

Calls for Help After September 11: a Community Mental Health Hot Line

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ABSTRACT Although unprepared for a disaster of the magnitude of September 11th, New York City's mental health system responded immediately. Within weeks, Project Liberty, a recovery program funded by the Federal Emergency Management Agency (FEMA), was in operation. The program provides free education, outreach, and crisis counseling services for those affected by the disaster and its aftermath. LifeNet, a 24hour, 7-day-a-week mental health information and referral hotline, is a key component of Project Liberty. In this article, we describe the operation of LifeNet and examine the volume of calls to the hotline during the 6 months following the terrorist attacks on the World Trade Center. We describe the demographics of the callers and the kinds of disaster-related mental health problems that callers presented. The data indicate a clear pattern of increasing calls from October through March for all demographic subgroups except seniors. Callers complaining of symptoms of posttraumatic stress and symptoms of anxiety, panic, and phobia increased over time. Bereavement-related calls increased as well. The number of callers who reported symptoms of depression and substance abuse/dependence did not show as clear-cut an increase over time. We looked at the volume of LifeNet calls in relation to the Project Liberty media campaign and suggest that the campaign has had a positive effect on call volume and that its impact is likely to continue over time.

INTRODUCTION

Research has consistently found that disasters have deleterious mental health consequences. The greater the loss of life and property and the greater the economic and social disruption that follow, the more serious and widespread the mental health impact; when disasters are intentional, adverse psychological reactions are all the more likely. Early studies of the psychological effects of September 11th on the population of New York City are consistent with those findings. ^{2,3}

Although unprepared for a disaster of the magnitude of September 11th, New York City's mental health system responded immediately. It provided much-needed emergency crisis counseling, and it began to plan for the continuing provision of services that all mental health experts deemed necessary. Within weeks, Project Liberty, a recovery program funded by the Federal Emergency Management Agency (FEMA), was in operation. The program, which is administered by the Department

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of Health and Mental Hygiene (DHMH) in conjunction with the New York State Office of Mental Health, provides free educational, outreach, and crisis counseling services for those affected by September 11th and its aftermath.

Key to Project Liberty's operation is LifeNet, the city's 24-hour, 7-day-a-week mental health information and referral hotline. This article describes the operation of LifeNet and reports on the increased volume of calls to the hotline during the 6 months following the terrorist attack. It describes the demographics of the callers and the kinds of mental health problems that they presented. Selected brief vignettes, provided by LifeNet's staff of mental health professionals (referral specialists), are offered here as examples of the kinds of distress that people reported.

LIFENET: A COMMUNITY MENTAL HEALTH HOTLINE

LifeNet, which is operated by the Mental Health Association of New York City under contract with DHMH, is an important resource for DHMH and the people of New York City. Since its inception in 1996, the referral specialists at LifeNet have answered caller questions and provided referrals to mental health and substance abuse services. LifeNet has the largest database of such services in New York City.

LifeNet began as an English language hotline, but Spanish and Chinese lines were added in 1998 and 2000, respectively. To assist callers who speak other languages, the hotline has utilized AT&T translator services.

In response to September 11th, LifeNet's role has been expanded. Working closely with Project Liberty, LifeNet now also serves as the connecting link between people requesting crisis counseling services and agencies providing those services.

The public has been made aware of LifeNet's expanded role through a Project Liberty media campaign. The campaign, which began in November 2001, is a large and concerted effort to reach out to all New Yorkers to encourage those with disaster-related mental health problems to seek help. The campaign advises those who need counseling to call the LifeNet 800 numbers for information and referrals.

LIFENET'S INFORMATION SYSTEM

When the LifeNet hotline was created, its data-gathering system was designed to collect whatever information was necessary to make an appropriate referral. It was not designed to collect data per se. In fact, LifeNet referral specialists are able to make appropriate referrals without necessarily documenting in their data system specifics about the calls. Not surprisingly, therefore, the quality of the data for purposes of this report is uneven. Although we acknowledge the limitations of the data, we believe that they are still very important for understanding the post–September 11th mental health needs of New Yorkers.

Generally, the information-gathering system at LifeNet is as follows. Calls to LifeNet are documented by referral specialists as they come in. Age, gender, and borough of residence of the person in need of services are noted. Also noted are history of treatment, problem(s) reported, and primary source of information about LifeNet that prompted the call. Although referral specialists do not attempt to make diagnoses based on DSM-IV criteria, when appropriate, they do record their clinical impressions.

This article presents information collected by LifeNet that has been aggregated

over each month from June 2001, 3 months before the terrorist attacks of September 11th, to March 2002, 6 months after the attack.

The completeness of the data varies by month and by kind of data. Age, gender, borough, or treatment history information are not available for 20.5% (August/gender) to 49.0% (September/treatment history) of the calls. September calls also have the highest percentage of missing demographic information. We assume that referral specialists are not biased in their recording of demographic and treatment history information; therefore, for the purposes of this article, we have proportionally recategorized missing gender, age, borough, and treatment history data to follow the distribution of the known data. These are the numbers presented below in Figs. 2 through 5.

Also varying by month are the numbers of calls for which reported problems (1 or more per caller) and primary source of call are missing. It is not possible to calculate the number of problems each month that were not documented. What we do know is that the number of calls each month exceeds the number of problems recorded. Calls exceed problems by as much as 19.7% on average from June through August and 64.7% on average from October through March. Missing source data varies from 26.5% (June) to 39.2% (September). Somewhat greater percentages of source data are missing post- as compared to pre-September: 27.5% on average from June through August and 32.9% on average from October through March. Where problems and sources are presented in Figs. 6 and 7 below, missing data are not included.

THE IMPACT OF SEPTEMBER 11th ON CALL VOLUME

As indicated in Fig. 1, the number of calls to LifeNet after September 11th rose substantially. The average number of calls per month from June through August

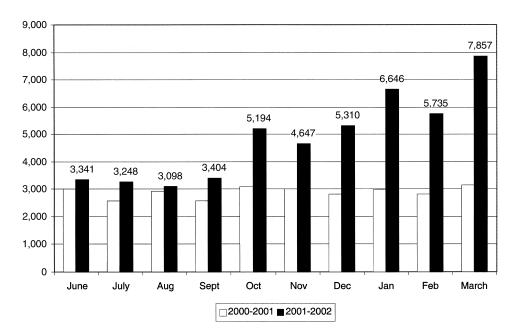


FIGURE 1. Number of calls by month, 2000–2001 and 2001–2002.

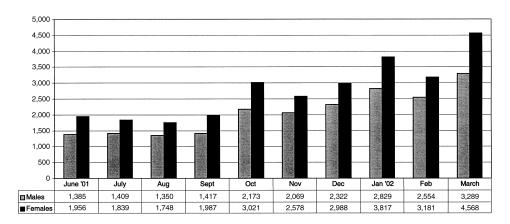


FIGURE 2. Number of calls by month and gender.

was 3,229. The average number from October through March was 5,898, an increase of 82.7%. This increase in calls is clearly not a seasonal variation because, as the figure shows, the numbers of calls during these same months the year before show no similar increase. On the contrary, the numbers of calls the year before were quite stable.

Figure 2 shows that the number of calls increased for both men and women. Comparing monthly calls pre– and post–September 11th, we find that the increase in calls is essentially the same for both sexes: 83.9% on average for men and 81.6% for women. The figure shows that women are more likely than men to call LifeNet, and, moreover, that the proportion of calls made by the two sexes was unaffected by September 11th. Both before and after September, the proportion of women callers was 57% on average, with little variation from month to month.

Figure 3 shows that the majority of calls to LifeNet, both pre- and post-September were made by or on behalf of adults (18–64 years old). Consistent with the pattern of calls described above, this figure shows that the number of adults seeking help from LifeNet increased substantially after September. The average number of

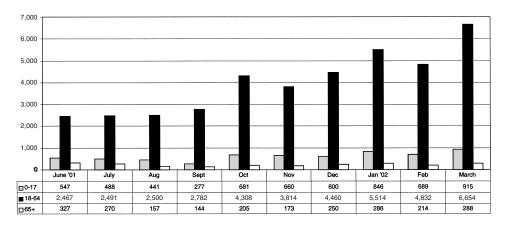


FIGURE 3. Number of calls by month and age.

monthly calls jumped from 2,486 from June through August to 4,930 from October through March, an increase of 98.3%. Although the number of calls each month concerning children and adolescents (0–17 years old) was substantially smaller, it too increased after the terrorist attack, from a monthly average of 486 to a monthly average of 732, an increase of 48.8%. Only contacts from seniors (65+ years old), who made the fewest calls to LifeNet, did not increase after September.

Figure 4 shows the pattern of calls from the five boroughs. Although the numbers of calls to LifeNet, both before and after September, vary across boroughs, calls from all five boroughs increased after the disaster: 49.6% in the Bronx, 63.6% in Brooklyn, 128.9% in Manhattan, 73.5% in Queens, and 91.4% in Staten Island.

During the 3 months prior to September 11th, the majority of calls were made by or on behalf of persons who had previously received treatment for mental health problems. In fact, callers with a known history of treatment have comprised the majority of callers since LifeNet's beginnings in 1996. After the terrorist attack, however, as indicated in Fig. 5, calls from persons who had no history of treatment surpassed the number of those who did. Although average monthly calls for both of these populations increased after September, they did so at different rates: 55.7% and 112.7% for those with and without a treatment history, respectively. Callers with a history of substance abuse treatment comprise only a small proportion of LifeNet's callers; however, their numbers increased somewhat as well after September. Their average number of calls per month rose by 39.1%.

Figure 6 shows the numbers of callers who were noted by LifeNet's referral specialists to have the kinds of mental health problems most often associated with disasters. Posttraumatic stress is the most frequently documented and studied of these psychological reactions.

Among the callers reporting symptoms of posttraumatic stress after September 11th was the delivery worker who told a LifeNet referral specialist that when the first plane hit Tower 2 of the World Trade Center, he had been delivering a package on the 102nd floor of Tower 1. After running down the stairs for

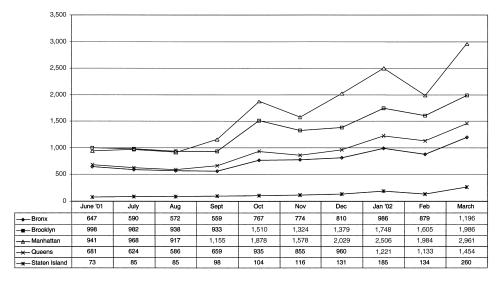


FIGURE 4. Number of calls by month and borough.

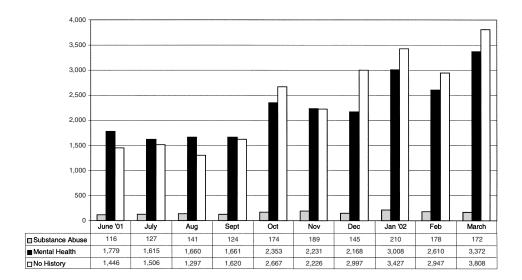


FIGURE 5. Number of calls by month and treatment history.

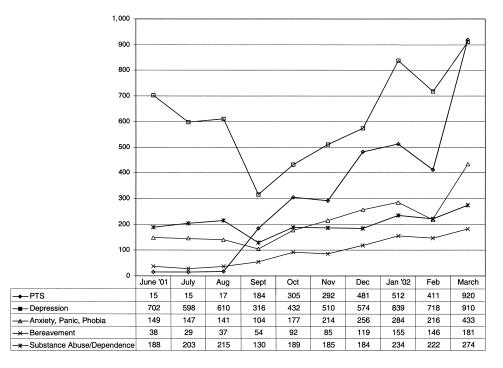


FIGURE 6. Number of calls reporting disaster-related mental health problems by month.

20 minutes, he escaped from Tower 1 just as it was being hit by the second plane. The worker described in detail the horrific sights and sounds that surrounded him, including the debris and ashes and the bloody, injured people. He reported to the referral specialist that he was "feeling very weak physically" and that he was "still hearing the explosion."

The numbers of callers reporting posttraumatic stress symptoms during the 3 months prior to September were negligible, 16 on average. After September, however, the numbers jumped precipitously to a monthly average of 487. By far the greatest number of these calls, 920, came in March, 6 months after the attacks.

Probably the second most studied mental health problem associated with traumatic events is depression.

Among LifeNet callers reporting symptoms of depression after September 11th was a man who had resided in Battery Park City. He had witnessed the attack and collapse of the towers, and he and his wife were forced to flee their home. Two months later, he reported to a referral specialist that he had no appetite, had lost 30 pounds, and had been sleeping only a few hours a night. He was unable to work, felt "too overwhelmed to leave the house," and was crying frequently "with no apparent reason."

Historically, LifeNet callers have complained of depression more than any other mental health problem. However, contrary to expectations, the numbers of callers who complained of depression-related symptoms do not show a clear pattern of increase after September 11th. In fact, as Fig. 6 indicates, from October through December the numbers of callers reporting these kind of symptoms was less than the numbers from June through August. The average monthly calls prior to September and from October through December were 637 and 505, respectively. Only in January and again in March are the numbers of calls noticeably larger, 839 and 910, respectively.

Other mental health problems often associated with trauma are anxiety, panic, and phobia.

Calls of this nature post-September included a manager of a small company located near Ground Zero who requested help for her staff. It was 4 weeks after the disaster, and her staff had quite reluctantly just returned to work. They were complaining of anxiety and insomnia and were still so terrified that they insisted on going in pairs to the restroom down the hall.

Figure 6 shows that the numbers of callers who were reported to have these kinds of symptoms after September were greater than the numbers before. The average number of monthly calls pre– and post–September 11th were 146 and 263, respectively, which is an increase of 80.1%. The largest number of calls by far was made in March.

LifeNet typically receives some calls each month associated with bereavement. Because of the extensive loss of life caused by the terrorist attacks, it was expected that these kinds of calls would have increased after September.

Among those whom LifeNet referred for bereavement counseling after September 11th were a young pregnant woman and her mother. The mother called to report that her son-in-law was missing at the World Trade Center and that

her daughter was not sleeping or eating and was crying constantly while calling out her husband's name.

Although the number of calls of this nature comprises only a small percentage of the total number of calls that LifeNet received after September 11th (from 1.8% to 2.5% a month), the average number of monthly bereavement-related calls, as shown in Fig. 6, did increase. It jumped 271.4%, from 35 calls on average pre-September to 130 calls on average post-September.

Although some literature on the aftereffects of disasters has suggested that higher rates of substance abuse or dependence may be likely, past findings are inconsistent. Figure 6 shows that there is no discernible pattern in the numbers of callers each month who were noted by LifeNet's referral specialists to have problems associated with either substance abuse or dependence. As with the other kinds of disaster-related problems, however, the largest number of these calls was noted in March.

THE EFFECT OF PROJECT LIBERTY'S MEDIA CAMPAIGN

Prior to September 11th, LifeNet used a variety of media and methods to publicize its services. Beginning in November, LifeNet's outreach efforts increasingly became part of the larger Project Liberty campaign. The Project Liberty media campaign began the second week in November with television ads. By mid-December, the campaign was expanded by adding brochures and radio and transit ads.

Figure 7 shows the number of callers by month who reported that specific components of the media campaign helped to prompt their call. The number of calls generated by television ads increased substantially starting in December. Subway ads and brochures were generating many more calls by January and March, respectively.

DISCUSSION

After September 11th, there was a substantial increase in the number of calls made to the LifeNet hotline. Calls increased at about the same rate for men as for women; however, more women called the hotline both before and after the terrorist attack. This finding is consistent with other studies of help-seeking behavior, which report that women are more likely than men to seek health and mental health services.⁴

Our findings suggest that calls after September 11th increased for adults and for children and adolescents. Only seniors seem not to have increased their calls to LifeNet. This finding is consistent with epidemiologic studies of disasters. Norris et al., in their review of disaster literature, suggest that older adults may be "more resilient" in the face of disaster, and that perhaps they ought to be viewed as a "resource for disaster stricken communities" rather than as a group at risk for mental health problems.

Calls from all five boroughs of New York City increased after September; however, we found the greatest percentage change in calls from Manhattan. This finding may reflect increased exposure of Manhattanites to the disaster. Past epidemiologic research indicates that the greater the exposure, the greater the mental health impact. This finding may also reflect a greater educational and outreach effort in Manhattan, particularly in lower Manhattan immediately after the terrorist attack.

Our findings suggest that, after September 11th, people both with and without

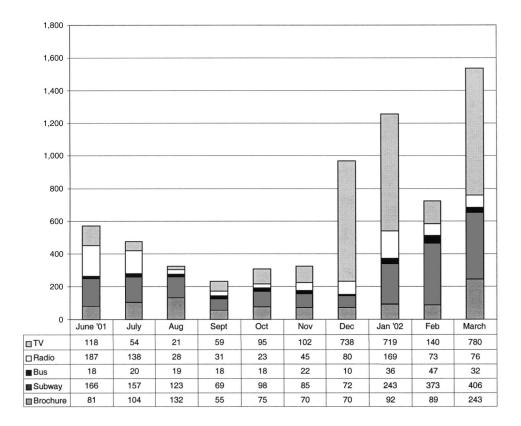


FIGURE 7. Number of calls prompted by media campaign by month.

a history of mental health treatment turned in greater numbers to the LifeNet hotline for help in dealing with their problems. Although epidemiologic studies suggest that those with a history of mental health problems may be at greater risk following a disaster, ^{1,5} the increase in calls to LifeNet was greater for those who had not previously sought help. It is worth noting that Project Liberty designed its campaign to reach out to the public at large. Its aim was to help all New Yorkers who were having trouble coping to return to their predisaster levels of functioning. The campaign was not especially directed to those who had previously experienced mental health problems and for whom September 11th exacerbated their symptoms.

Our finding that calls reporting symptoms of posttraumatic stress increased immediately after September is very much consistent with survey research on the psychological aftermath of disasters. So are our findings regarding bereavement and anxiety, panic, and phobias. Although an epidemiologic study of New Yorkers found that symptoms of depression had already increased just 5 to 8 weeks after the terrorist attack on the World Trade Center,³ we did not find an increase in these calls in the first few months after September. However, calls reporting depression were higher in January and again in March. Depressed people may simply be slower to reach out for professional help. In the coming months, it is reasonable to expect a continued elevation in the numbers of these calls, especially from those who are grieving, as natural supports tend to diminish over time and individuals find it increasingly difficult to get on with "normal life."

The monthly volume of calls to LifeNet post–September 11th are also likely related to the timing of Project Liberty's outreach efforts. The data suggest that, by December and January, Project Liberty's efforts to reach New Yorkers through its media campaign were having an effect. The television ads in particular seem to have been successful in generating calls. The presence of celebrities in these ads might have especially helped draw attention to Project Liberty and destigmatized requests for assistance.

In March, LifeNet not only received the highest number of calls per month that it has ever received, but also received the highest number of calls reporting the kinds of symptoms that are usually associated with disasters. Several factors working together are likely to explain these numbers. First, as time passes and people realize that they are not feeling better, they are more open to outreach efforts and more willing to seek and accept help. Second, March 11 was the 6-month anniversary of the disaster. Anniversaries are particularly stressful for people, and the news coverage of this anniversary was extensive.

One of the most publicized media events was the television airing on March 10 of a documentary of the attacks on the World Trade Center. It offered yet another visual reminder of the horrors experienced by those who were at the Twin Towers. Recent research suggests that repeated news and other media coverage of disasters are likely to have deleterious effects on the public's mental health.^{6,7} On March 11, LifeNet received a record number of calls, 515, which is about five times the average number of calls received on any given day in June, July, or August. Calls continued to come in to LifeNet in unprecedented numbers throughout the month.

The airing of the documentary, however, also presented an opportunity for Project Liberty and LifeNet to reach out to large numbers of people. Project Liberty television spots were shown immediately before and after the airing of the documentary. Project Liberty and the LifeNet hotline numbers were also mentioned on the local 11 PM news programs that evening. As Fig. 7 shows, the number of callers who reported that television was their primary source of information about LifeNet was greatest in March.

The results of other Project Liberty outreach efforts as well may be evident in the March numbers. Postcards and paper cups with Project Liberty information and the LifeNet hotline numbers began to be distributed in mid-January and mid-February, respectively. With the 6-month anniversary of the attack in mind and the resulting distress that it was likely to generate a concern, Project Liberty also arranged for over 1.3 million newspaper inserts to be distributed between March 11 and March 22. At the time of this writing, there is no documentation available to assess the success of these additional campaigns. However, a survey conducted in January 2002 found that as many as one in four New Yorkers was aware of Project Liberty and its services (D. Vlahov, New York Academy of Medicine, personal communication, April 15, 2002).

In discussing our findings, it is important to point out again that the amount of missing data, particularly after September, is significant. It is very likely, therefore, that the number of disaster-related problems presented in Fig. 6 is less than the actual number of such problems reported to LifeNet. Similarly, it is very likely that many more people than those who are represented in Fig. 7 were influenced by the Project Liberty media campaign.

Since Project Liberty began its media campaign in November 2001, LifeNet's hotline numbers have had unprecedented exposure. It is reasonable to assume that

this increased exposure not only generated many more calls for disaster-related assistance, as was the purpose of the campaign, but also generated some additional calls for assistance unrelated to the tragedy of September 11th. With the information available to us, it is not possible to determine the extent to which the overall increase in call volume since September 11th may be attributed to calls unrelated to the tragedy.

CONCLUSIONS

The data presented in this paper on help-seeking behavior post–September 11th contribute to a growing understanding of the mental health needs of New Yorkers.

We found that, at the 6-month mark, call volume to LifeNet was still on the rise. Looking forward, we expect that volume will remain high. The data show a clear association between number of calls and the Project Liberty media campaign. Phase 2 of the campaign will commence in the late spring of 2002 and should further increase the public's awareness of the Project. This increase in awareness should help encourage those who still find themselves in need to call for help. A continuing demand for crisis counseling services is consistent with the experience in Oklahoma City, Oklahoma, after the 1995 bombing of the federal building. In Oklahoma, more individuals sought counseling in the second year than in the first. Threats of terrorist attacks, reports of "sleeping cells" and emergency alert systems, the ongoing war in Afghanistan, and concerns about the safety of air quality in lower Manhattan all contribute to the psychological aftermath of September 11th and make it more difficult for New Yorkers to return to their predisaster levels of functioning.

As a final but important note, physicians have a significant role in helping New Yorkers regain their emotional footing. Often, individuals experiencing mental health problems seek help from their primary care doctors. In a national study conducted between 1990 and 1992 of outpatient service utilization, investigators found that 12.5% of individuals suffering from posttraumatic stress disorder sought help from general medical practitioners. With the increased penetration of managed care in New York City during the past decade, many individuals in the city are now required to see their primary care physician or "medical gatekeeper" as a first step to seeking mental health services.

Patients sometimes report their psychiatric symptoms as the primary reason for their doctor's visit, but frequently they seek help for somatic complaints that they may not realize relate to their emotional state. Many of the symptoms of postdisaster psychological distress (e.g., inability to sleep, difficulty concentrating, irritability) are nonspecific in that they can be due to a number of different causes. In these times, therefore, physicians need to be especially aware of the connection between trauma and symptomatology and, if need be, take on the role of educators and referral agents.

Physicians need to maintain their vigilance even as time passes. As patients distance themselves in time from September 11th, it is likely that they will find it more and more difficult to make the association between the events of that day and their presenting emotional or physical symptoms. For some patients who have not received mental health counseling, their problems may become more entrenched over time and more difficult to treat. Physicians also need to keep in mind that many of their patients with no history of emotional problems might benefit from disaster counseling services. Because an increasing number of studies are finding

that emotional trauma, if left untreated, can also lead to long-term and serious physical illness, ¹¹ the role of the physician in responding to emotional symptoms of trauma many be even more important than previously recognized.

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