying pills, then we're not comfortable with you having take-home bottles because we don't know that you're going to really use the methadone. You might use it to get your money to buy something else so we'd rather not.

Overall, the decisions made by methadone administrators weighed heavily on them. As one administrator confided:

I think we were very lucky in the State that no tragedy occurred, you know, because we operated blindly and that's very frightening considering what we were giving out ...that our patients aren't always as good as they should be about storing medication and, you know, in

recent months there have been kids dying of the stuff. So if you think about all that, we really do need to come up with some better mechanism for knowing who we were giving that kind of stuff.

Given the poor health of some methadone patients, at least two methadone administrators mentioned the needs of disabled and sickly patients on 9/11 and days afterwards. Special arrangements were made for non-ambulatory patients.

PROBLEMS PRESENTED BY PATIENTS

The interviews with 75 patients in drug treatment programs about their experiences on 9/11 and the aftermath of the attacks involved discussions about what patients were doing on 9/11 before, during, and after the attacks, the physical and psychological effects of the attacks, and the impact it had on their drug treatment program. Patients in treatment were asked about their attendance, drug use, and whether they relapsed. Incidents of relapse were assessed in relation to 9/11 and the patients' mental status. Individuals who were not in drug treatment on 9/11 were queried about their drug use and decision to enter treatment. The interviews explored the social, emotional, psychological, and economic impact of the attacks on their lives (see Appendix D).

Relapse Among Patients

Among the 75 individuals interviewed, 49 were either enrolled in a drug treatment program or were in recovery on 9/11. The rest were either using drugs or in prison. About 75 percent of the sample of patients expressed a need to use drugs or drink alcohol to escape the feelings associated with the disaster. Men who were in treatment on 9/11 were more likely to relapse than women—67 versus 11 percent (exhibit 7). Nearly everyone who wanted to use drugs was able to find them. Because of transportation problems and the 'shut down' of Manhattan, however, access was not always as easy as usual.

Exhibit 7: Patients in Program or Recovery on 9/11 Who Experienced a Relapse, by Gender

Drug Use	Male N (%)	Female N (%)	Total N (%)
No Use	10 (33)	17 (89)	27 (55)
Used Drugs/Increased Drug Use	20 (67)	2 (11)	22 (45)
Total	30	19	49

The finding that men were more likely than women to report relapse held for all treatment modalities. Overall, patients in drug-free outpatient treatment programs were more likely to relapse than those in methadone maintenance, as indicated in exhibit 8. All patients in residential programs who were in a drug treatment program on 9/11 indicated they relapsed; 6 of the 10 patients relapsed with heroin after having been drug-free for extended periods. Note, however, that the residential sample is small and that many other factors affect enrollment in these programs. For example, patients in residential programs tend to be mandated by the courts; others may attend because of issues related to relapse.

Exhibit 8: Patients in Program or Recovery on 9/11 Who Experienced a Relapse, by Modality

Drug Use	Residential N (%)	Methadone N (%)	Drug-Free Outpatient N (%)	Total N (%)
No Use	0	20 (62)	7 (50)	27 (55)
Used Drugs	2 (67)	9 (28)	6 (43)	17 (35)
Increased Drug Use	1 (33)	3 (9)	1 (7)	5 (10)
Total	3	32	14	49

Methadone Patients. Of the 35 methadone patients interviewed for this study, 32 were already enrolled on 9/11, and 3 entered methadone treatment after 9/11. Twelve (34 percent) relapsed on heroin. Another two also used other drugs, such as crack or cocaine. Ten patients reported using alcohol, including one individual who had been in recovery for alcoholism and had been sober for 7 years (see exhibit 9 presented later). According to three methadone program administrators, this patient population is at high risk for relapse.

Reasons for Relapse

Fifty-five percent of all sampled patients attributed their relapses and increases in drug use to the events on and following 9/11. Others (45 percent) attributed their relapse to part of a general pattern or other significant stressors in their lives. Many had used drugs since they were adolescents, and one person described relapse as part of a cycle of *chronic relapse*:

Basically, to tell you the truth, I didn't relapse that day but maybe like a week later I did. I don't know if—I don't think it was because of that. An addict is just a person that—for me, I don't get high unless I want to. There's nothing that makes me get high. I'm my own worst enemy. I could feel good and I'll go get high; I'll feel upset and I'll go get high. So someone that says they relapsed because the World Trade Center fell, I don't think so. Maybe if they had families involved, that would be something different but I'm being honest with you. I'm just the type of person who gets high just ...at the spur of the moment.

I was using more after 9/11. I was, you know, drinking methadone, sniffing heroin, and smoking cocaine. No, I'm not going to say it was linked. I'm just going to say that, during that time, you know, I thought about it. ...It was present. ...It wasn't a good sight to see. It wasn't like I could just say, 'Oh, well, that happened. Oh, well. You know, hey, so what?'

Other patients indicated their relapse might have been associated with anger or fear that stemmed from 9/11 as well as a desire not to think about the event:

Well, I did it when I went fishing. You know, I bought cocaine, I bought heroin, just to keep my mind off it because, at that time, you could still see the smoke and that smoke was there for a while, months and months. And that reminded me of it because when I used to go fishing, I just turned around and I see the smoke from it. That reminded me. So I actually got high one time.

Like I was just telling you, it was during the excitement of what was happening. You understand? And when I got around those particular friends, they're like around the corner because I live in a drug-infested area, and once we got to talking about that and the drug

presented itself, I mean we just—just something that happens and they found it in my urine, and they said you've got to go up. And, you know, I let them know what the cause was, but I had to go up because I was scared in a sense. Everybody was scared in a sense. You know, whether you want to admit it or not. I'm admitting to you, as a grown man, I was afraid.

Although program staff warned patients not to allow the attack to be an excuse to use, several individuals did believe that the experience gave them a needed excuse to use, as one person explained:

Because I was just getting myself numb, you know. And it was scary. It was scary and I used everything I could. That's what I usually mess with anyway. I had some other things to do, but I guess that just gave me an excuse to, you know, because I wasn't planning on it, but that just gave me an excuse to do it.

One of the most severe cases of relapse involved an ironworker who worked at Ground Zero for 7 months following the attack. His work was critical, but it took its toll. After being drug-free for 3 years, he suffered a relapse and was left emotionally drained, as he described:

I worked down there for about 7 months after it happened. I am an ironworker so I was burning steel, you know. Well, I will tell you, it was nasty, with the odor and the smell and all the bodies. Picking up body parts... And I work with a lot of Mohawks from Canada, you know, because that is International Iron Workers, and they're big drinkers, and before I knew it, I was at the bar. I had 2 years clean before that.

I was clean for 2 years. I was clean for 2 years and I went to the bar, and after I left the bar—I live in the Bronx, I was on my way home and I got off at Hunts Point, which is a big heroin area, and I just started doing junk again. And I was doing—I just got here like a month ago—so I was using for like maybe a year and 3 months, a year and 4 months after that.

But, you know, it was like when you're doing something like that, even though it's not like expressed but you get close with people, and it was just that we were going to the bar. And I just went, you know. But drinking is not my thing. I like doing heroin. So, you know, I had a couple with them; well, I'm going, I got on the train and I stopped at Hunts Point and got what I wanted to get. ...what I know works for me, or at least what I think works for me.

Well, at first, you know, when you're on heroin, it's like nothing is so bad. Nothing is so bad. But once you have a habit, it's just maintaining the habit, you know. So sooner or later it is going to wind up taking its toll, and I would be down at work and it would be like every half hour or so, I got to go find somewhere and get off...

Other patients described a desire to use but were resolved in their decision not to, especially not to allow it to become an excuse to relapse. Instead they spoke with *a lot of people* and agency staff to help them remain strong in their recovery. They also encouraged others to remain clean and to reach out to *our little kids that have all these questions of what's going on, what happened*. Ten of those who did not relapse attributed their resolve to remain clean to focusing on their families; 9 were women with children. The depth of the tragedy forced many respondents to confront mortality and

reassess the direction of lives. Others found that the heightened concerns or potential for other attacks made them want to be more aware and therefore sober. Others no longer felt they could handle the financial and emotional burden of drug use; as is the case below:

No. I'm in a financial situation right now. I can't afford to waste \$10 on a pack of dope, knowing that I have to buy milk and diapers.

Methadone medication was increased for patients who relapsed, had considered using drugs, or had increased anxiety and/or fear related to the attack, including trouble sleeping and sweating profusely. Methadone doses were increased for eight patients. Six of those who had their dosages increased were men, and five had used illicit drugs. However, they were not necessarily the individuals who reported being most emotionally affected by 9/11. They were also prescribed other prescription drugs, often anti-anxiety or depression medication. Twenty-two (63 percent) of the patients in methadone treatment were taking prescription drugs that reportedly interact with methadone and weaken its strength. Only two patients who increased their methadone dosages were taking other medication.

Increases in Substance Use

Among the patients interviewed in drug-free outpatient programs, 47 percent (14) were in drug treatment programs on 9/11; 7 of these patients reported use of illicit drugs following the attack. Five (31 percent) of the 16 respondents who were not in a drug-free outpatient program at the time of the attacks indicated an increase in drug use after 9/11; 3 indicated their drug use spiraled out of control. A few respondents sought help only after *hitting bottom*.

Individuals attributed their use to many factors, including a desire to numb their feelings, suicidal urges, a response to grief, lingering anxieties, and sleeping problems; three said that they felt doomed. Others identified drug use as a motivator and a means of coping with the situation following the attacks.

A hell of a lot [of drugs], you know. A lot. A lot. But also my disease wanted me to stay right there feeling the way that I was feeling due to what happened. To keep me in the grips.

I had overdid it and I was like on a bender, you know, behind that mess there because it really—it really got me—it really scared me. And then, you know, thinking about that thing... I still thought about it a lot, you know that they're going to do something else. I still have in my mind that they were going to do something else, that they wasn't finished.

Several individuals expressed regret about using drugs during the tragedy, as well as embarrassment that their primary concern was to get high. One said:

It made me think back to that day and how I mostly thought about how I was going to cop drugs instead of those people that might have been killed in that building.

Another said:

And I'm like I'm out here running, chasing this stuff, and the Towers just got blown up. It like blew my mind, you know.

Becoming fatalistic and “acting out” were other behaviors reported, as indicated in the following comments by two patients:

Well, I would see a lot of army people around and I just started to get high more. I had the ‘not care’ attitude, thinking that I'm going to die soon anyway. So I was just, you know, not caring, not even caring about what happened. Every chance I got, I just went and got high to numb my feeling.

I went and I bought a bottle of rum. This is it. This is, you know, something is going to happen, why not go out this way... I don't know why I thought like that, because I don't drink. I used to drink but I stopped. But that day really—Yes, of course. That's why I got drunk on my behind that day. I mean, like I told you, I thought it was over. That was just it.

Three respondents identified their drug use following 9/11 as being suicidal. One man viewed it as a means of controlling his own fate when faced by death:

I felt even when the building came down that I made it home that God spared my life because I used to get suicidal and I could never do anything... And I said ‘I'll be damn if I'm going to let somebody else take my life. I'll take it myself.’ That was why I believe I used, I kept using the way I did. I didn't want to die that way. I'd rather die not feeling anything. If I was going to die I was going to die high...nobody could help me because my mind was already set of what I was going to do. How long I was going to do it I didn't know. I just went on and on every day. As long as there was a disaster, I felt that if I'm going to die I'm going to die my way and not their way. I'd rather die from a drug overdose than be burned or jump out of a window.

Instead of letting some frigging Arab come over here and kill me, I'll kill myself. You know, I'll end my own life my way. Not the way anybody else wants to take me out. Things like that I thought about and I told my psychiatrist so he put me on Suprex.

Alcohol Use. Twenty-one respondents reported drinking more alcohol following 9/11, including those in methadone maintenance and drug-free outpatient programs (exhibit 9). Three respondents self-identified themselves as alcoholics; their use indicated relapse. For others, it was a one-time or episodic event. For those who were not in a program, it became part of an overall increase in substance use prior to entering drug treatment.

Exhibit 9. Patients' Use of Alcohol on or Following 9/11, by Modality

Impact	Residential N (%)	Methadone N (%)	Drug-Free Outpatient N (%)	Total N (%)
No Use	8 (80)	25 (71)	14 (47)	47 (63)
Used Alcohol	0 (0)	2 (6)	5 (17)	7 (9)
Increased Alcohol Use	2 (20)	7 (20)	9 (30)	18 (24)
Relapse With Alcohol	0 (0)	1 (3)	2 (7)	3 (4)
Total	10	35	30	75

Respondents identified several reasons for using alcohol, including *calming nerves*. A few men reported that it helped them to process what happened, reflect on it, express themselves better, and feel closer to other New Yorkers. One man said it emboldened him to plan actions with his friends against *these Arabs*. As two respondents explained:

After that, I was using and drinking. And that just did it... when I drink I am able to express myself more than when not drinking. I'm really quiet. But when I drink... I was able to let all of that out and then I felt better. I felt better by letting it out, you know. Talking to God... I let it out. I talked to God. Things happen the way they do... I let it all out and I started feeling—I went into treatment.

My nerves were bad and all that pressure, you know. The first thing I thought of was getting me a drink. I mean, the pressure was so much and everybody was, well, drinking then. They were going and getting rum and stuff like that and we were talking about it.

Other Stresses Affecting Drug Use

Several respondents said that stress contributed to their drug use, but that the stress itself was not necessarily related to 9/11. The experiences of 9/11 were filtered through other more prominent life circumstances and crises. The majority were already financially distressed. They viewed the attacks as hurting the economy, which disproportionately hurt poor and low-income workers. Seventeen patients (13 men and 4 females) lost jobs because of the attacks, the overall decline in the economy, or mental health problems. While it is not clear whether these rates of job loss were higher than the norm, data collected from all OASAS drug treatment programs indicated that the proportion of patients who were employed full-time at admission declined significantly between the 6-month interval starting with September 11, 2001, and the preceding time interval, from 14 to 12 percent. This may reflect the decline in the general economy, which was exacerbated by the loss of jobs after the 9/11 tragedy that affected many New Yorkers, including substance abusers.

There were also at least six individuals who became homeless and/or were already living in shelters at the time of the attacks. Those who became homeless because of other life circumstances were preoccupied by the horror of living in a shelter—a situation that instilled its own terror and led to other concerns, such as finding affordable housing, health problems, and securing other needed support services.

Several people reported that their drug use was related to personal crises, such as being diagnosed as HIV-positive, health problems, poor relationships, or the death of a family member or partner from natural causes. As one woman explained:

I'm really active, I mean, and I'm strong, but ever since I found out that I'm HIV-positive, everything is just like came down, you know. I didn't want nobody to look at me. I felt weak. I relapsed after I did 4 years clean. Even more, yeah. Because I didn't think I was worth it. You know what I'm saying? I said, 'Well, I'm going to die, so let me have it to die instead of just living the process and going through the side effects of this disease and stuff like that because I don't want to go through the side effects.'

One person said that it was a way for him to *wallow in self-pity*. Another person became overwhelmed when his already complicated life was further complicated by events tied to 9/11. His wife's office closed down and his children's schools were closed. As he stated:

Stress. Straight stress. Bills, more bills, ex-wife, headache, girlfriend. ..It was complicated. Very complicated. Eight kids. Okay. Eight kids, complicated. Very complicated. She [my wife] had to stay home. She worked at 300 Park Avenue. She couldn't go to work. Everything fell on me. Yeah. My kids couldn't go to school. I had to find another way for them to go to another school in my area in the Bronx. Shut it down. Shut everything down. You know, just everything building up on top of each other and a lot of things just happening simultaneously. I started drinking, you know, big time. Not even knowing where my next dollar is coming from and then not even knowing where the next dollar is coming to feed your kids. The next dollar to take care of my bills and stuff like that. It's big time stress.

The Impact on Patients' Mental Health

Mental Health and Substance Use

Thirty (40 percent) of the interviewees reported having significant, often longstanding, mental health problems (see exhibit 10). Patients suffered from diverse psychiatric problems such as schizophrenia and bipolar disorder. The most common mental health problems identified included depression, a sense of helplessness, insomnia, anxiety, fear, and resulting isolation. At times, these diagnoses were identified in conjunction with PTSD.

Exhibit 10. Mental Health and Drug Use on or Following 9/11

Drug Use	On Medication N (%)	No Medications N (%)	Mental Health Treatment N (%)	No Mental Health Treatment N (%)	PTSD N (%)
No Drug Use	18 (45)	15 (43)	14 (47)	19 (42)	4 (36)
Drug Use	22 (55)	20 (57)	16 (53)	26 (58)	7 (64)
Total	40	35	30	45	11

The lives of many patients were marked by personal trauma, history of abandonment, and life-threatening illnesses that exacerbated existing mental health problems, contributed to new problems,

and affected drug use. Those with a dual diagnosis of mental health problems and a history of drug use were generally highly vulnerable to relapse. At times, such hardships preceded and possibly contributed to drug use; in other cases, trauma became an integral part of a high-risk life style.

The most common symptoms of stress associated with the 9/11 attack included feeling jittery, dreaming about the attacks, invasive thoughts, and trying to avoid reminders. When these symptoms were severe, the person may have suffered from PTSD. Respondents with previous psychiatric histories appeared to be more symptomatic than others, yet not necessarily more likely to relapse. Those experiencing PTSD, however, were more likely to use drugs.

Individuals with mental health problems associated with 9/11 were less clear as to the primacy of their mental well-being compared with their recovery. Some patients were more focused on recovery, while others felt that their drug use had been a temporary response to trauma. Some patients with significant mental health problems who had been in recovery for several years viewed their substance use as being better controlled than their mental health problems. Given their precarious emotional state, some patients viewed the possibility of relapse as life threatening, while others viewed it as symptomatic of a cycle related to their mental health problems. In one case, drug use was related to the trauma. The following quotes represent the different perspectives of three patients:

I came here because I had a drug problem. I didn't come here because I got psych problems or my past. I didn't come here to fix that. I came here to fix my drug problem. They say that's part, and maybe it's part, but I've been using drugs since I'm 9 years old. What kind of problem a 9-year-old can have?

No, I don't think about relapsing. It's something I try not to think about because, if I relapse for whatever reason, I won't be able to come back from that. I feel that if I relapse now, that's it. I'm not going to come out of it.

I've been in programs for mental illness. I've been hospitalized seven times but not for substance abuse. I would go through these episodes and then be hospitalized and clean up and go back to work, and then I'd do it again. I've like done it seven times. I've been hospitalized seven times. And, you know, there is a connection between drug and alcohol use and mental illness. At least in my case anyway. So, you know, I mean, I would just go through these phases... it was like a revolving door type thing.

The Spectrum of Mental Health Problems

The impact of the attacks on the mental health and well-being of patients in drug treatment programs was assessed based on self-report, using three categories: “minimally affected,” “moderately affected,” or “extremely affected” (exhibit 11). These categories, however, do not fully capture the varying degrees of severity, complexity, and duration of the psychological impact.

Twenty-seven percent of the patients reported that they were not personally affected by the events of 9/11, although they may have been upset or confused in the short-term. Forty-one percent indicated

they felt personally affected by 9/11, but not in a way that significantly altered or circumscribed their lives, while 31 percent reported being extremely affected.

Exhibit 11. The Psychosocial Impact on Patients by Gender

Impact	Total N (%)	Male N (%)	Female N (%)
Minimally Affected	20 (27)	13 (28)	7 (24)
Somewhat Affected	31 (41)	20 (43)	11 (38)
Extremely Affected	24 (31)	13 (28)	11 (38)
Total	75	46	29

The 20 respondents who reported being minimally affected said that the events of 9/11 were extremely sad, and that they had been shocked, angry, and disturbed by the loss of lives. They sympathized with those who lost loved ones, yet they did not feel personally affected by it. Nevertheless, four respondents were leery of trains and/or buildings, an impact that was primarily limited to the days and weeks following 9/11. In general, males were less likely to be emotionally affected than females. Males were also less likely to be taking prescription medication. They resumed their normal lives without serious problems. As one male expressed, *Gradually I got to my old way but it was scary*. Others commented:

I mean, it was a tragedy but I guess the work continues, life continues. I mean, we have to just move on with our lives and just pray for the ones that didn't make it and the ones that did make it and are injured or whatever. God bless them.

Basically once my family was okay, I just had a little sadness for other people that lost their families and stuff, you know. No, it didn't have really a big personal effect on me.

One person attributed his lack of an emotional response to methadone, stating:

I really felt like it's because of my drug use or my maintenance on methadone that kind of deadens my feelings, you know, my emotions. I know it takes away your sex drive. But I'm sure of the fact that it does kill them slightly, yeah.

Forty percent of the patients who used illicit drugs while being treated in methadone maintenance programs reported being only minimally affected by the attack. In contrast, patients in residential and drug-free outpatient programs who used drugs on or following 9/11 were more likely to report being somewhat or extremely affected by the attacks. The information from the 42 patients who used drugs on or after 9/11 is presented in exhibit 12.

Exhibit 12. Psychosocial Impact of 9/11 on Patients Who Used Drugs on or After 9/11, by Modality

Impact	Residential N (%)	Methadone N (%)	Drug-Free Outpatient N (%)	Total N (%)
Minimally Affected	1 (11)	6 (40)	2 (11)	9 (21)
Somewhat Affected	3 (33)	8 (53)	11 (61)	22 (52)
Extremely Affected	5 (55)	1 (7)	5 (28)	11 (26)
Total	9	15	18	42

Patients who reported being moderately affected had lasting effects, such as fear or anxiety related to traveling by subway or visiting the city. Most respondents, however, were able to return to their normal lives relatively soon afterwards.

The 11 respondents who reported being extremely affected were unable to resume their daily lives and routines. They tended to be fully preoccupied by the attacks because they survived the attack, experienced personal loss of a loved one, or the attack revived previous traumatic experiences and PTSD. This group included one woman who was institutionalized for a mental breakdown after 9/11. Six respondents became suicidal, a few experienced panic attacks, and others became hypervigilant. Eight reported taking more than one medication (e.g., anti-anxiety and anti-depressants) as well as medication for other mental health conditions. Ten of the 11 people who reported being diagnosed with PTSD reported being extremely affected by the attacks.

Terrorism: Feelings of Powerlessness and Lingering Fear

Patients reported lingering effects, particularly those who witnessed the events up close or had previously experienced trauma. Many people could not stop reliving the day and thinking about death. Old memories were revived. New fears and anxieties were harbored. Some people became obsessed by images in the press and fears—real and imagined. It was all they thought about:

Yeah. Oh, yeah. Yeah. I have no control about nothing. Powerless. Powerless of what happens. Something is always going to happen. As hard as I try for it not to, destiny is written.

It was after 9/11, seeing the bodies splattering and seeing body parts, you know. In my mind, I could see them down there picking through the ruins, finding peoples' hands and arms and shit like that. The stuff they didn't report on the news they said—people would just say it's horrible down there, you know, and I would—my imagination, I don't know...

Nearly one-third of the patients experienced a chronic fear and suspicion. The future appeared uncertain. Others were hypersensitive, and a specific event, place, person, sound, or activity triggered bouts of anxiety. Some had a heightened sensitivity to noise (e.g., from trains or planes). At least two patients who lived near an airport reported being startled every time they heard a plane overhead. Patients, like administrators, reported a desire to avoid Manhattan, subways, and bridges. Some patients avoided the news and others were glued to it. Anxiety associated with the attacks on 9/11 may have caused health conditions to become emergency situations. One woman had premature labor and another had a seizure from high blood pressure. Some respondents reported short-term and

long-term sleeplessness because they did not *feel as safe as before*. Others indicated a numbing effect or an absence of emotion. One woman reported that she frequently checked the doors, the lock, even the oven—things she never did before. Men and women alike stated that they felt uncomfortable and/or very nervous.

Continuing terrorist threats accompanied by orange alerts and heightened security measures often revived latent fears. The blockades along the streets and sound of black hawk helicopters overhead became a constant reminder that the terrorist threat persisted. One patient reported that the presence of military vehicles *scares the hell out of me*. Several patients expressed concern about family members in the army who had been sent abroad to fight, and several said it was the first time they had felt insecure in the United States, particularly New York City. One explained, *there's a terror in my heart and I'm sure there are thousands of people like me; the attack on the WTC is only the beginning, more punishment is coming, and it isn't over yet*. Some patients wanted revenge and others deplored the possibility of another war. Some expressed distrust in individuals as well as politicians:

I personally don't know how I am going to handle the next orange alert. No, not—I don't know what—I shouldn't say this, but I hope I become manic if that happens. Yeah, and then I can be able to help instead of sitting back and watching.

Sure. But it's almost as if I'm waiting for New York to become almost like Israel. You know, I feel we're so far behind after what happened... like this September, it'll be 2 years already. And what have we done? We've got one kingpin, you know, but for as far as I see we've done little else.

Twenty-six respondents said they were highly suspicious about and felt angry towards Muslims and Arabs as well as other immigrants who looked at all Arabic. Respondents also criticized lax immigration policy. One respondent stated *There is a tendency to let anybody into the country. We don't know, you know—it just makes me nervous*.

Others stated:

Well, it has just gotten me scared. I'm scared, you know. I'm afraid that anywhere I go something will happen. You know what I'm saying? The way things are going now you can't be safe when you go out. You can't.

I'd been a little bit depressed before 9/11 but it elevated it. It made it worse because now I'm looking behind my back and I didn't used to do that. I'm looking a lot behind my back. I don't trust everybody now and before I used to trust the whole world. You know, now I feel different. It feels like I can't trust nobody.

Impacts Associated with Trains, Buildings, and Manhattan

Twenty-four respondents (32 percent) said that they distrusted trains, buildings, and/or avoided New York City. Some, although distrustful, continued to ride trains, while others were only able to travel if accompanied by someone they knew. In the more severe cases, patients opted to avoid going

outside altogether or, at least, to avoid public transportation, skyscrapers, or Manhattan. Tall or municipal buildings in Manhattan were particularly “suspect” and symbolic of danger, a sentiment reinforced by the presence of heavily armed police and other guards. Several respondents said they avoided meetings located in tall buildings, especially municipal buildings. One woman said she has postponed getting her daughter’s birth certificate for 6 months because she did not want to *go down there*. Another man said that if it hadn’t been for an immigration interview for his wife, he would never have gone into the city.

One patient said he would refuse a job if it were located in a tall building. A female patient who was institutionalized for a breakdown insisted that her room be on the ground floor. Another respondent turned down subsidized housing because it was in a tall building.

Being fearful of going outside their neighborhoods was another pattern reported by patients. Many opted to avoid Manhattan altogether. One respondent considered relocating upstate and another thought Alaska might be safer. One man asked his wife to stop working in Manhattan. Another woman, after an extended leave of absence, decided to stop working because her job was close to Ground Zero. Others talked about staying in their neighborhoods:

The idea of going back to work in a gigantic skyscraper, you know, high-rise building scares me a little now. I mean, I feel fear about it and I'm going to take a couple of years—I'm not going to go back to it right away.

I mean, I can go to the city but I'm not trying to be there for too long. Because that seems to be a main target. They wouldn't hit areas like the suburbs; the mecca of New York is the city. So that's where they would probably—like if they did—it is where they would target, the city itself... If I don't have to be there, I won't be there.

If I don't have any business being there, I'm not going. Such as it's not mandatory that I go to the city, I won't be there.

I don't get nervous in my block. That's my block. I know nothing is going to happen. Nothing like that is going to happen but when I get to the city, yeah, I worry on all the trains. When I get on the trains, I worry.

Sleeping Problems

One of the most common complaints was difficulty sleeping. Even patients who stated that they were not very affected by the attack suffered brief insomnia and/or nightmares. Dreams often involved a family member being consumed by flames or planes entering a building, people screaming or falling from windows—images of the horror. Many patients became fearful of sleep. Most did not feel comfortable discussing these problems with anyone. One person described her experience:

Yes, I hardly sleep and I dream a lot about having a plane crash. I have spoken to the program. After that happened, I dream a lot about crashing with a plane, about the train exploding. I've been having a lot of nightmares, very bad. And the program is trying to help me. You know,

they're working with me because I come here and I complain about the way I sleep. The way I act all day. I mean, even my kids get me paranoid if they scream. I get very nervous after it since I'm out of control.

The dreams soon disappeared for some, but not for everyone, especially when they were forced to relive past traumas:

I still have nightmares, you know, and now I have nightmares of war, not just nightmares with my father molesting me and him coming to rape me and issues that I haven't developed because I haven't come to terms with him yet. He died. And I still have his ghost on my ass, you know.

Depression and Isolation

Patients associated fears, nervousness, depression, and shakiness with the attack on 9/11 as well as new potential threats. Many patients said they did not feel they could trust anyone. A few said that their nerves were *always out of control*. Depression was one of the more common problems, as two respondents described:

It almost lit the flame under the depression. It actually made it worse. You know, I was sleepless. Anxiety was like climbing out of my skin... I've been a depressive for a lot of years. It seemed like a change. It seemed like it got worse, like exponentially after 9/11. Again, I'm not trying to lay all my problems on, 'Oh, my God, well, that's what happened,' you know, because of what happened. It was cause and effect. I mean, I could feel the emotional change afterwards. I really could. I mean, it was profound.

Well, I'm under a lot of medications for it and I try—the nurses tell me when I feel uncomfortable and I think something is going to happen to breathe slowly, you know. Talk to myself. Everything is going to be all right. And I talk to myself. But after the Twin Towers happened, I got very—more sick than I was.

Another pattern was the lingering fear of terrorism in combination with depression, which led to a discontinuation of usual activities. Patients made appointments that were necessary, such as getting medication, but were more comfortable remaining inside their homes. Many described being depressed and isolated even more than a year after the attack. Six people reported having been suicidal. As several respondents explained:

I haven't been on a train. I'm scared. I can't—I'm scared to go on the train. I won't go. He says you have to start going out more, you used to go out more, no more, I don't want to go nowhere. I stay home and watch TV and that's it.

So that's why I come here. I get my medication and I try to leave as soon as possible because, you know, my nerves are not too good. A little anxiety, you know, because I feel uncomfortable because of 9/11. It makes me feel that we are not safe. We are not safe. And that is scary. It scares me. We are not safe. And it almost seems like we don't have too much longer in this world. It seems like everything is hitting—everything is coming so fast. The terrorists bombing

places. Look at Israel. You know, Pakistan. It almost seems like this was a—like harassment. That's what it tells me.

I wasn't able to sleep and I still don't sleep that well. Sometimes. Sometimes I don't want to be around—I'm scared to be around—I don't want to be around nobody. I just want to be isolated, you know. Yeah. I'm a home person now. I used to go out and party... go to different clubs. Now you can't go to clubs without stuff happening, so I let that go. I just don't want to go out. There's always something bad happening. I'd rather be safe at home. Well, see, I take one day at a time. I used to, you know, not think about tomorrow. Now I do. And I wonder if there's going to be a tomorrow. Yeah. I mean, I live day by day. I'm not—I mean, I don't have nothing to really feel happy about.

And I was isolated, isolated, isolated, isolated. I was isolated from them and I was isolated from myself. I was isolated in my world. I was isolated in my home. Everything. It was like the death of isolation was going on. Now that I look back on it, yeah, I didn't realize it at that time but I was isolated because I couldn't talk about it with my friends. My friends did not want to hear it.

At times isolation was exacerbated by drug use, which led to severing contacts with friendships fostered while in recovery:

I found myself like—you know, like totally isolated... like once I had started using, I was still making meetings every once in a while but I was going high and people knew it and they were like, you know, 'You need to go get some help. You need to go get some help.' ...I wouldn't answer the phone and I just found myself like totally isolated after a while.

I bugged out due to the drugs that was in my system and the tragedy. I bugged out. I freaked out. And to know how many people—all the people that was killed in there...I was in such a state of mind, I didn't want to go in—I mean, go back out, get whatever it was I was getting, and do—just remain indoors. I used—no, it wasn't the same. It wasn't the same. I had isolated and kept myself in the house and stuck to the television for what channels we were able to see. I was stuck with the television to what happened, you know, not knowing what was going to happen next... it like kept me inside. I didn't want to go out. My fiancé said 'Sharon, let's go to the store.' If we go together, yeah. But I just didn't want to go out by myself, you know. It felt like I couldn't trust no one. The people's house that I was over at the time that it happened, I stopped going over there as well. They didn't see me. If I had it to use, I will use. I will go buy it and I come back home. I stopped like going and stopping over to her house or his house... I would just go get what I'm going to get and bring it home, and I'd use in my house.

Trauma and PTSD

Eleven patients suffered from PTSD. For those who were Vietnam veterans or had suffered significant traumas, the condition preceded 9/11. Of the 11 patients diagnosed with PTSD, 10 reported being extremely affected by the attacks. The three major features associated with PTSD in the patient population interviewed were as follows:

- Intrusive thoughts, flashbacks, reliving of the experience

- Avoidance and numbing
- Hyper-arousal, startle response, irritability, sleeplessness

All respondents with PTSD reported one, if not several, of these symptoms. They frequently complained about both long-term and short-term sleeplessness, as well as repression and denial of events related to 9/11. At times, individuals stated they avoided thinking about the event or even reading or watching the news. Individuals who reported depression or had been diagnosed with depression were sometimes also diagnosed as having PTSD, although not everyone with depression had PTSD.

Intervening and Contributing Factors

Location. The majority of the patients interviewed witnessed the events unfold from a distance, in the street, from a window or on television. At least 15 respondents saw the attack nearby from a building or the street. Nearly everyone interviewed was in New York City during the attacks. There was one woman who was living in Rhode Island and a few men who were incarcerated outside the city, one of whom learned about the attacks while on a plane from Puerto Rico to New York State. Many respondents either worked in the neighborhood of the World Trade Center or lived nearby. Several people witnessed the planes hit the buildings from apartments or buildings nearby. One man said that he and his wife watched the event close up through his telescope, but when they noticed people jumping from windows, they decided it *got a little too graphic*, so they only watched the television. Five people had been working in the building, or were meant to be nearby that morning, but had either overslept or were temporary or part-time workers who were not on site. Many were in the streets when the buildings collapsed. One man ran to the Towers after promising a cousin he would find and rescue his wife. He was one of two survivors interviewed who experienced two separate close encounters with death on 9/11; both were suffering from PTSD.

Individuals who survived the attacks and witnessed the destruction downtown displayed the most severe signs and symptoms of emotional disturbance, guilt, and trauma, and were later diagnosed as suffering from PTSD. Nevertheless, there were many others who watched the events unfold on television who were also traumatized. One woman in Rhode Island had a mental breakdown after watching the attacks on television.

Testimony from Two Survivors

Case One. *I stood in my window like I'm looking out right now—and say from where that telephone building is, that is where the World Trade Center is—and the ball of fire came out and for two seconds just looking at it, 'Oh, my god, it's coming here.' And all of a sudden it's coming... It's that—the cauliflower smoke, that cloud of smoke that was coming out of fire. That was just about to reach—for two seconds—and then literally I mean two, two moments, that that ball of fire was going to come. I'm saying, 'It's coming here, that's it. That's it.' And then it just hovered. It just stopped maybe one block from where the building was....and I was ready to die. I was ready to die at that moment. ...I remember saying in my head I have six seconds to get indoors because these are tall buildings. Nobody knew how it was going to fall. And I'm*

thinking it's going to fall this way towards where I was standing and then I remember—it was like I was paralyzed. I went like like a wild animal in the sense of where can I duck. Where I can get indoors. And that's—I remember saying to myself I have six seconds... So then my friend came back and he got me. And he just said, 'Tony, come on. Let's go.' And he did. And I'm very grateful to him and we'll always—we connected on that level that we went through that together, and the aftermath of all of that is still taking its toll of where to find its place and stuff like that.

Case Two. *As I'm standing in front of the building, I see all the people just start dropping. You know, they just—I'm like let's say 30 feet away—and people are just falling from the building. I seen like 20 to 25 people fall. And it was—that was really, really devastating to me as well because after that I couldn't sleep, you know. But as—as the building—as I seen the people falling then the building starts collapsing... The minute I got out of the truck and started running, I turned around and I hear the rumbling again. That's when the second building started falling... The minute I got out of the truck the second building falls. The second building falls and crushes the truck that I was in. So I'm like, wow, you know, I got saved twice already. The people that saved me, I couldn't even thank them for saving my life, because I just ran out of there and thank god that I did run out of there because I would have been dead. I would have been under the truck... And after that I just—I don't know. I kept on with the drugs and kept on with the ecstasy and just partying and staying up all night. I forgot about working and then I started, you know, selling drugs just to make—to get—more drugs so I could suppress my feelings but it ended up, it was like a domino effect because I lost my cousin, I nearly lost my life. I ended up losing my job due to the partying and the drugs, and I had complications with my wife so I—we're separated right now. It landed me here. I lost my freedom and it's—it has been hell ever since. I got caught selling drugs.*

History of Trauma

For respondents who reported a history of abuse, violence, or other traumas, the attacks on the World Trade Center triggered either depression or extreme anxiety. Females were more emotionally affected by the attack on 9/11 than males, 38 percent reported being extremely affected compared with 28 percent of the men, as indicated earlier in exhibit 11. These individuals also were the most likely to be prescribed medication. Ninety-two percent of those who reported being extremely affected were taking prescription medication. Among the most severe cases were 2 people who reported having a mental breakdown, 10 who suffered from post-traumatic stress, and 5 who were experiencing panic attacks. A few individuals experienced flashbacks related to Vietnam, rape, and, in one case, a murder committed in self-defense. As three people reported:

So being that we were both in the service, everything just snapped. You know how you just snap back into the military mode. We started to get behind the car and let it roll and after that—about 45 minutes later it looked like somebody just threw snow on us. I mean, just crazy. It was just, to me, I just caught a flashback, a serious flashback. I haven't been back since. To this day I still haven't been down there.

Well, see it come from first I had—years ago—I had killed somebody in self-defense. Yeah, I killed somebody in self-defense and it seemed like after the 9/11, I would get more dreams

about—thinking about—what had happened back then and I couldn't sleep. When I get on a train I get nervous, you know.

I am a Vietnam veteran and it brought me right back to, you know, what I seen over there, you know. And, like I said, you know, I could have dealt a lot easier with this with alcohol in my system because this—I wouldn't have had to face it as much, you know... it brought me back, you know, to that sudden instinct there, you know. I do suffer from PTSD also.

Testimony: A Description of PTSD. One patient spoke about suffering from PTSD:

And, you know, like a lot of times—like my whole life pretty much—I was just like numb to everything... because I grew up around violence... And I guess that is the way I dealt with it. I just numbed myself... And this was just another one. And that is how I dealt with it, but I guess it became too much for me because I went back to using drugs. And the way he explained it to me is that I'm angry and at the same time I'm empty. And to me it was a contradiction. He says, 'Yeah, it is a contradiction but it's reality because this is what I've run across with people.' I don't feel anything, you know. Like I just—I just walk through life and somehow or another like I shut down at a very early age and I... just bottle everything up and I don't, I don't allow myself to go through any kind of feelings except anger. That's the only feeling I would allow myself to go through. You know, I'll explode. And just talking to him, you know, he said, 'You've gone through a lot of traumas in your life.' You know, I seen my father get killed. I seen both my brothers get killed, you know. A lot of my—'Yeah, in the street, you know. In the street, you know.' They weren't doing what they were supposed to be doing. From that, there was a lot of physical violence around me. And then when I was in the service and then with this, you know, because we sat down for like 3 hours and he says, you know, 'I would like to talk to you a lot more but I'll tell you with this, just what you're telling me,' he says, you know, 'You sound like you got post traumatic stress disorder'... And that is how I wound up dealing with everything, I just shut down, and I don't allow myself to feel anything... Yeah, like I was trying to—like what do I got to do to feel something, you know? And he says, 'Well, you're on the right track getting clean and staying clean but it might take a few years.' He says, 'You've been using pretty much your whole life, even as a child.' Like when I was 7 or 8 years old I had already started drinking, smoking pot, taking mescaline, so like I never really had any kind of life experience being sober. You know, so-called normal or whatever. My whole life has been drugs, and, you know, crime and stuff like that. So he says, 'It took you that long to get like that, it's not going to be 2 years or 3 years or even 5 or maybe even 10 years before all that kind of dissipates.' It was—I mean, 200 guys, you know, probably like the nastiest meanest looking guys you ever seen and they're crying their eyes out like little babies, and it wasn't that I was like worried about crying in front of another man because I know there's nothing wrong with that... It's just that it doesn't ever come... Like I might be feeling upset about it, like this is a tragedy, this is terrible, and it just doesn't come. It's not there, you know. Like there's some kind of like void in me. It's not there. I don't know.

Breakdowns: Panic Attacks and Recklessness

At least five respondents, including one staff person, described panic attacks that they attributed to 9/11. Panic attacks often occurred while in transit, crossing a bridge, or during a delay in the

subway. One woman described undergoing an attack when she realized that she was close to Ground Zero. Another person was hospitalized when her anxiety culminated in a complete mental breakdown. She said at that point she knew *our world is coming to an end*.

Patients reported that during severe panic attacks they started to shake, cry, get goose bumps, were unable to breathe, and experienced memory loss. One person described her own experiences:

I get random panic attacks. Sometimes when I see too much—well, you know, or when I hear too many police things or too many engines—fire engines. Even today, you know, or extra helicopters. I get all upset... like I want to cry, I'm nervous, and I'm fearful to like, you know, I'm always looking out the window, looking for the jets, and all that stuff, the little fighter jets that go around, those F-14's, and always looking where I live. I live by the water, you know, you can see all these things.

Grief and Personal Loss

Nearly everyone identified with those who perished. Even individuals without direct ties to the victims were haunted by their deaths. They stayed up at night imagining how other people felt who had lost loved ones. Fourteen patients indicated they were still grieving the loss of close friends, coworkers, family, and other relatives. Four people who worked at the WTC lost coworkers. One woman lost her boyfriend who was one of the firefighters who never returned from the site. Another woman's sister was disabled after being crushed on the stairway of one of the Towers when trying to escape. Many people had a friend or relative they worried about, or knew someone who worked in the Towers or the vicinity as cooks, blue-collar workers, or professionals. One Hispanic man referred to the loss of his *Spanish brothers*; another lamented the death of fellow members of the International Brotherhood of Electrical Workers. There were also people who had several generations of family members who were firefighters and others, that had themselves, worked for years in the Trade Center as an electrician, stockbroker, cook, or messenger.

Those who were grieving were more likely to report being affected or extremely affected by the attacks (93 versus 69 percent). A few were experiencing "survivors' guilt." The loss of a boyfriend who was a fireman resulted in a downward spiral for one woman who felt she had lost her dreams and hope for happiness:

I'll tell you one thing, I was anticipating a relationship with this man. I really was. And I have been married but I'm not the relationship type of person, you know. I try to get away from them because I don't really believe in the fairy tale ending, and this just goes to show that it doesn't happen. No, it has contributed to my reasons of not believing in a happy ending. So I started getting high more and then when he didn't come back that was it. I think my abandonment issues started when my father left me, and then my daughter, how I left her. I feel that. I'll never get married. I'll never be happy but I can accept that right now. Destiny is written. If it'll happen it'll happen. If not, I can't change things. I can't control things. That's the bottom line... That put the icing on the cake. Yeah, it really put the icing on the cake...

Another man who unsuccessfully tried to locate and save his cousin's wife said:

She was on the 97th floor. After that, it was a month of us searching for her—going to every hospital, every shelter, you name it. We was going through every Red Cross. Yes. It was nonstop. No sleep, no nothing, just sleep for a couple of hours, wake up and go start searching again. Maybe, we was thinking, she was probably in a coma or unconscious and had amnesia or something, and maybe she didn't ID herself, but it was to no avail, you know. A couple of months later, we had a memorial for her but with no body parts, no nothing, you know, of herself and they started asking us for the DNA and the brushes and the hair samples, anything like that, to identify the body because they had gotten so many body parts and stuff like that. It took like 4 months after that they called us back and said, 'Listen, we found a match on the DNA,' and her torso and her thigh, and her heart was included. After that I was never the same. I mean, it was detrimental to me. I couldn't—I still can't sleep at night. They had me on medication here. They had me on Paxil because I was going through depression, because right after that I just started—in order for me to alleviate the thinking about it and the stress—I started looking towards drugs. I mean, before that I was—I was never into drugs or anything like that. I was introduced to this drug called ecstasy and the mind, you know, it enhances your emotions and stuff, so I would party instead of just sitting there depressed and staying home and not sleeping because if I hear a loud noise it's like I hear—I see a body falling again. ...And I'm walking around there barefooted and trying to get up to my cousin to where he was at to explain to him that I couldn't find his wife. It was devastating because I felt a lot of guilt inside of me and I felt like, you know, I was there, I should have been—and I was right there. I was in the building already. It couldn't have taken anything for me just to run away from the fire department but god knows that I would have been up there—I would have been in the building.

Another person lost his only close friend in New York City. One woman associated her depression with the loss of several friends. She said that she felt overwhelmed when she continued to hear about people she knew who had perished in the Towers:

Depression, you know, got more intense. Anxiety was much more common and more intense. And insomnia much worse... There was that cloud of 9/11 still hanging over. It just seemed like it just—you know, it was there. You think about it every time you look at a paper. You see another picture of somebody else they found. My God, I went to school with him or something like that, you know. It just—still—just recently I've had another kid who I went to school with; his father who was fireman and I just found out that he had died in 9/11. You know what? I mean, I am still hearing about people that I knew who died. People have a lot worse than I do... I just can only identify how it affected me.

Four people were meant to be working in one of the buildings on 9/11. One was late to work and hadn't quite reached the building yet. He recalled:

Everybody that I knew—okay, they're gone in that and even up to now that messes me up—and sometimes I have problems even with that now... the memory and all that, and I get so—I get so uptight when people start talking to me because... I think it affected me in a way that it shook me up. I got—I thought I was going to die. You know what I'm saying? Because the building just all of a sudden collapsed, and when the building started collapsing all of the smoke starting coming towards the people and the police started sending everybody to run. You know what I'm saying? So I'm grateful that, you know, I didn't—that the buildings didn't fall on me because—if I

had died, I'd want it to be quick like those people. I had a lot of images in my mind of them exploding... I heard that people turned into red mist, that they just, you know, kind of evaporated or something. And if I was going to go—and I mean I'm going to go sooner or later some time—I would appreciate a quick death... that would be better than a slow agonizing death. But, you know, I am trying to be healthy. That's why I got sober.

Another person said,

I actually—you know, I cried. I cried because, man, I said to myself, 'Wow, if I would have went to work that day,' I'm thinking about the work that I used to do. If I would have went, I wouldn't be here. I wouldn't—I won't be right here. You know what I'm saying? So it must have been a miracle for Him to allow me to oversleep and not get up on time. You know what I'm saying? It must have been.

Several people who were using drugs were also suicidal. A few cases of overdose were reported. As one woman, who was grieving the loss of a boyfriend who was a firefighter, explained:

Hell yeah, I overdosed. I put myself in situations where I was raped, beat up, thrown down stairs, something that I never did in my life. I never—I was never, you know, subject to that before. Yeah. Because I had the 'fuck its.' Fuck it, it's not going to happen, so why try. You know, settle for. And I didn't give a fuck. I really didn't. I tried to kill myself. About 6 months. Until I really couldn't—I tried killing myself, you know, everything built up and then I started seeking help... They talked me into it when they found me in the staircase bleeding... I don't even know if they threw me down the stairs. I know that's where I ended up... I was raped by two men. I overdosed with Xanax. That was another incident down the stairs. And I did things that I had never done before in my life... Something else would have went wrong, maybe. Nothing ever good happens. Nothing. I'm telling you there's no happy endings. There is none.

Patients also mourned the loss of the buildings—buildings that symbolized more than just the financial center of a great city. One person described them as the *heart of Manhattan*. A few people considered the buildings to be among the greatest in the world. Others, even those who hadn't previously liked them, said they missed them. Those that did not have a personal attachment still felt sentimental about the buildings. The skyline took on a new meaning. The absence of the Towers ineradicably altered the city. For many people, the view of the Towers was part of their daily urban landscape, one they saw from their homes or during the morning commute. Many felt upset each time they looked at the altered skyline. One parent reported that the Towers also meant a lot to her daughter. She thought that, *there's a piece of her that went with it*.

Immediately following the attack, a few individuals reported volunteering to help in the recovery and clean-up efforts. Five people volunteered to help at Ground Zero, but not everyone could handle it. Three individuals who had offered to help at Ground Zero also experienced post-traumatic stress—one prior to volunteering and the other two afterwards. One person was turned away when he revealed how traumatized he was, another three worked for only 1 to 3 days. Two decided the experience was too disturbing, the images too haunting. One said he had tried hard to forget the experience. The other was working without the knowledge of the officials organizing the effort; he feared that, as a Muslim, there might be harsh consequences if he was discovered.

As one person reported:

And they volunteered us so I worked there for like 3 days and all the stuff that I saw, you know, was nasty. I saw arms. I saw a stomach. I saw guts. And it was nasty. I even had to take—I was dreaming. I had bad dreams about that so I had to go over to Hartford to get some medicine to go to sleep.

Other Patient Medications

Many people were prescribed drugs for anti-depression, anxiety, and insomnia. More than one-half (40) of the patients reported being prescribed drugs (exhibit 13) for an array of symptoms, including being too *emotional*, needing help to *calm me down*, preventing hysterics, or *waking in the middle of night in a cold sweat thinking that they might be coming to bomb us all*. One person identified the medicine as *for nerves, the nerves that jab you with pain*. Others attributed their overall well-being to being properly medicated.

Exhibit 13. Patients Who Were Prescribed Medication on and After 9/11, by Gender¹ and Modality²

Modality	Male N (%)	Female N (%)	Total N (%)
Residential	2 (25)	2 (100)	4 (40)
Methadone	11 (50)	11 (85)	22 (63)
Outpatient	9 (56)	5 (36)	14 (47)
Total	22 (48)	18 (62)	40 (53)

¹ The percentage is calculated by gender of sampled respondents in each program.

² The percentage is calculated based on the number of the sampled respondents in each program modality.

Patients in methadone maintenance programs were most likely to be prescribed medications. Across modalities, women were more likely than men to be receiving prescription medications (62 vs. 48 percent).

Those who were already taking similar drugs prior to 9/11 had to have their dosages adjusted after 9/11. Many patients tried to make sure that the prescriptions were nonaddictive. Others sought prescriptions for drugs they had bought on the street, such as Xanax. Often respondents were on multiple medications. One woman reported being on *about 20 medicines all together*. Frequently, prescribed drugs included Xanax, Paxil, Elavil, Lithium, and Zyprexa.

A number of patients were critical of the tendency of physicians to automatically prescribe drugs. Three patients complained about being given prescriptions for medications instead of therapy. As one person put it, *I didn't want to be drugged by pills... because it's like taking drugs again*.

One resident who was suffering from PTSD described his experience:

Well, they seem to be, you know, real quick with the pen and the scripts... And I've done enough drugs. So, you know, because he wrote me a couple of scripts and then it was like, 'What's that?' And he goes, 'Well, it's a heavy tranquilizer.' And I said, 'Aren't we talking about that I don't feel anything?' 'And isn't this going to like, you know, kind of exacerbate that?'

Another respondent described being wary of addictive prescription medication and wanting to be alert rather than doped, or as he expressed it, *walking around like a zombie*.

Patients Experiences at Drug Treatment Programs

Methadone Maintenance

When 35 patients at 7 methadone maintenance programs were interviewed about their experiences at the agencies on 9/11 and afterwards, most noted that agencies were able to meet their need for methadone. While none of the seven methadone maintenance programs were forced to close, many patients attended methadone programs near where they worked (often far from where they lived) to ensure confidentiality. It was not always easy for them to reach their programs because of transportation problems, although most did reach their programs.

Most patients were able to meet with their counselors, when needed. Staff counseled anxious patients by phone and in-person. Staff reassured patients of the clinics' plans to remain open and to extend hours to accommodate regular and guest patients who had transportation problems. Some patients were anxious about getting access to medication in the near future, although one patient noted that methadone could always be purchased on the street. Several counselors reassured patients that medication would be available as a courtesy at other facilities, if they were unable to get to the program. As two patients conveyed:

So basically I was like—I was like, you know, in hysteria—because I said, 'Damn, you know, you mean to tell me I ain't going to be able to get to the program.'

You know, there's another thing that gets me kind of worried. It is what is going to happen if I can't make it one day. What happens when the train stops running? There's no buses that's going anywhere. There is an alert or something is going on. Nothing is coming into the city. I don't know. I mean, I don't want to go through no changes, but then I thought maybe I can go to the hospital. I don't know if they would believe me or not.

While many patients received take-home doses on a regular basis, no one mentioned receiving extra dosages in response to the attacks, primarily because agencies were able to remain open and operate normally. Methadone staff remained at work and patients who were able to get to the programs were medicated. Staff had a place to gather and talk to other patients and staff.

While some individuals had take-home privileges and therefore did not need to go to the agency for medication on 9/11, five patients did not go to their agencies even though they needed medication. One patient reported being too scared to leave her apartment, and another, who was also a recovering alcoholic, spent the day drinking heavily. They did not seem to have any serious physical effects from missing their daily medication. As one patient noted:

I was scared to even come to the program because I was scared that, you know, you never know they're going to bomb—I don't know, but that was my fear... it was tough. The cops came all out... We couldn't go outside. We couldn't walk.

Methadone patients who were unable to get their take-home doses because of transportation problems were referred to other programs as “guests,” but not everyone knew they could receive medication at another site. Only one respondent went to another agency in his neighborhood to get his regular dose of methadone.

Drug-Free Outpatient Programs

In contrast to the methadone and residential programs, drug-free outpatient programs followed the lead of most businesses and institutions in New York City and closed. Patients at three of the six drug-free outpatient programs indicated their programs had been closed after 9/11 and that they were unable to receive treatment services, although one patient remained in close contact with her counselor by phone. There was less concern by patients and administrators at drug-free outpatient programs when patients missed sessions. Often respondents reported not attending the program for days and even weeks. A few people decided to switch to different programs.

Other Drug Treatment Services

On and following 9/11, patients at many agencies found staff eager and willing to provide additional help through counseling, support groups, prayer groups, candle lighting and organized volunteer activities. Some agencies set up special programs to provide different types of support. As one person said, *we really—we just held each other. That's it. Everybody just embraced each other. And everybody just looked out and took care of each other.*

Many of the 75 patients felt that this was one time when everybody came together as one. It was noted by some respondents that staff were friendlier, there was more sharing, and there was an amazing *amount of unity*. Feelings of inclusion were expressed by minority group patients. One person said:

It wasn't because you're Black, you're White, you're this or that. I never seen people come so together—you know, just like everybody was there to help each other. No matter what color you were or whatever. It didn't really matter. Everybody seen everybody as someone who was suffering, somebody who's human, somebody who needed help basically.

One pregnant woman was amazed when the agency held a baby shower for her just days after 9/11 with as she put it, *all this stuff going on.*

Others commented:

Yeah, they were friendly but they got more—you know, they got to know me more better. They got more caring. More interested in me.

No. I saw more people pulling together at that point in time than I ever seen in a program in my life. They were all pro-America, you know, let's do this for our country, let's pitch in where we volunteer. We were volunteers. We were going to city hall, to rallies. They were having different little things here and there, you know.

At one agency, several patients indicated that there was no effort by program staff to provide special services. It was felt that this particular agency could have done more to help patients, such as operate support groups or discussions that specifically focused on the attack:

It was as though it didn't affect anybody around here. Not the director, not no one. It was like I was the only living soul around here that was in pain.

...Everybody was really caring about was the fact that it took place and what kind of preparations, you know, could there possibly be as far as administering our methadone. That was it. If we had any mental, physical, or psychological problems, it wasn't about to be shown.

One patient attributed her agency's lack of response to its location in the Bronx, which she viewed as a great distance from the World Trade Center.

So they had heard but this is the Bronx. It's not Manhattan. That's the feeling that I got, you know. It's the Bronx. We don't care about what's going on in Manhattan.

The experiences at each agency were different. Not all staff were empathetic and not all respondents wanted or had the opportunity to discuss their feelings. While many patients felt they needed additional support, others only wanted to go to their groups, talk with their counselors, get medicated, and then go home. Several respondents tried to repress memories of 9/11 and refused to explore the event in support groups. One patient felt that staff responded negatively to his *refusal to involve myself with any further discussions about the incident that had taken place. I just wanted to put it behind me.* Other participants, however, reported that staff at their agency did not force people to explore their feelings in groups. Respondents at another agency were critical of staff for not providing any 9/11-specific support groups or even addressing the issue in other forums. Patients who relapsed said their counselors expressed patience and understanding, and indicated that many other people did the same thing. Many respondents commented that the interviews were the first time they had discussed the event and their anxieties, and that they found it helpful to talk.

While most patients found agency staff to be supportive and available, some staff and a few patients said they did not feel that staff were as supportive as they could have been. One patient noted that her group leader was too upset because her brother worked at the WTC so the group ended early. Others also noted that staff appeared more distressed than patients. As two people noted:

The staff was definitely here but they were like more shocked than we was. And that day... they didn't try to help nobody or nothing because everybody was going through their own emotions about what's going on.

They were available but not to the extent that one would have liked, you know. It was like almost they needed comforting.

One patient said that there was a shortage of counseling staff at his residential program. In seeking therapy from counselors, some patients were disappointed by the tendency to address problems

primarily by prescribing medications. At one residential program, the 9/11 experience had dissolved firmly delineated roles and rules. As one patient remarked:

There was an improvement in the way they treated us. They treated us like—of course, where I was at, the counselors were like very snotty. They had a very bad attitude towards the patients and how they spoke to us. So basically after that incident they, I guess, came down to earth and came down to the same page that we was on as far as knowing that where we came from that's where they came from. You know what I'm saying? And the only thing is that they got a job now and they're a counselor but they was in the same boat we was in... the only thing is, like we're trying to change our ways just now.

When administrators and staff at one residential program located near Ground Zero realized the gravity of the attack, they focused their energies on organizing and providing help for people fleeing from the collapsing buildings. Doors were opened to anyone in need on the street, offering water, a place to clean up, and a bed to sleep in. As one patient commented:

They started offering people the use of phones. Jugs and cans of water were put on the corner... free drinks. Staff made signs as quick as they could with cardboard, which indicated there were free sodas, free drinks, free restrooms, food, telephones if available, and they opened up the entire building to the public immediately. No restrictions were made on the clientele at all. We were a therapeutic community for the public and we did as much as we could to help as many people as we could. And we—you know, it was amazing how many people we helped in such a short time. It continued all day. We had had many people sleeping there that night... [those who] lost their homes, couldn't get in touch with their families. They lived in the area. I did a lot of—I would say in therapeutic terms—patching up people, helping them deal with their feelings. I had graduated a therapeutic community years before and I had a lot of—you know, I had skills that could help people understand their feelings, identify their feelings, articulate their feelings... and help them try to let their feelings go. I did a little more counseling as a former resident. I was doing more counseling, helping the counselors there. Only because of my prior knowledge... since I graduated a program.

One resident reported that, at his residential program, people were using the events of 9/11 as an excuse to leave the program:

A few people used it as an excuse and they ran out the door saying, 'I got to go see my family.' Not being aware that what are you going to do for your family if they're okay and you just left treatment.

Perceived Need for Specialized Mental Health Services

Several respondents indicated they were referred through their program to a psychiatrist or a therapist. According to the patients, counseling sessions became more common and frequent. Often psychiatrists diagnosed depression or anxiety and then prescribed medication. However, patients with PTSD also needed access to specialized groups. Others, including administrators, were not ready to deal with their feelings.

Counseling for PTSD was not readily available. Two patients identified Project Liberty as having provided significant assistance and referral services. However, Project Liberty was not readily available to all patients, particularly those in residential programs. Patients also identified several needs that were not being fully met, including not only specialized counseling for PTSD but also bereavement counseling. There was a lack of services for individuals who were grieving or who had PTSD; individuals who were suffering PTSD because of 9/11 did not find existing support groups to be useful because they primarily addressed drug-related problems. As one person explained:

There's groups. I can't really—I talk about it [9/11], but I don't even want to talk about it because I feel like I don't want to go off the subject. Most people here are like really into crack and heroin and they got real issues like—my issue is real, but I just feel like they're just like totally off. It's like... it is a different level.

One patient, who had previously received help through Project Liberty, was unable to continue to receive needed therapy since being mandated by the courts to a residential program. The rules of the program prohibited him from receiving off-site services. In contrast, there was another respondent suffering from PTSD and heavy cocaine use who was able to get treatment for his drug use only after seeking mental health service through Project Liberty. Because he was not involved in the correctional system or mandated to a program, he was able to receive help for PTSD and a referral to drug-free outpatient drug treatment from Project Liberty:

I got to this program, through the Project Liberty... And I didn't admit my drug problem. I came in here with the excuse, I made 9/11 my problem. All I knew is I needed help.

One individual with PTSD who did relapse said that supportive services were essential to his recovery; particularly what he called the *strange concept like unconditional love*. It was through drug treatment that he found people, of whom he had been unaware, who were willing to help him. He noted that:

All I needed to do was call a couple of people and say I needed help and they were right away, bang, bang, bang, this is what you've got to do. What I know I need is to get back to fellowship [Alcoholics Anonymous] because I know that's the only thing that works for me, you know. For me, the fellowship is the only thing that will work because I tried just about everything else to get clean. And the only substantial amount of clean time that I ever put in was when I was in the Rooms going to meetings.

Bereavement counseling for those who personally suffered from the loss of a loved one was requested but not provided at one residential program. There were also individuals who were not receiving some of their former support services because they were too fearful to travel by train.

EXTERNAL SUPPORT RECEIVED BY PROGRAMS AND CLIENTS

Overview

Administrators were asked not only about the help their treatment programs received on 9/11 and afterwards, but also about help that they themselves could have used from Federal, State, and local

sources. Exhibit 14 indicates the major support services that were received in response to treatment program needs.

Exhibit 14. Support Services Received by Treatment Programs from External Sources, by Program Modality

Modality (n)	OASAS	Emergency Medicaid	Project Liberty
Methadone (7)	7	5	2
Drug-Free Outpatient (6)	4	3	3
Residential (2)	2	1	–
Total (15)	13	9	5

OASAS

Although staff respondents by virtue of their positions in their program hierarchy were not privy to all the help that was received, most were aware of help given to them by the New York State Office of Alcoholism and Substance Abuse Services. Thirteen of the 15 programs received such help. Most remembered the literature on trauma and recovery they received from OASAS, which proved helpful to both staff and patients.

Perhaps the most help provided by OASAS was the guidance to methadone programs on 9/11 and afterward. Four of the seven methadone program administrators remembered consulting with OASAS regarding guest patients and take-home privileges. Some also noted that OASAS promised and provided financial aid. In general, contacts with OASAS were supportive and appreciated by the programs. One administrator summed it up as follows:

OASAS is always helpful...It is very nice to get personal calls from the people who are responsible for our programs...it was a definite sense of support and a sense of family from the folks at OASAS.

Emergency Medicaid

The second most acknowledged source of help was “emergency” or temporary Medicaid, which became readily available. Administrators in 9 of the 15 programs reported the benefit for patients and programs, including 5 of the 7 methadone program administrators. Methadone administrators also noted that the temporary enrollment facilitated permanent enrollment. One administrator commented:

A large number of our patients received the emergency Medicaid, which, for a good number of them, just took the natural progression into permanent Medicaid.

Another administrator explained that:

A couple of patients for whatever reason kept getting denied... We told them, ‘Listen, if you go to this place you can get it right now, and it’s active for a certain period of time.’ They availed themselves of it... Whatever Medicaid issues they had unresolved before were resolved and so we were able to activate their Medicaid. That worked for us really well.

According to a residential program administrator, one of the reasons that temporary Medicaid worked so well was the ease of application:

They reduced the paperwork that was required to apply. It was just an easier system to negotiate and so we absolutely used that and that was very helpful.

A drug-free outpatient program administrator was particularly pleased with Medicaid help:

It was too bad that that just can't go on and that more people aren't eligible for Medicaid...Medicaid responded beautifully.

The secondary analysis of treatment admission data presented in Appendix A confirms the importance of Medicaid as a source of funding for treatment. Since 9/11, Medicaid funding has grown steadily, from 51 percent in the 6 months before 9/11 to a statistically significant 57 percent a year later.

Other External Support

A third source of help came from the Federal Government in the form of “Project Liberty.” This mental health initiative, with social workers and psychologists, provided disaster, trauma, and critical incident counseling as well as training to help staff help patients and each other. Five programs availed themselves of this help. One methadone administrator was particularly enthusiastic about Project Liberty:

Exceptional. Exceptional and timely. And when I say exceptional, that's what I mean. They were there on time. They had enough staff to do it and they had the right staff for the most part, and they were centrally located.

Programs also had hospital-based psychiatric services in place. There were in-house staff who were helpful in providing counseling, especially critical incident debriefing, which administrators generally found helpful for patients as well as for staff.

In addition, three administrators mentioned that the American Red Cross was helpful in providing training, assisting residential programs in locating family members, and in providing literature to patients and staff. Administrators also mentioned that assistance received from employee assistance programs was helpful to staff, as were community groups whose members called to offer assistance.

Six treatment program administrators indicated their staff provided help in the communities where they were located. This help included working in the communities as needed by programs that were hospital-based, working in local armories and firehouses doing counseling and acupuncture, and working with families who needed help.

Gaps in Services

When administrators were asked what gaps in service existed and what needs their programs had that were not addressed, they essentially talked about three types of services. First, methadone

program administrators clearly saw the need for better communication and a better mechanism to access and verify dosage information for guest patients. One methadone administrator in an isolated location in Brooklyn commented *that was really where the challenge came on that day.*

Second, administrators underscored the need for more psychological services during a disaster—on that day and for weeks and months afterward. Programs needed expertise in assessing Post Traumatic Stress Disorder, in conducting critical incident stress debriefing, and in providing bereavement counseling and relapse prevention. As one administrator put it, *We weren't prepared. We needed this training ahead of time, but how would you have known that.*

Although some services apparently existed, diagnosis and assessment of problems were limited, information may not have been disseminated well enough, and some people were not willing to travel to services. A consequence of such needs may have been a drop in census especially for drug-free outpatient programs. As one administrator remarked, there was a kind of hopelessness among patients: *They lost their hope in this fight for recovery.*

Third, a general need felt by five administrators was that a crisis or disaster plan should have been in place. There was the general lack of knowledge about what to do when confronted by the disaster and the prolonged uncertainty that followed. Although administrators recognized that this event was completely unexpected, they still did not want to feel so completely helpless. One administrator recalled questioning:

Where do we go from here?...How do we proceed day to day with this?...Where do you go? And I think that that was missing.

An administrator of a drug-free outpatient program felt that having a crisis plan would have allowed them to mobilize and do much more than they did on 9/11 and afterward. She said:

We could have used a plan...a crisis plan to mobilize people. Something a little bit more organized than...how it kind of played out.

RECOMMENDATIONS BY PROGRAM ADMINISTRATORS

When administrators were asked about the lessons learned and the recommendations they would make in light of their experiences on 9/11 and its aftermath, each had one or more discussion points; Exhibit 15 highlights the major recommendations made by administrators.

Exhibit 15. Recommendations for the Future Made by Program Administrators by Program Modality

Modality (n)	More Services for Mental Disorders	Better Communication	Disaster Plans
Methadone (7)	3	5	3
Drug-Free Outpatient (6)	5	1	1
Residential (2)	2	1	1
Total (15)	10	7	5

More Services for Mental Disorders

Clearly, the need for mental health services—including diagnostic services—to deal with trauma, critical incident stress debriefing, and Post Traumatic Stress Disorder for patients as well as staff were the most frequently mentioned services; 10 of the 15 administrators made recommendations regarding these needs. This kind of expertise was missing. Several administrators recognized that many patients had been traumatized in their lives and could benefit from this kind of expertise in any case. One administrator underscored the importance of hiring *more professionals who have specific training in trauma. The treatment of trauma, but that is always a thing. Our population is a traumatized population.*

Other administrators saw the special need for the kind of crisis that was experienced:

It would be nice to have someone trained specifically for situations like 9/11 to do some kind of critical incident stress debriefing or, you know very specific PTSD training. Maybe to help train the rest of the staff.

Another administrator recommended that should such a crisis take place again, she would want to see *an independent person that comes on board to make sure that people are okay.* This was the kind of help her program needed because *it was like we were all patients.*

Fitting neatly into this recommendation, another administrator suggested the mobilization of professionals *like a critical incident stress management team,* to be deployed as needed.

Improved Communication

As exhibit 15 indicates, the need for a more reliable communication system was the second most important need and recommendation discussed by administrators. By modality, this need was particularly underscored by five of the seven methadone program administrators, especially for verification of dosages and for patients to call in to determine program availability.

In general, the use of phones, including cellular phones, was mentioned repeatedly as an important adjunct to the work of the programs. For instance, one program had a 24-hour answering service so a patient could be in touch at any time. Another administrator had an answering machine message that advised patients about the opening and closing of the program. Two drug-free outpatient program administrators discussed the importance of the telephone for conducting therapy sessions when the patient and the therapist could not meet at the program. It was felt that outreach to patients by telephone could have been used more frequently at this critical time, and having an improved and more reliable phone system was an important priority.

Disaster Plans

The need for disaster planning was discussed by five of the administrators. Although most of the programs have plans in place—especially the hospital-based programs—many plans are not taken as seriously as they should. Since 9/11, many programs have become more concerned about these issues. One methadone program administrator described what has happened at her program:

After that we had a number of disaster drills, making sure staff have flashlights, and the emergency generator works, and we know who calls who, and who does what. There has also been talk about having some kind of a registry so that we would know all of our patients... The problem with that is, if it's computer-based there's no guarantee that computers are going to be up and running. So that's one of the things there has been back and forth discussion about. We've had two disaster drills since 9/11. I think they're planning to do them like once every 6 months so we can make sure and just run through what would happen. There is talk about putting cots here in case we can't get out, there's a snowstorm or whatever, and people need to sleep here. You know, there's talk about doing stuff like that and having all those things available in the event that we need them.

In summary, nine administrators indicated specific measures they have already taken to improve their disaster preparedness. These measures include checking the working of cellular phones, the frequent updating of lists of addresses and telephone numbers of staff and patients, developing evacuation procedures, checking flashlights and generators, and conducting more disaster drills. Fire alarms and fire drills have also become much more important.

Planning by Modality

Other lessons learned were more specific to treatment modalities. As expected, most methadone program administrators were concerned about ways to accommodate patients in emergencies when they could not attend their own programs. Suggestions included having hospitals dispense methadone in case of an emergency, having methadone mobile vans go to sites where they are needed, having a hotline dedicated to verifying dosage, and setting up partnerships with methadone programs in other parts of the city—*if anything happens, you know automatically you're in our database*. Having a communication system that can be relied upon—possibly with backup—was basic to the recommendations made by methadone program administrators.

One of the residential program administrators was particularly concerned about having a residential facility that is viewed as a health care facility with at least a backup power system. He stated, *Loss of power is a big thing for us, and there should be a long-term strategy to fix that*. He was also concerned about insurance premiums that are likely to increase as a result of 9/11. He said:

I think that the State or the Federal Government should, in fact, come to the aid of nonprofits—I'm going to say substance abuse and mental health facilities—to help underwrite insurance premium costs.

Finally, drug-free outpatient administrators saw the particular value of increased mental health services for patients. A recommendation stated before was the value of “phone sessions” when staff and patients cannot come together at their program site. One administrator commented, however:

The insurance companies will not pay us to do phone sessions. It has to be face-to-face contact... What I would want to do if this ever happened again is be able to call people on the phone...I would like to be able to offer that comfort to people who are in our program.

Interestingly, another drug-free outpatient administrator was able to conduct therapy sessions via the phone. Given the fact that that program was close to Ground Zero, insurance reimbursement was forthcoming for what was considered emergency sessions.

The general consensus seemed to be: “We need to be better prepared.” The variety of lessons learned and recommendations made indicate the several main areas where that might take place.

4. CONCLUSIONS AND RECOMMENDATIONS

Attempting to extrapolate from the results of this study may be problematic because of the limitations of interview data. Although self-report has been found to be reliable, studies based on self-reporting may suffer from recall and report bias. In this case, there was a reliance on the recall of individuals about their experiences and behaviors before and after September 11, 2001, an event that occurred more than a year before the interviews. Nevertheless, while the recollection of events may not always be fully accurate, particularly regarding sensitive issues such as substance use, much of what was recounted does reflect the respondents' perception, interpretation, and memory of the attacks on 9/11 and events following.

The lives of many administrators and patients alike were dramatically altered by the 9/11 attacks, not only in terms of mental welfare and patient drug use but also philosophically and politically. In general, programs managed to respond to the emergency and patients reported being well treated, and in most cases, having their needs met. The experience at drug treatment programs has highlighted potential service needs in the area of staff training, technical assistance, and program and systems development.

The attacks on 9/11 were clearly a visceral experience that affected many patients' drug use, recovery, and mental health. Although there were incidents of relapse and escalating drug use on and after 9/11, the relationship between drug use and trauma is not straightforward. For example, relapse among methadone patients was not much higher than usual and it was lower than in drug-free outpatient treatment (37 vs. 50 percent). Relapse among methadone patients may have been mediated by the methadone. Other factors that may account for the lower rates of relapse among methadone clients include greater access to services because, unlike drug-free outpatient programs, the methadone maintenance programs remained open on 9/11. Men who were in treatment programs reported higher rates of relapse than women in all treatment modalities (67 vs. 11 percent). Women may have been less likely to relapse because of the importance they placed on their families. They were also more likely to be taking prescription medication. For many people in recovery, the experience strengthened their resolve to remain clean, productive, and connected to their family. The depth of the tragedy forced many to confront mortality and reassess the direction of their lives. The resiliency demonstrated by many patients was largely influenced by concern for their families.

The impact of the attacks on mental health is less ambiguous. Clearly, there was a range of responses, with some individuals at higher risk for severe reactions and trauma. Women were most likely to report being extremely affected by the attacks, as were individuals who had suffered previous traumas or personal loss. Although women suffered more psychological distress than men, they had, as noted earlier, lower rates of relapse and were more likely than men to be receiving prescription medications (62 vs. 48 percent). These findings, along with recommendations, are summarized below.

Problems Experienced by Treatment Programs

The effects of 9/11 on substance abuse treatment programs seemed to uncover new problems and exacerbate old problems. A new problem that seemed to surface involved the sensitivity of drug-free outpatient programs to the crisis. Overall, drug-free outpatient programs were more likely than other treatment modalities to close on 9/11 and sometimes days afterward, to have retention problems when they did reopen, and to experience financial problems as a result.

Recommendation: Although it is difficult to generalize from the six sampled drug-free outpatient programs to the larger system, the common experience was strongly suggestive. With the closing of programs and the difficulty in communication, treatment activity was limited in the first days following the tragedy. When telephone communication is possible in such disasters, each program needs to engage in active outreach to patients to check on their well-being and to make appointments for phone sessions if face-to-face contact is not possible. Insurance companies need to be made aware of the importance of this type of service and provide reimbursement at such critical times.

Another problem uncovered by the 9/11 tragedy concerned the reaction of staff members. Although some staff members were extremely heroic and came to work under very difficult circumstances, others suffered emotional and mental health problems and functioned poorly at their jobs.

Recommendation: Although disaster preparedness is difficult to teach, our country as well as other countries have valuable experience and have developed training around disasters and other traumatic experiences. This knowledge should be included in preparing and developing staff in the field of substance abuse, especially counselors and therapists. According to administrators, this training is helpful in dealing with patients and also to staff in terms of what is expected from them and how they deal with their own problems.

A third problem that surfaced was the limitations in the telephone communication system. Clearly, telephone communication is vital to everyone; it is especially vital in crisis situations in treating patients with a sensitive, relapsing disability such as substance abuse.

Recommendation: Treatment programs need to reevaluate their communications system in the light of recent experience. The use of more cellular phones, especially when staff and patients are in the field, should be considered. The use of walkie-talkie communication devices should also be considered so staff may be in direct contact with one another. Given the communication technology of the day, many devices need to be evaluated as part of primary systems, as do backup systems.

Perhaps an old problem that was surely exacerbated by the tragedy concerned patients' mental health status. Although many patients showed little response, others showed severe reactions that may have been provoked by their own personal histories.

Recommendation: Treatment programs need to reevaluate and upgrade their ability to identify and diagnose mental health problems as well as refer patients who are symptomatic to appropriate

services. Program staff also need to monitor the progress of patients after a traumatic experience to determine lingering effects, and, perhaps, delayed reactions.

Special Problems Regarding Methadone Maintenance Treatment Programs

The angst experienced by administrators of methadone programs with regard to dispensing methadone to “guest” patients when dosage levels could not be verified, as well as giving take-home doses to all patients, was conveyed by six of the seven program administrators in the sample. With the risks involved in dispensing methadone, one administrator summed up the situation, “I think we were very lucky in the State that no tragedy occurred...because we operated blindly.”

Recommendation: Federal and State guidelines need to be reviewed and revised in light of the experiences of 9/11 regarding dispensing methadone to guest patients when verification is not possible and giving extra take-home doses at critical times. Once issued, guidelines should be well-disseminated throughout the system of programs, and, in turn, disseminated to staff. Methadone patients also should be very familiar with procedures and options should their programs not be functioning or if they cannot reach their programs.

A pattern of benzodiazepine use—both licit and illicit—seemed to develop among patients after 9/11, especially among methadone patients. Although the need for such medication at such times is understandable, there seemed to be a divergence of opinion among administrators about the advisability of prescribing these drugs for patients, mainly because of their addiction potential.

Recommendation: Addiction specialists need to consider this issue and advise the field about the appropriateness of prescribing benzodiazepines and similar anti-anxiety and anti-depression medication. Patients also need to be advised about the dangers involved in taking such addictive medication.

Patients and Drug Use

Men in all treatment modalities were much more likely than women to report relapse on or following 9/11. Women were more likely, however, to be deeply disturbed by the attack on and following 9/11 and to be prescribed medication.

Recommendation: Programs need to be aware of the signs of relapse or emotional distress and the fact that men and women may react differently to the same stressors. Many factors may mediate the use of drugs, including access to programs and a concern for other family members, particularly children.

Many, but not all, respondents attributed relapse and increases in drug use to the events on and following 9/11. Others indicated it was part of a general pattern of drug use or that there were other significant stressors in their lives at the time, such as being homeless, living in a shelter, or being diagnosed with HIV.

Recommendation: While staff need to be able to identify those at higher risk for relapse, they also must remain aware that everyone may be at risk for relapse. Following a crisis, there should be a reassessment of all patients' mental health, drug use, and treatment plans.

Many people in drug recovery reported an increase in alcohol use on 9/11 and in the following days and weeks. Sometimes, but not always, this was in conjunction with drug use.

Recommendation: There is a need for research to assess the extent of alcohol use in treatment populations and the role alcohol plays in rehabilitation efforts.

According to two administrators at methadone agencies, approximately one-third of patients will have dirty urines at any time; therefore, the relapse rate of 37 percent in methadone treatment programs was only slightly higher than this norm and was lower than in drug-free outpatient programs. Patients in methadone maintenance who relapsed were also the least likely to report being affected by the attacks. This may reflect the longer involvement with recovery among methadone patients, easier access to service, or the use of other prescription medications. Twenty-two (63 percent) of the patients in methadone treatment were taking prescription medication. On the other hand, the rates of relapse may be typical at each program and unrelated to 9/11.

Recommendation: Programs need to engage patients in services to prevent relapse. In this context, access to programs in preventing relapse should be explored.

While many people attributed relapse to 9/11 to fear, coping, anger, forgetting, a desire to numb feelings, suicidal urges, a response to grief, and problems sleeping, others felt that it had enhanced their resolve to remain sober. Still others who had relapsed said it would have happened irrespective of 9/11. Despite hardships, many positive lessons resulted from the experience. It helped strengthen some respondents existing resolve not to use drugs. People who focused on family appeared to have benefited from the experience in terms of remaining drug-free.

Recommendation: Programs need to engage patients in services that foster positive experiences and healthy priorities, such as family or volunteer activities that do not entail recovery efforts, such as those at Ground Zero. These activities may enhance patients resolve to remain drug-free.

Direct exposure of volunteers to the horror of the attack in the recovery effort at Ground Zero invited additional trauma and stress that could contribute to relapse, particularly for those who have a history of PTSD.

Recommendation: Individuals who have suffered PTSD or community violence should be advised against volunteering in recovery efforts. Other volunteer activities, however, may be appropriate.

Mental Health Issues

The majority of respondents felt personally affected by the attacks on the WTC and identified with the victims and survivors. The depth of the impact was affected by proximity to the attack, personal experience of loss, history of previous trauma, and identification with the victims and the Towers. Twenty-nine percent of the respondents reported that they were not personally affected by the events of 9/11, while 39 percent indicated they felt personally affected, with an additional 31 percent being 'extremely affected.' Respondents who survived the attacks and witnessed the destruction displayed the most signs and symptoms of emotional disturbance, guilt, and trauma, and were later diagnosed as suffering from PTSD. Women were more likely to report being extremely affected by the attacks, 38 percent compared with 28 percent of men, but were not more likely to relapse. Ninety-two percent of patients who reported being extremely affected were taking prescription medication. Among the most severe cases were two people who reported having a mental breakdown, seven who suffered from post-traumatic stress, and five who were experiencing panic attacks. A few individuals experienced flashbacks related to Vietnam, rape, and, in one case, a murder committed in self-defense.

Recommendation: Programs need to be aware of patients who are at higher risk for PTSD, for example, veterans and others who have witnessed community or familial violence and other traumas. A standard approach to diagnosing and addressing PTSD among substance users and individuals in recovery is needed. In addition, research is needed to better understand the complex relationship between drug use and PTSD.

Many people were prescribed medications for depression, anxiety, and insomnia. More than one-half (40) of the 75 patients reported being prescribed drugs for an array of symptoms. Some administrators were acutely concerned about the use of addictive medications such as benzodiazepines.

Recommendation: Programs need to be attentive to the special needs of those who are grieving or suffering from PTSD. Many patients indicated they would prefer an alternative therapeutic treatment that addressed PTSD, one that did not rely mainly on prescription drugs. Research is needed to demonstrate the role of prescription medication among drug users and recovering addicts in relation to recovery, relapse, and well-being.

Although symptoms of depression and PTSD among New Yorkers may be on the decline, it is not clear whether stress will diminish, given the ongoing threats associated with terrorism. The chronic nature of stress associated with terrorism may contribute to lingering anxiety and relapse.

Recommendation: Programs may need to reassess patients' mental health during periods of heightened security in response to threats of terrorism. Patterns of relapse and drug use should be monitored in relation to terrorist threats and "orange alerts."

Many patients indicated that they had no opportunity to discuss their fears and problems following the attacks on 9/11, and therefore, did not receive needed counseling. Even less severe symptoms indicative of mild PTSD may circumvent activities of daily living and contribute to isolation. These include hypersensitivity to buildings, public transportation, and sounds.

Recommendation: Outreach may be needed to engage seemingly asymptomatic patients into supportive services to allay lingering fears attributed to 9/11. Counselors need to be aware of the range of symptoms related to chronic stress and trauma. They may also need training in providing interventions for a range of symptoms, from mild to severe stress and trauma.

Availability of Support Services from External Sources

Support services that were particularly helpful to treatment programs in the months after 9/11 included those provided by OASAS, Project Liberty, and Medicaid. Project Liberty, a mental health program, provided much-needed training and counseling; emergency Medicaid, with its ease in processing and financial assistance, provided the wherewithal for some to enter treatment for the first time and for others to remain in treatment.

Recommendation: Although these government-supported programs were provided to alleviate problems in the short-term, perhaps 6 months to a year or more after 9/11, the programs are really needed for a longer period of time. Many staff members throughout the treatment system can still benefit from Project Liberty expertise in dealing with trauma, especially if training and counseling are provided onsite. (Project Liberty is scheduled to end on December 31, 2003.) Similarly, Medicaid assistance provided much needed financial help to both patients and programs. Rather than being temporary, these benefits should be made permanent for those who avail themselves of treatment during such critical times.

Summary of Lessons Learned

Many lessons were learned as a result of the tragedy, especially the need for more services for mental health disorders and the need for a better telephone communication system. A third lesson concerned the need for disaster preparedness. Although many programs have had to prepare disaster plans for different types of emergencies, frequently these plans have not been taken seriously and are now being upgraded in light of the 9/11 experience.

Recommendation: Efforts should be made on the part of government agencies overseeing treatment programs to convene meetings between program administrators and experts in disaster preparedness. These efforts would result in an understanding of the basic steps a program would need to take to be prepared for a disaster should one happen, with periodic drills and updating of staff and patient information. Ideally, this should include networking between treatment programs as well as community agencies, such as hospitals, shelters, and food kitchens. Both staff members and patients need to be included in the planning and in the preparedness.

BIBLIOGRAPHY

Associated Press. "9/11 Caused Stress in Many Americans." (September 11, 2002) Available online at <<http://www.intelihealth.com/IH/ihtIH/EMIHC000/333/333/355103.html>>.

American Psychological Association. Dr Silver, press release May 15, 2002. Available online at <<http://www.apa.org/releases/2002newsrel.html>>.

Blake, D.D. "Psychological Assessment and PTSD: Not Just for Researchers." *NCP Clinical Newsletter* 3(1):16–19 (Winter 1993).

Brady, K.T., and Sonne, S.C. "The Role of Stress in Alcohol Use, Alcoholism Treatment, and Relapse." *Alcohol Research & Health* 23(4):263–271 (1999).

Bravo, M.; Rubio-Stipec, M.; Canino, G.J.; Woodbury, M.A.; and Ribera, J.C. "The Psychological Sequelae of Disaster Stress Prospectively and Retrospectively Evaluated." *American Journal of Community Psychology* 18:661–680 (1990).

Brown, P., and Wolfe J. "Substance Abuse and Post-Traumatic Stress Disorder Comorbidity." *Drug and Alcohol Dependence* 35:51–59 (1994).

David, D.; Mellman, T.A.; Mendoza, L.M.; Kulick-Bell, R.; Ironson, G.; and Schneiderman, N. "Psychiatric Morbidity Following Hurricane Andrew." *Journal of Traumatic Stress* 9:607–612 (1996).

Everly, Jr., G.S. "Crisis Management Briefings (CMB): Large Group Crisis Intervention in Response to Terrorism, Disasters, and Violence." *International Journal of Emergency Mental Health* 2(1):53–57 (2000).

Galea, S.; Ahern, J.; Resnick, H.; Kilpatrick, D.; Bucuvalas, M.; Gold, J.; and Vlahov, D. "Psychological Sequelae of the September 11 Terrorist Attacks in New York City." *New England Journal of Medicine* 346(13):982–987 (2002).

Gibbs, J.P. "Conceptualization of Terrorism." *American Sociological Review* 54(3):329–340 (1999).

Green, B.; Grace, M.; Linday, J.; Gleser, G.C.; Leonard, A.C.; and Kramer, T.L. "Buffalo Creek Survivors in the Second Decade: Comparison with Unexposed and Nonlitigant Groups." *Journal of Applied Social Psychology* 20:1033–50 (1990).

Green, B.K.; Korol, M.; Grace, M.C.; Vary, M.G.; Leonard, A.C.; Glesser, G.C.; and Smitson-Cohen, S. "Children and Disasters: Age, Gender, and Parental Effects on PTSD Symptoms." *Journal of the American Academy of Child and Adolescent Psychiatry*, 30:945–951 (1991).

Jacobsen, L.K.; Southwick, S.M.; and Kosten, T.R. "Substance Use Disorders in Patients With Posttraumatic Stress Disorder: A Review of the Literature." *American Journal of Psychiatry* 158:1184–1190 (2001).

Laor, N.; Wolmer, L.; and Cohen, D.J. "Mothers' Functioning and Children's Symptoms 5 Years After a SCUD Missile Attack." *American Journal of Psychiatry* 158:1020–1026 (2001).

Lima, B.R.; Pai, S.; Toledo, V.; Caris, L.; Haro, J.M.; Lozano, J.; and Santacruz, H. "Emotional Distress in Disaster Victims: A Follow-Up Study." *Journal of Nervous and Mental Disease* 181:388–93 (1993).

Messina, J. "Attack Anxiety Triggers Jump in Illegal Drugs." *Crain's New York Business* (November 12, 2001). Available online at <<http://crainsny.com/page.cms?pageeld=399>>.

Murphy S. "A Status of Natural Disaster Victims' Health and Recovery 1 and 3 Years Later." *Research in Nursing and Health* 9:331–40 (1986).

National Center for PTSD. "Disasters and Substance Abuse or Dependence: A Fact Sheet from the National Center for PTSD." (October 4, 2001). Available online at <<http://www.ncptsd.org/disaster.html>>.

National Opinion Research Council. "Has America Recovered From 9/11? Study Finds Mixed Response." Chicago: University of Chicago Press (October 2001). Available online at <<http://www.norc.uchicago.edu/projects/reaction/index.asp>>.

New York City Board of Education. "Effects of the World Trade Center Attack on NYC Public Schools: Initial Report to the Board of Education" (May 6, 2002).

Norris, F.H. “50,000 Disaster Victims Speak: An Empirical Review of the Empirical Literature, 1981–2001.” National Center for PTSD and The Center for Mental Health Services (SAMHSA) (2001).

Norris, F.H. and Everly, Jr., G.S. “Crisis Management Briefings (CMB): Large Group Crisis Intervention in Response to Terrorism, Disasters, and Violence.” *International Journal of Emergency Mental Health* 2(1):53–57 (2000).

Norris, F.H.; Perilla, J.L.; Riad, J.K.; Kaniasty, K.; and Lavizzo, E.A. “Stability and Change in Stress, Resources, and Psychological Distress Following Natural Disaster: Findings from Hurricane Andrew.” *Anxiety, Stress, and Coping* 12:363–396 (1999).

North, C.S. “Psychosocial Consequences of Disasters: Final Report to NIMH for Grant RO1 MH 040025” (2001).

North, C.S.; Nixon, S.J.; Shariat, S.; Mallonee, S.; McMillen, J.C.; Spitznagel, E.L.; and Smith, E.M. “Psychiatric Disorders Among Survivors of the Oklahoma City Bombing.” *Journal of the American Medical Association* 282:755–762 (1999).

North, C.S.; Smith, E.M.; and Spitznagel, E.L. “Posttraumatic Stress Disorder in Survivors of a Mass Shooting.” *American Journal of Psychiatry* 151:82–88 (1994).

Office of National Drug Control Policy. *Pulse Check—Special Topic: The Impact of September 11*. Washington, DC: ONDCP (April 2002).

Pfefferbaum, B.; Nixon, S.J.; Krug, R.S.; Tivis, R.D.; Moore, V.L.; Brown, J.M.; Pynoos, R.S.; Foy, D.; and Gurwitch, R.H. “Clinical Needs Assessment of Middle and High School Students Following the 1995 Oklahoma City Bombing.” *American Journal of Psychiatry* 156:1069–1074 (1999).

Rand Health Archive, Rand Health. “Research Highlights After 9/11: Stress and Coping Across America” (September 2002). Available online at <<http://www.rand.org/publications/RB/RB4546/>>.

Schuster, M.A.; Stein, B.D.; Jaycox, L.H.; Collins, R.L.; Marshall, G.N.; Elliott, M.N.; Zhou, A.J.; Kanouse, D.E.; Morrison, J.L.; and Morrison, S.H. “A National Survey of Stress Reactions after the September 11, 2001, Terrorist Attacks.” *New England Journal of Medicine* 345(20):1507–1512 (2001).

Shariat, S.; Mallonee, S.; Kruger, E.; Farmer, K.; and North, C. "A Prospective Study of Long-Term Health Outcomes Among Oklahoma City Bombing Survivors." *Journal of the Oklahoma State Medical Association* 92:178–186 (1999).

Schlenger, W.E; Caddell, J.M.; Ebert, L.; Jordan, B.K.; Rourke, K.M.; Wilson, D.; Thalji, L.; Dennis, J.M.; Fairbank, J.A.; and Kulka, R.A. "Psychological Reaction to Terrorist Attacks: Findings From a National Study of American's Reactions to September 11th." *Journal of the American Medical Association* 345:1507–1512 (2002).

Smith, D.W.; Christiansen, E.H.; Vincent, R.; and Hann, N.E. "Population Effects of the Bombing of Oklahoma City." *Journal of the Oklahoma State Medical Association* 92:193–198 (1999).

Solomon, S.D., and Green, B.L. "Mental Health Effects of Natural and Human-Made Disasters." *PTSD Research Quarterly* 3(1) (1992).

Stein, B.D., and Myers, D. "Emotional Sequelae of Disasters: A Primary Care Physician's Guide." *Journal of American Medical Women's Association* 54:60–64 (1999).

Substance Abuse and Mental Health Services Administration. *Results from the National Household Survey on Drug Abuse and Health: National Findings*. (Office of Applied Studies, NHSDA Series H-22, DHHS Pub. No. SMA03-3836) Rockville, MD: Author (2003).

Talan, J. "The Emotional Impact of 9/11." *Newsday* (September 10, 2002). Available online at <<http://www.newsday.com/news/health/ny-dsspdn2917725sep10.story>>.

Turner, S. "Terror Aftermath on Psychiatric Patients, Study Shows." *Brown University News Service* (May 20, 2002). Available online at <<http://www.brown.edu>>.

Ursano, R.J.; Fullerton, C.S.; Vance, K.; and Kao, T.C. "Posttraumatic Stress Disorder and Identification in Disaster." *American Journal of Psychiatry* 156:353–359 (1999).

Vlahov, D.; Galea, S.; Resnick, H.; Ahern, J.; Boscarino, J.A.; Bucuvalas, M.; Gold, J.; and Kilpatrick, D. "Increased Use of Cigarettes, Alcohol, and Marijuana among Manhattan, New York, Residents after the September 11th Terrorist Attacks." *American Journal of Epidemiology* 155(11):988–996 (2002).

APPENDIX A. QUANTITATIVE ANALYSIS: RECENT TRENDS IN ADMISSIONS TO NEW YORK CITY SUBSTANCE ABUSE TREATMENT PROGRAMS

To understand the impact of the World Trade Center disaster on New York City's substance abuse treatment system from as many sources as possible, information from the Client Data System (CDS) of New York State's Office of Alcoholism and Substance Abuse Services was analyzed. The CDS treatment records include a variety of data/information about each patient admitted to treatment in New York City and the State. The vast majority of treatment programs in the State are included in the CDS. Treatment admission data show changes that may be taking place in the treatment system as a result of the characteristics of patients who are entering treatment.

Table A on the following page shows trend data from the CDS for time periods surrounding 9/11. A 6-month time interval starting with 9/11 was chosen so the effects of local, short-term, and temporary disruptions to the system that occurred immediately after the disaster would be mitigated. Once this 6-month interval was selected, all comparative time intervals were similar 6-month intervals, before or after 9/11. Table A presents results for three 6-month intervals: preceding 9/11 (3/11/01–9/10/01), following 9/11 (9/11/01–3/10/02), and the subsequent 6 months (3/11/02–9/10/02).

As shown in table A, there was almost no differences in total admissions to treatment between the periods before and after 9/11, but a 7-percent increase in the subsequent period, compared to the period immediately after 9/11. Do these differences suggest a delayed response to 9/11? Another difference between the 3 periods is the seasons in which they occur: spring and summer, autumn and winter, and then spring and summer again. To evaluate seasonal effects, the same statistics are presented for the six preceding 6-month intervals in Appendix B. To facilitate comparisons for each of the 6-month intervals of interest, Appendix C shows cumulated comparative statistics for the corresponding periods of the 3 preceding years. The total admissions from Appendix C demonstrate that the differences in these admissions in the three periods of interest may, in fact, be attributed to seasonal trends. The historical comparison sets in Appendix C show little difference between admissions in spring/summer and the following autumn/winter, but they do show a 7-percent increase between autumn/winter and the following spring/summer.

Table A. Semi-Annual Trends in Admissions to New York City Substance Abuse Treatment Programs by Selected Characteristic and Percent: 3/11/01–9/10/02

Characteristics	3/11/01–9/10/01	9/11/01–3/10/02	3/11/02–9/10/02	Statistical Significance
Total Admissions	35,210	35,632	38,306	
Service Modality				
Crisis Services	28	29	30	(a)
Drug-Free Outpatient	35	34	35	
Methadone	20	20	18	
Inpatient Rehabilitation	2	3	3	
Residential	15	14	13	
Primary Substance of Abuse				
Heroin (Injected)	20	20	20	
Heroin (Not Injected)	32	32	31	
Crack	16	15	15	
Cocaine	10	10	11	
Marijuana	18	18	18	
Secondary/Tertiary Alcohol Abuse	42	40	41	
Intravenous Use	21	22	22	
Median Age (Years)	36	36	37	
Percent Male	74	75	75	
Race/Ethnicity				
White	18	18	18	
Black	40	39	39	
Hispanic	39	41	41	
Other	2	2	3	
Employment at Admission				
Full Time	14	12	12	(a)
Part Time	4	3	4	
Unemployed	61	63	64	
Not In Labor Force	22	21	20	
Source of Funding for Treatment				
Medicaid	51	56	57	(a) (b)
Private	5	5	6	
Self Pay	12	12	12	(a) (b)
Other	15	13	13	
None	17	14	13	

SOURCE: New York State Office of Alcoholism and Substance Abuse Services Patient Data System

- (a) Statistical significance at .000001 level, using Pearson Chi-square, when comparing data for 9/11/01–3/10/02 with 3/11/01–9/10/01, controlling for seasonal variation.
- (b) Statistical significance at .000001 level, using Pearson Chi-Square, when comparing data for 9/11/01–3/10/02 with 3/11/02–9/10/02, controlling for seasonal variation

Overall Characteristics of Treatment Admissions

The most common type of treatment admission was drug-free outpatient, followed by crisis services, methadone, and residential, with few inpatient rehabilitation admissions. Since crisis service patients have such short treatment stays, they constitute only a small proportion of patients in

treatment on any date, and for this reason, were excluded from all subsequent statistics about treatment admissions.

Heroin is the primary substance of abuse for nearly one-half of the admissions; less than one-half of these admissions inject heroin. The next most common substance reported by patients admitted to treatment is crack/cocaine, with crack more often reported as the primary substance of abuse than powder cocaine. (When crack or cocaine is the primary substance of abuse, the other is usually the secondary substance.) For most other patients, marijuana is the primary substance of abuse. Patients for whom alcohol is the primary substance of abuse were excluded from all these analyses, but about two-fifths of the admissions report alcohol as a secondary or tertiary substance of abuse.

The median age of admissions is in the mid-30s. Almost three-quarters of admissions are male. Hispanics and Blacks each represent about two-fifths of the admissions; most of the rest are Whites.

Only about one-sixth of the patients are employed, most full-time. Most others are in the labor force, but not employed. Excluding admissions for whom the source of funding is unknown (since this information was not collected at admission to treatment), more than one-half are funded by Medicaid, with most of the rest evenly divided among self pay, other, and none; a few have private insurance.

Statistical Analyses of Trends

Since seasonal variation may also account for some differences in characteristics of patients admitted in the three time intervals, it is necessary to interpret differences in comparison to the historical characteristics for the corresponding times. Using Pearson's Chi-square for a two-by-two contingency table, the main time period of interest (9/01–3/02) was compared to the previous 6 months, (3/01–9/01), with comparable time periods in the previous 3 years as a historical control for seasonal effects of autumn/winter (9/98–3/99, 9/99–3/00, 9/00–3/01) compared with the preceding spring/summer (3/98–9/98, 3/99–9/99, 3/00–9/00). Similarly, the main time period was compared to the subsequent 6-month time period (3/02–9/02), but with use of cumulative data for the corresponding time periods in the previous 3 years to compare autumn/winter (9/98–3/99, 9/99–3/00, 9/00–3/01) to the following spring/summer (3/99–9/99, 3/00–9/00, 3/01–9/01).

With such large samples, even an inconsequential change in rates will achieve statistical significance at any reasonable level of significance. To limit the discussion of findings to those with perceptible changes in rates, the threshold for noting statistical significance in Table A was set at .000001, indicating findings that would occur by chance no more than once in one million times. Clearly, more findings could have been reported by using a less stringent criterion. The statistically significant changes are not random or simply attributable to seasonal effects. They may very possibly be associated with the 9/11 tragedy, or may be associated with other unrelated events or policy changes.

Table A indicates statistical significance in just a few changes in characteristics. The first change is an increase in admissions to the inpatient rehabilitation service modality during the 6 months following 9/11, when compared with the previous 6-month interval. Although the numbers of treatment admissions are small (2.9 vs. 2.1), the finding may be an indication that more patients were

eligible for this acute and short-term modality because of extreme symptoms, or that more of the eligible patients were opting for detoxification at this time.

Second, the proportion of patients who were employed full-time at admission declined significantly between the 6-month interval starting with 9/11/01 and the preceding time interval, from 14 to 12 percent. Although the finding does not seem dramatic, it probably signals the loss of jobs that occurred in the 9/11 period, which affected many New Yorkers, including substance abusers who were seeking treatment. Appendix B, however, suggests the downturn in the rate of employment started before 9/11, which may reflect the course of the general economy, which was exacerbated by the local effects of the 9/11 tragedy on New York City.

Finally, the source of funding for treatment showed significant changes when the period following 9/11/01 is compared with both the preceding and the subsequent 6-month periods. Medicaid funding played a statistically significant role, increasing from 51 percent of treatment funding prior to 9/11 to 56 percent during the 9/11 period, and then to 57 percent in the subsequent period. Concomitantly, the proportion of patients not paying at all declined from 17 to 14 to 13 percent in the three respective time periods. These changes reversed consistent trends of decreasing Medicaid and increasing lack of payment, as indicated in Appendix B. With emergency Medicaid funding becoming more readily available after 9/11, Medicaid became a much more important source of revenue for New York City's treatment system.

In conclusion, the quantitative analysis shows little gross change in characteristics of treatment admissions to New York City programs over the recent time intervals of interest. A statistical analysis of the trends corrected for seasonal effects, using a stringent criterion, does show an increase in admissions to the inpatient rehabilitation service modality, a decrease in admissions who were employed full-time when entering treatment, and in the increase in the patients receiving funding for their treatment from Medicaid with a corresponding decrease in those not paying for treatment.

**APPENDIX B. TREND DATA FOR NEW YORK CITY TREATMENT
ADMISSIONS: 1998–2002**

From To	3/11/98 9/10/98	9/11/98 3/10/99	3/11/99 9/10/99	9/11/99 3/10/00	3/11/00 9/10/00	9/11/00 3/10/01	3/11/01 9/10/01	9/11/01 3/10/02	3/11/02 9/10/02
Numbers of Admissions									
Total	28,870	28,735	31,297	30,621	32,098	32,781	35,210	35,632	38,306
Crisis Services	6,553	6,531	7,851	7,620	8,135	8,982	9,765	10,335	11,394
Drug-Free									
Outpatient	10,357	10,831	11,597	10,872	11,145	11,500	12,376	12,097	13,485
Methadone	6,499	5,883	6,549	6,533	7,254	6,859	7,165	7,136	7,061
Inpatient Rehab.	653	389	400	299	442	548	741	1,041	1,247
Residential	4,808	5,101	4,900	5,297	5,122	4,892	5,162	5,016	5,112
Median Age	35	35	35	35	36	36	36	36	37
Percentages									
Services									
Crisis Services	22.70	22.73	25.09	24.88	25.34	27.40	27.73	29.01	29.75
Drug-Free									
Outpatient	35.87	37.69	37.05	35.51	34.72	35.08	35.15	33.96	35.21
Methadone	22.51	20.47	20.93	21.34	22.60	20.92	20.35	20.03	18.44
Inpatient Rehab.	2.26	1.35	1.28	0.98	1.38	1.67	2.10	2.92	3.26
Residential	16.65	17.75	15.66	17.30	15.96	14.92	14.66	14.08	13.35
Services (Excluding Crisis Services)									
Drug-Free									
Outpatient	46.41	48.78	49.46	47.27	46.51	48.32	48.64	47.83	50.12
Methadone	29.12	26.50	27.93	28.40	30.27	28.82	28.16	28.22	26.24
Inpatient Rehab.	2.93	1.75	1.71	1.30	1.84	2.30	2.91	4.12	4.63
Residential	21.54	22.97	20.90	23.03	21.37	20.56	20.29	19.83	19.00
Male	69.87	69.77	69.97	72.12	72.69	73.07	73.96	74.81	74.93
Race/Ethnicity									
White	18.35	18.58	18.01	18.27	18.63	18.36	17.97	17.83	17.67
Black	42.01	41.40	41.54	40.94	40.20	40.64	40.38	39.14	38.78
Hispanic	37.78	38.12	38.71	38.86	39.16	38.78	39.37	40.69	40.96
Other	1.86	1.90	1.74	1.93	2.01	2.22	2.27	2.35	2.59
Primary Substance of Abuse									
Heroin (injected)	18.90	19.20	18.83	19.17	19.60	19.73	19.94	20.69	20.21
Heroin (non-inject.)	30.18	29.34	30.90	30.61	32.30	31.56	31.54	31.88	31.28
Crack	21.29	20.76	19.47	18.36	16.53	16.11	15.58	15.34	14.88
Powder Cocaine	11.81	11.70	11.46	10.71	10.04	10.18	10.07	9.97	10.62
Marijuana	13.29	14.23	14.32	16.18	16.94	17.75	17.86	17.66	18.31
Other	4.52	4.77	5.02	4.97	4.59	4.68	5.02	4.47	4.69

**APPENDIX B. NEW YORK CITY TREATMENT ADMISSIONS: 1998–2002
(CONTINUED)**

From To	3/11/98 9/10/98	9/11/98 3/10/99	3/11/99 9/10/99	9/11/99 3/10/00	3/11/00 9/10/00	9/11/00 3/10/01	3/11/01 9/10/01	9/11/01 3/10/02	3/11/02 9/10/02
Abuse of Alcohol									
Secondary	30.05	30.54	30.49	30.02	29.67	31.48	31.55	30.77	31.03
Tertiary	11.20	10.47	10.80	10.14	10.03	10.13	9.99	9.46	10.07
Not Noted	58.75	58.99	58.71	59.84	60.30	58.38	58.45	59.77	58.90
IV Drug Use	20.69	20.74	20.50	20.73	21.08	21.21	21.42	22.21	21.87
Percentages									
Employment at Admission									
Full-Time	12.33	12.73	12.73	13.93	14.27	14.06	13.70	12.10	11.86
Part-Time	3.80	3.41	3.49	3.49	3.74	3.58	3.57	3.30	3.63
Unemployed	51.53	54.00	56.20	56.47	57.43	57.88	61.00	63.11	64.28
Not in Labor Force	32.34	29.86	27.58	26.11	24.55	24.48	21.73	21.49	20.23
Source of Funding									
Medicaid	46.11	43.92	43.93	41.70	41.13	40.41	42.34	44.94	41.70
Private	4.51	4.06	3.70	3.89	3.65	4.08	4.36	4.25	4.10
Self-Pay	10.36	11.59	11.38	12.66	12.75	13.03	10.32	9.82	8.37
Other	13.42	14.36	13.30	12.11	11.51	12.16	12.04	10.88	9.17
None	7.78	9.39	11.00	10.86	11.91	12.72	13.94	10.99	9.30
Missing	14.78	13.58	13.14	14.57	13.54	11.59	9.11	7.79	7.51
Not Yet Discharged	3.04	3.11	3.55	4.21	5.52	6.01	7.90	11.34	19.85
Source of Funding (Excluding Unknown)									
Medicaid	56.11	52.72	52.73	51.34	50.82	49.04	51.02	55.58	57.41
Private	5.49	4.87	4.44	4.79	4.51	4.95	5.25	5.25	5.64
Self-Pay	12.60	13.91	13.67	15.59	15.75	15.82	12.44	12.14	11.52
Other	16.33	17.23	15.96	14.91	14.22	14.75	14.50	13.45	12.62
None	9.47	11.27	13.21	13.37	14.71	15.44	16.79	13.59	12.81

APPENDIX C. NEW YORK CITY TREATMENT ADMISSIONS: COMPARATIVE PERIODS AND SEASONAL EFFECTS

From To	3/11/01 9/10/01	9/11/01 3/10/02	3/11/02 9/10/02	3/98 9/98	3/99 9/99	3/00 9/00	9/98 3/99	9/99 3/00	9/00 3/01	3/99 9/99	3/00 9/00	3/01 9/01
Number of Admissions												
Total	35,210	35,632	38,306				92,265				92,137	98,605
Crisis Services	9,765	10,335	11,394				22,539				23,133	25,751
Drug-Free Outpatient	12,376	12,097	13,485				33,099				33,203	35,118
Methadone	7,165	7,136	7,061				20,302				19,275	20,968
Inpatient Rehab.	741	1,041	1,247				1,495				1,236	1,583
Residential	5,162	5,016	5,112				14,830				15,290	15,184
Median Age	36	36	37				35				35	36
Percentages												
Services												
Crisis Services	27.73	29.01	29.75				24.43				25.11	26.12
Drug-Free Outpatient	35.15	33.96	35.21				35.87				36.04	35.62
Methadone	20.35	20.03	18.44				22.00				20.92	21.26
Inpatient Rehab.	2.10	2.92	3.26				1.62				1.34	1.61
Residential	14.66	14.08	13.35				16.07				16.59	15.40
Services Excluding Crisis Services												
Drug-Free Outpatient	48.64	47.83	50.12				47.47				48.12	48.20
Methadone	28.16	28.22	26.24				29.12				27.93	28.78
Inpatient Rehab.	2.91	4.12	4.63				2.14				1.79	2.17
Residential	20.29	19.83	19.00				21.27				22.16	20.84
Male	73.96	74.81	74.93				70.88				71.73	72.28
Race/Ethnicity												
White	17.97	17.83	17.67				18.33				18.40	18.20
Black	40.38	39.14	38.78				41.22				40.98	40.69
Hispanic	39.37	40.69	40.96				38.57				38.60	39.09
Other	2.27	2.35	2.59				1.87				2.03	2.02
Primary Substance of Abuse												
Heroin (injected)	19.94	20.69	20.21				19.12				19.38	19.48
Heroin (non-inject.)	31.54	31.88	31.28				31.16				30.55	31.58
Crack	15.58	15.34	14.88				19.02				18.31	17.12
Powder Cocaine	10.07	9.97	10.62				11.08				10.83	10.50
Marijuana	17.86	17.66	18.31				14.91				16.13	16.44
Other	5.02	4.47	4.69				4.71				4.81	4.88
Abuse of Alcohol												
Secondary	31.55	30.77	31.03				30.06				30.70	30.60
Tertiary	9.99	9.46	10.07				10.66				10.24	10.26
Not Noted	58.45	59.77	58.90				59.28				59.06	59.14
IV Drug Use	21.42	22.21	21.87				20.76				20.90	21.02

**APPENDIX C. NEW YORK CITY TREATMENT ADMISSIONS:
COMPARATIVE PERIODS AND SEASONAL EFFECTS (CONTINUED)**

From	3/11/01	9/11/01	3/11/02	3/98	3/99	3/00	9/98	9/99	9/00	3/99	3/00	3/01
To	9/10/01	3/10/02	9/10/02	9/98	9/99	9/00	3/99	3/00	3/01	9/99	9/00	9/01
	Percent											
Employment at Admission												
Full-Time	13.70	12.10	11.86		13.14			13.60				13.58
Part-Time	3.57	3.30	3.63		3.68			3.49				3.60
Unemployed	61.00	63.11	64.28		55.17			56.20				58.32
Not in Labor Force	21.73	21.49	20.23		28.02			26.70				24.51
None	13.94	10.99	9.30		10.31			11.07				12.35
Missing	9.11	7.79	7.51		13.79			13.20				11.83
Not Yet Discharged	7.90	11.34	19.85		4.08			4.51				5.74
Source of Funding (Excluding Unknown)												
Medicaid	51.02	55.58	57.41		53.13			50.96				51.50
Private	5.25	5.25	5.64		4.79			4.87				4.75
Self-Pay	12.44	12.14	11.52		14.05			15.14				13.89
Other	14.50	13.45	12.62		15.48			15.59				14.88
None	16.79	13.59	12.81		12.55			13.45				14.98

APPENDIX D. NEW YORK STATE OFFICE OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES (OASAS)

9/11 TREATMENT IMPACT STUDY CONSENT FORM

FOR QUESTIONS ABOUT THE RESEARCH, CONTACT:

Ken Robertson
Project Director
New York State Office of Alcoholism and Substance Abuse Services
501 7th Avenue
New York, NY 10018
(646) 728-4621

This consent form explains the research study. Please read it carefully. Ask questions about anything you do not understand. If you do not have questions now, you may ask later. If you have any questions about your rights as a participant in a research project, you should contact (anonymously, if you wish) the Social and Behavioral Sciences Institutional Review Board, College of Arts and Sciences, Room 810 Clemens Hall, University at Buffalo, Buffalo, NY 14260, (or by phone 716 / 645-2711).

PURPOSE: You are invited to participate in study on the events of 9/11, 2001 and how they affected you and your treatment program in New York.

PROCEDURES: You will be asked to participate in a private interview about your experience on and following 9/11, 2001. The interview is completely anonymous and confidential. No names will be used. We think that anonymity is so important that we will ask you not to use your name or the names of other people you know.

We will be discussing what you were doing on 9/11 before, during, and after the WTC attack, the physical and psychological effects of 9/11, and the impact that 9/11 has had on you and your drug treatment program. We will be asking you to describe what happened on and after 9/11 at the agency, and personal patterns of drug and alcohol use before and since 9/11.

TIME COMMITMENT: Your participation in this research will take approximately 1 to 2 hours.

RISKS AND BENEFITS: There are no known risks to participating in this research as there will be no way to attribute your name or identity to anything that you say. The information we get from you will help OASAS provide the services that are best suited for your community and maybe even for you personally. So, the information you give us is very important.

ANONYMITY AND CONFIDENTIALITY: Your individual privacy will be maintained in all published and written data resulting from the study. With your permission, the interview will be taped to ensure that we accurately capture the information that you give us. The tapes will be transcribed and then destroyed so that you can in no way be identified. No one other than the researchers and the transcriber will hear these tapes.

PAYMENT: You will receive a payment of \$20 or a gift voucher in the amount of \$20 upon completion of this interview.

JOINING OF YOUR OWN FREE WILL (VOLUNTEERING FOR THE STUDY): Your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled as a patient or as an employee of this facility. You have the right to refuse to answer any particular question.

SUBJECT STATEMENT: I have read the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study. I have been given a copy of this consent form.

SIGNATURE OF PARTICIPANT AND DATE, A PSEUDONYM MAY BE USE

INVESTIGATORS STATEMENT: “I certify that I obtained the consent of the subject whose signature is above. I understand that I must give a signed copy of the informed consent form to the subject, and keep the original copy in my files for 3 years after the completion of the research project.”

SIGNATURE OF INVESTIGATOR and DATE

APPENDIX E. INTERVIEW GUIDES

Interview Guide for Patients in Treatment

Place of Interview _____ Type of service _____

Date of Interview: _____ Interviewer: _____

Start Time: _____ End Time: _____

Thanks so much for agreeing to this interview. As you know, the interview is being conducted as part of an effort to understand the impact of 9/11 on treatment programs. As we mentioned in the consent form, the answers you give to our questions are confidential. We would like to tape the interview, so we can be sure we get exactly what you have said, in your own language. If at any point during the interview you want me to turn off the taping, just let me know and I will. Are you comfortable with having the interview taped? Do you have any questions? If you are ready to proceed, I'll start now with some background questions.

1. Thinking back to the World Trade Center attacks on 9/11, please try to describe for me what you were doing at the time, where you were, and what you were feeling on that day?
2. Were you enrolled in this treatment program for chemical dependency on 9/11 , 2001?

IF NO: SKIP TO #3

IF YES: Probes:

- Did you try to get to the program on that day?
- (If respondent did) What were your experiences?
- Was the program open?
- Was staff available to help you?
- If you could not get to the program, what happened?
- Was there any telephone communication or other communication with the program?
- How long did it take before treatment services got back to normal?
 - **(If a week or more elapsed:)** What did you do in the interim?

METHADONE PATIENTS: (If respondent did not discuss:)

Probes:

- What was your dosage level at time of attacks?
- What is your current level?
- What time of day dose was received/taken?
- Do you have "Take-home" privileges?
- Did you experience any missed doses? What were the reasons, and consequences?

If methadone patient was unable to get methadone doses, ask the following:

- Did the clinic give you any help or instructions on what to do? (Probe for agency response)
- Did you try or consider trying to get methadone from another source? (Probe sources considered.)
- How long was it before you were able to get your methadone? (Probe number of days and reasons.)
- How did you feel when you could not get your methadone? (Probe for emotional feelings and physical symptoms.)
- (If feelings /symptoms expressed, ask:) What did you do to deal with these feelings and/or symptoms? (Probe for behaviors and actions.)

GO TO #5

3. Were you enrolled in another treatment program for chemical dependency on 9/11, 2001?

IF NO: SKIP TO #4

IF YES:

Probes:

Let me ask you about your experiences with services on that day at that treatment program.

- What kind of program were you in?
- For how long?
- Why did you leave the program?
- Why did you enroll in the current program?

GO TO #5

CONTINUE WITH PROBES AND QUESTIONS IN #2.

IF ENROLLED AFTER 9/11

4. Thinking back to 9/11, at what point did you decide to enter treatment?

Probes:

- **Why did you enter treatment?**
- **What specific substances did you use before you enrolled in this program?**
- **Was your choice of program affected by 9/11 in anyway? Please explain?**

5. When you think back to the weeks and months following 9/11, did you have any special problems, such as emotional problems or problems with stress and anger that might be associated with the World Trade Center disaster?

If yes, probes:

- What specific problems did you experience, for example, sleep problems, anger, anxiety?

- Did you seek help or receive help?
 - Who provided help and what type of help was provided?
 - **If yes**, Were you being treated for anything specific? Explain?
 - Was this a positive experience?
 - How could it have been a better experience?
 - What about treatment programs, community service organizations (e.g., churches, community health centers, settlement houses) and city government agencies?
 - Were they helpful in meeting your needs?
 - How could they have been more helpful in addressing your needs?
6. Have you had other problems, such as medical problems, financial problems, marital problems in the weeks and months following 9/11 that might be associated with the World Trade Center disaster?

If yes, probes:

- What specific problems did you experience?
 - Did you encounter and problems seeking help and receiving help?
 - Who provided help and the type of help was provided?
 - What about treatment programs, community service organizations (e.g., churches, community health centers, settlement houses) and city government agencies?
 - Were these agencies helpful in meeting your needs?
 - How could they have been more helpful in addressing your needs?
7. Let me ask you about the use of alcohol and other drugs that are not prescribed, and let me repeat that the information you give me is completely confidential and will not be shared with your program or anyone else. **First, before the 9/11 disaster**, were you using alcohol, pills, or any other drugs that were not prescribed?

If yes, probes:

- Which specific substances did you use?
 - How often did you use for each substance—used several times a day, once a day, several times a week, several times a month, just occasionally.
 - (Try to determine reasons for the use of these specific substances).
8. In the weeks **following the attacks**, did you begin to use or increase your use of alcohol, pills, or any other drugs that were not prescribed?

If yes, probes:

- Which specific substances did you use?
- How often did you use each substance—used several times a day, once a day, several times a week, several times a month, just occasionally?
 - (Try to determine reasons for the use of these specific substances)

9. Are you **currently** using alcohol and other drugs that were not prescribed?

If yes, probes:

- Which specific substances are you using?
- How often are you using for each substance—used several times a day, once a day, several times a week, several times a month, just occasionally.
 - (Try to determine reasons for the use of these specific substances).

If in treatment at this program before 9/11/01:

10A. Thinking about the treatment services you were receiving at this program before 9/11 and the services after 9/11, are there any differences, are they about the same?

If yes, probes:

- What differences did you encounter? (Specific positive/negative experiences)

If enrolled in a different treatment on 9/11:

10B. Thinking about the treatment program you were in on 9/11, what could have been done differently? What advice might you give to the director of the program about how they carried out their responsibilities? What advice might you give to program counselors, nurses or other staff on that day about how they carried out their responsibilities?

11. Let me ask you about the lessons you might have learned from your experiences after the 9/11 attacks. What personal lessons, if any, have you learned about yourself and your own well-being?

Interview Guide for Director/Administrators of Treatment Programs

Place of Interview _____ Type of service _____

Date of Interview: _____ Interviewer _____

Start Time: _____ End Time: _____

Thanks so much for agreeing to this interview. As you know, the interview is being conducted as part of an effort to understand the impact of 9/11 on treatment programs. As we mentioned in the consent form, the answers you give to our questions are confidential. We would like to tape the interview, so we can be sure we get exactly what you have said, in your own language. If at any point during the interview you want me to turn off the taping, just let me know and I will. Are you comfortable with having the interview taped? Do you have any questions? If you are ready to proceed, I'll start now with some background questions.

1. In general, how did your program/clinic function on 9/11 and the days immediately following the World Trade Center attacks?

Probes:

- Was your program/clinic operating at full capacity on 9/11 and the following days? (Try to get an estimate of how many patients received treatment at the clinic on 9/11.)
 - Did your program/clinic have to close? If so, when, for how long and the reasons?
 - If open, were normal routines followed on 9/11 and the following days? If not, please describe what did take place?
 - Were phones and other electrical equipment working?
2. More specifically, how did your patients/patients deal with problems associated with 9/11?

Probes:

- Were there any procedures in place to try to contact active patients immediately after the 9/11 attacks to inform them about how the clinic would be operating?
- Did any patients have problems getting to your clinic?
- Did patients present with mental or emotional problems following the attacks? If so, what types of problems were these?
- Did patients present with other types of problems? If so, what types of problems?
- Were patients showing strong political or ethnic feelings after 9/11?
- How were patients able to cope with problems associated with the attacks? Increased alcohol use and/or other drug use? If so, what were they using?
- Was your clinic able to assess problems such as post-traumatic stress among your patients?
 - If so, how did your clinic assess these problems? What diagnostic or screening instruments were used?

- To your knowledge, have more drug abusers than usual attempted to enter your program since 9/11?

Methadone Programs: If yes,

- Can you estimate the number of patients who did not receive methadone doses. Primary reasons?)
- Were there any plans in place to contact patients and help them find alternative service providers? If yes, plans, how they worked?)
- Did any patients have adverse reactions as a result of not receiving methadone doses? If so, what were they?
- Were there any provisions in place for patients to get take-home doses of methadone after 9/11?)
 - Were any of your patients “guest” patients at other clinics?
 - If so, how many? How did they find the experience?)
 - Were there any attempts to use mobile vans to reach and administer methadone to patients? Specifics?)
 - To your knowledge, have any patients left the program because of the attacks?
 - Have more patients been seeking detoxification?

Residential Programs: What impact did 9/11 have on the “community” of residents in your facility? Use of drugs? “Acting Out”? Emotional outbursts?)

- Did resident patients organize or participate in groups to discuss feelings and/or problems associated with the attack?)

3. Now, let me ask you about your staff? How did they deal with problems associated with 9/11?

Probes:

- Did any staff have problems getting to the clinic on 9/11 or the days immediately after 9/11? If yes, probe for reasons.
- Did staff present with mental or emotional problems following the attacks? If so, what types of problems were these?
- Was your clinic able to assess problems such as post-traumatic stress among staff?
- If so, how did your clinic assess these problems? What diagnostic or screening instruments were used?
- What other problems did staff members have?
- Were staff members showing strong political or ethnic feelings after 9/11?
- How were staff able to cope with problems associated with 9/11? Alcohol and/or other drug use? Did they volunteer to help out at ground zero or other locations?
- Have any staff members resigned from their jobs because of problems associated with 9/11?
 - If so, how many and what were the specific reasons?

4. Did your agency have any contact or interaction with OASAS or any Federal, State, city or other agency regarding the impact of 9/11 or the need for help after 9/11?

Probe:

- What type of contacts?
 - What were the reasons for contacts (including Project Liberty)?
5. Did you or your agency seek or get help or information from any other sources, e.g., mental health community organizations that serve drug-abusing populations?

Probe:

- What specific sources and help/information received?
 - In retrospect, what types of assistance did you and your agency need most in the weeks following 9/11? Why?
 - If help was received, what did you find most helpful to your agency, staff and patients after 9/11?
6. Did you or your agency offer or give help to other agencies or community organizations?

Probe:

- If so, which agencies?
 - What kind of help was asked for or given?
7. Did your agency experience any financial problems related to the 9/11 attacks?

Probe:

- Were there any disruptions in payments for patient services?
 - If so, how were problems resolved or what steps need(ed) to be taken?
 - Were “temporary” or “emergency” Medicaid benefits utilized by your patients?
8. Based on the problems that resulted from the 9/11 attacks, is your agency doing anything differently?

Probe

- Is there anything that you would like to do differently? If another crisis emerged, is your agency better prepared to assess and/or address problems that might arise?
- What is being done differently? How? What would you like to do? How? Resources needed?
- How is agency better prepared?

Methadone Programs:

In the event of future crises, how can methadone maintenance programs like yours be more prepared to make sure that patients can receive the medication needed if there is an interruption in your services? Specific details?

9. Since 9/11 has your agency actually engaged in any activity to prepare for the possibility of disasters in the future?

Probe:

- What “disaster plans” exist? How do you coordinate with other agencies, special training for staff and/or patients.

10. Currently, what help do you need most in dealing with crises like 9/11?

Probe:

What is most realistic?