Massachusetts' Post-Traumatic Stress Disorder Program: a Public Health Treatment Model for Vietnam Veterans

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Synopsis

Post-traumatic stress disorder (PTSD) can be a serious aftermath of catastrophic events such as war. The incidence of PTSD appears to be high among Vietnam veterans. PTSD can be extremely disruptive to a person's physical and mental well-being, family life, social relationships, and employment status. Yet, for a variety of reasons, many Vietnam veterans suffering from PTSD have remained undiagnosed or insufficiently treated.

The Massachusetts Department of Public Health, in cooperation with the Massachusetts Department of Veterans Services, initiated a hospital-based treatment and rehabilitation program for Vietnam veterans who have PTSD. As of November 1989, 150 Vietnam veterans had been admitted to this program.

War is a public health catastrophe because the aftermath of war extends beyond the individual survivor to the family and community. Its ramifications may be felt through generations, and they pose public health needs often not readily discernible.

The Vietnam War was such a catastrophe. Although precise statistics are not available, the incidence of psychiatric illness is thought to have risen more sharply among Vietnam veterans since the war than among veterans of previous conflicts such as World War II (*1, 2*). Significantly increased rates of incidence of depression, anxiety, alcohol and drug abuse and dependence, and post-traumatic stress disorder (PTSD) have been noted in Vietnam veterans (*3*). For example, the National Vietnam Veterans Readjustment Study estimated that 15 percent of male and 9 percent of female combat theatre veterans currently suffer from PTSD (*4*). Death rates from selected causes including motor vehicle accidents, homicide, suicide, and drug overdose have been noted to be elevated in Vietnam veterans (*5, 6*). Self-perceived health status has also been found to be worse among these veterans compared with the general population (*7*). Despite the availability of Federal services, a broad need exists to enable the general health care community to cope with the variety of health problems such veterans face.

Massachusetts, with close to 175,000 Vietnam veterans and current estimate of 26,000 with PTSD, has developed a unique health care program to address these issues. This article describes the need for this type of program, the process through which the program was established, the treatment protocol for those admitted, and initial results. The public health program we will describe is one that we believe can be a model for similar programs nationwide.

Definition of PTSD

PTSD is a condition not limited to war as its cause. It can occur subsequent to exposure to catastrophic events that can cause distress in almost anyone. It is characterized by symptoms such as intrusive recollections of the catastrophic events, flashbacks, hyper-startle response, numbing of emotional responsiveness, sleep disorders including nightmares, and memory problems (*8*). Feelings of rage and depression may also be associated with this disorder. People may isolate themselves to avoid stimuli that may symbolize the catastrophic event. There can be a lowering of affect and a reduction of involvement in the external world.

These reactions to catastrophic stress can cause subjects to abuse themselves through poor eating and sleeping habits, social alienation, and alcohol and drug abuse. Medical complications may be relatively common in this disorder and may need attention.

These symptoms of PTSD have been noted repeatedly among Vietnam veterans (*4*). The Vietnam War immersed large numbers of American youth in the death experience. Adding to the immersion in death were other concomitant factors contributing to PTSD

that were somewhat different from other wars of this century. The young age of the combatants, the nature of their rotations through tours of duty, the difficulty in recognizing the enemy, the guerilla nature of the war, and the difficulty in understanding the mission of the military forces all contributed to the psychiatric problems of Vietnam veterans. Additionally, the return home to a community which often treated the veteran with indifference or even open hostility contributed to lingering problems that the veteran had to deal with after discharge from military service (*9*).

One recent survey found that approximately 50 percent of Vietnam veterans had one or more symptoms of PTSD (*3*). It has been estimated that 470,000 male and 650 female Vietnam veterans exposed to combat may be suffering from PTSD (*4*). Prevalence among white Vietnam veterans has been estimated at 14 percent, among blacks at 19 percent, and among Hispanics at 27 percent (*4*).

PTSD—a Public Health Problem

The large number of Vietnam veterans suffering from PTSD, the multiproblem nature of the disorder, and the unmet treatment needs make this an important public health problem requiring a comprehensive solution in the public health arena. Additionally, it had become clear that there existed serious needs in family treatment (*1, 10*). Experience has indicated that the ramifications of trauma extend through the family and can have multigenerational effects. The numerous behavioral problems associated with PTSD can have devastating effects on spouses, children, and other family members—further strengthening the need for preventive public health strategies (*1, 10*).

It is a new concept to use a public health approach to the treatment of war trauma. Choosing a public health response to trauma is based on the multiplicity of problems (medical, psychological, and social) faced by this population, the chronic aspects of the disorder, and the disorder's ramifications within the family and the community. Furthermore, the fact that the precipitating traumatic events were events "that would be markedly distressing to almost anyone" (*8*) lends itself to a treatment that focuses on the commonality of the survivors with the community rather than separating them further by focusing on their "abnormal" response to extraordinary circumstances.

Gaps in Service

When a veteran seeks health services, or when a veteran's family seeks such services, a complete review of combat history is necessary. Many times medical practitioners list the dates of service, but do not ask the questions that might uncover trauma. This failure may result in retraumatization of the veteran, especially the Vietnam veteran, and can result in missed opportunities for intervention.

The reasons for the oversights of the past have been numerous. A reluctance to open up areas in which the practitioner might hear about catastrophic trauma may underlie the oversights. No one want to expose himself to possible images of war and atrocity. The realities seen on the nightly newscasts showed the American public what they never wanted to hear or see. In addition, most physicians have not received training in the recognition and treatment of PTSD. As a result of these factors, those veterans or their family members have sought help often were not identified or were inadequately treated in the general health care system.

The needs for additional resources to complement the Federal system and to close the gaps in the general system of delivery services were excruciatingly apparent by 1984 in Massachusetts. At that time both the staff of the regional Veterans Administration (VA) PTSD Program and information coming out of State-funded veterans' programs indicated the need for additional inpatient services, particularly for PTSD. Lengthy waiting lists at the regional Veterans Administration PTSD Program and a lack of resources in the private health care system contributed to the perception that existing needs were not being sufficiently addressed. The staff of the regional VA PTSD Program supported and encouraged the development of these proposed additional State-funded beds.

Public Health Intervention

In 1984, the Massachusetts Departments of Public Health (MDPH) and Veterans Services (MDVS) first discussed the creation of a discrete inpatient program to treat PTSD and its associated problems of Vietnam veterans. Estimating the number of persons in need was difficult because hard epidemiologic data did not exist. Prevalence estimates for persons in need were determined based on the assumption that one-third of the 175,000 Massachusetts veterans actually saw combat. If this were a normal population, one would expect to use 0.44 beds per 1,000 persons for an inpatient hospital-based psychiatric care (*12*). However, this group was not considered to be a normal population and the needs were therefore judged to be greater.

As already noted, the regional VA PTSD Program had long waiting lists. The three beds which had been set aside previously for PTSD patients in the MDPH's Center for Alcohol and Substance Abuse Disorders Program at its rehabilitation hospital at Rutland Heights

had been filled for most of the previous 3 years. We therefore anticipated that a significant population existed that could benefit from discrete services and proceeded to develop a plan for such services.

We determined that an inpatient program, which provided a comprehensive set of medical, psychological, vocational, and rehabilitative services, was the most appropriate setting to provide treatment. The duration for such a program would be shorter than the existing inpatient VA program, in part because it would link up with existing outpatient services already being provided by the MDVS. The MDPH's Center for Alcohol and Substance Abuse Disorders at Rutland Heights Hospital, which specialized in treating multiproblem patients, had already been highly successful in such efforts and provided an excellent source of expertise for an effort of this kind.

A further indication for the creation of an inpatient program rested on the theory that control over environmental factors that could stimulate the expression of PTSD symptoms was important. Destimulation of the environment would set the climate for reducing symptoms. The staff could then successfully begin a process of reconnection of the patient through basic human bonding and trust. The reconnection within the therapeutic setting could then be generalized to the veteran's family and community, restoring the bonds which had been ruptured in the combat experience.

We prepared a detailed position paper and rationale for the development of a 12-bed discrete unit to treat PTSD at Rutland Heights Hospital. Our positions as Program Manager at Rutland Heights Hospital and Deputy Commissioner of the Department of Public Health indicate the importance that the agency placed on this proposal. A detailed proposal was reviewed with the Department of Veterans Services prior to final submission to the State's Secretary of Human Services, to whom both the MDPH and the MDVS report.

A planning board was developed by the Office of the Secretary of Human Services; its members included Vietnam veteran constituency groups, representatives of the MDPH and MDVS, and technical experts in the fields of psychiatry, psychology, and catastrophic trauma. The constituency groups provided grassroots support for the proposal.

In 1986, the Massachusetts Legislature approved the funds for this unit. To our knowledge this was the first time that a State had developed a comprehensive inpatient rehabilitation program to treat the devastating psychosocial results of war.

Approximately $400,000 was appropriated to establish a separate and distinct, comprehensive rehabilitation center on the grounds of Rutland Heights Hospital. The project would be developed consistent with the other previously accredited and successful rehabilitation services of the hospital and would operate at an active hospital level of care. Included would be 24-hour medical and nursing care, 24-hour counseling services, vocational services, psychology and psychiatric services, occupational therapy, physical therapy, speech therapy, recreational therapy, art therapy, family systems therapy, and the full range of rehabilitation services of the hospital.

We identified the need to educate families, community agencies, and providers to identify and provide assistance for the medical and psychological problems resulting from PTSD. Members of the staff have been used to provide such community-based training and to encourage the existing health care community to provide services to the Vietnam veteran population.

The health education process of these groups also focused on prevention of the perpetuation of symptoms within the veteran's lifecycle, further family disruptions, and the multigenerational problems resulting from the disorder. The use of health education as part of the treatment program helped to round out the program as a public health response to PTSD.

PTSD Focus and Its Sequelae

From the start, it was clear that the central health care issue that should be addressed was PTSD. It was also clear that we would be dealing with a chronically disordered population, some of whom had been unsuccessfully treated or not treated at all for as long as 20 years. Ancillary difficulties, such as problems with employment, were anticipated as were long-term addictions problems, personality disorders, family disorders, and chronic medical illnesses. This set of problems would require the full range of rehabilitative services of a major hospital environment.

Our theory of treatment began with the suggestion that the exposure to meaningless death leads the trauma survivor to a condition in which the connections that hold the subject together rupture, leaving him or her in a state of detachment, confusion, and despair (*11, 13*). The redevelopment of trust, hope, and a positive outlook on living are essential to the healing process and forms the basic core around which our program is built. This central element of the project necessitates the involvement of the veteran's family and community.

This humanistic reconnecting process also may have an effect on the reduction of the symptoms in the trauma survivor and the family cosurvivors. This reconnection concept may not be classical in its approach and to some may seem insufficient. However, it has been significantly stated before that "classical psychotherapy procedures not only may be ineffective, but they are

often inappropriate and even deleterious to crisis intervention efforts'' in the case of disasters. We believe that this may be true in treating the post-traumatic disaster survivor as well (*14*).

Maintaining a destimulating, healing environment in which veterans regain self-respect and self-sufficiency is the core of the treatment program. The program does not focus on trauma regression (or the more intensive technique known as ''flooding''), which is an approach often taken in traditional psychological therapies for PTSD. PTSD patients have suffered traumas beyond the normal human experience and are often immersed in death. We believe that the regression of patients to traumas that are so catastrophic as to be essentially ''undigestible'' (or not psychologically integratable) in nature may be of limited value in the treatment of patients. Because of this, trauma regression in our program is done only at the discretion of the patient and not at the discretion of the therapist. The program objective is to focus on reconnection, rather than trauma regression or flooding.

We were not convinced that trauma regression is, or should, form the basis of a humanistic, public health approach to PTSD. The patient's death images cannot be made meaningful if they are essentially undigestible. Furthermore, the disconnection from the past, family values, friends, and life itself that occurs in death immersion seems to require reparation as the precursor to adequately coping with death immersion (*11, 13*). In this sense, we have selected an approach that focuses on restoring the patient's connectedness in order to enhance his or her sense of self, and this approach allows reflection on the traumas within a new context. It is a central difference between our program and other programs that use trauma regression or flooding as a primary treatment modality. While our program focuses on Vietnam veterans, the rationale underlying our public health approach could be applied to any death-immersed PTSD population.

We chose the concept of reconnection as central to recovery from catastrophic trauma. The nature of such traumatic events generally precludes their meaningful integration into a subject's psyche. We postulated that the attachment bonds described by others may rupture in the face of severe trauma (*15*). It has been suggested that the rupture of connections can result in an ''undifferentiated'' condition characterized by a failure of boundaries between self and others, present and past, self and values, and even self and self (*13*). If this is true, then the primary therapeutic role may not be to attempt to integrate such events, but rather to restore the disconnected self. We also felt that it was important to focus on the veteran's family, who in many senses were cosurvivors of the trauma. The cosurvivorship issue has its analog in the coaddiction concept within the alcoholism field. This concept accepts the premise that family members are affected by the disordering process and in fact become a part of that process. They may evidence aspects of the illness such as denial, depression, alcohol abuse, and a higher incidence of physical illnesses.

Work with the Holocaust survivor group has indicated similar effects on family members, especially children, in that population (*16, 17*). Higher incidence of depression, poor impulse control, guilt, substance abuse, and other sequela of PTSD patients have been noted among family members (*10*). Our experience with Vietnam veterans with PTSD has shown the same phenomena. Family members may become cosurvivors and the functioning of the family as a whole become impaired.

Second generational effects of catastrophic trauma have been reported by several authors (*17–19*). Beyond the effect on persons, problems in life development, including failure in the generational reconciliation process, exist (*19*). Without the conclusion of this process, there is an impairment in the maturation process and the ability to reverse roles with parents in the aging process. There is no doubt in our minds that similar multigenerational issues exist in any catastrophic trauma group and most certainly in the Vietnam veteran survivor group.

Program Structure

The structure of the treatment was developed by the treatment staff assisted by an advisory committee to the MDPH and MDVS. This committee of experts represent the fields of psychiatry, nursing, medicine, addictions rehabilitation, hospital administration, forensic psychiatry, health education, and public health. The advisory committee also included Vietnam combat veterans and staff members of local VA programs. The numerous details of the project were discussed by the committee over the year preceding the opening of the project. The major components of the program are listed subsequently.

Individual counseling
Group process psychotherapy
Structured human relations training
Substance abuse education-counseling
Family therapy
Vocational counseling
Art therapy
Recreational therapy
Medical care

The actual structure adopted rests on the public health philosophy discussed earlier, the needs of

patients and family members for health education regarding their illnesses, and the need for structure within the treatment group. A structured treatment day as well as the inclusion of daily structured human relations exercises were integrated into the treatment (*20*). While structure was considered helpful to the general treatment outline, an atmosphere of flexibility was maintained to provide for such problems as sleep disturbances. Full staffing is in place on the night shift, for example, to be able to provide attention to those plagued by nightmares or insomnia.

An average program day begins with a community meeting in which patients may discuss with staff problems that exist on the unit. After this, patients proceed to an art therapy session in which they use expressive mediums to facilitate dealing with the emotional subjects that they have difficulty verbalizing. Patients process their experiences in this expressive, therapeutic modality with the art therapist-counselor. Group process counseling follows a lunch break and alternates in the scheduling with structured human relations training groups, oriented to assist patients in dealing with specific life-skills problems around which they may have difficulty (for example, decision-making and communications skills). Patients also have time to meet with an individual counselor. During the week, they can also meet with a vocational specialist to assess skills, interests, and abilities, as well as to form the link with external vocational development organizations. The vocational specialist is also provided to the program on a regular basis through the Job Training and Placement Act Program, administered through the MDVS.

A recreational therapist develops leisure time activity programs in the evening and on weekends. Alcoholics Anonymous meetings are available for those patients who are alcohol addicted. Educational sessions are held to acquaint patients and families with the nature of traumatic disorders using a health education approach (*21*).

Therapeutic Environment

A great deal of attention to the therapeutic environment was given in the development of the project. A residence on the grounds was reconverted to house the 12 beds. The reconstruction of this 6,000-square foot space included a kitchen, lounge, conference areas, and nursing-medical offices. Colors with a calming effect were used in painting the building with an eye to the creation of a healing therapeutic environment of low stimulation. The location of the hospital in a pastoral setting was also considered important—the grounds include 88 acres of woods, ponds, and fields.

Within the therapeutic environment, the concept of coming home from the war has been stressed. War traumas are essentially undigestible (*11, 13*). They are experiences which cannot be broken down and made meaningful. There is limited benefit in requiring the patient to regurgitate the traumatic images over and over in such cases. It is not important to our treatment program to constantly image the trauma. We do not allow the wearing or display of militaria. Rather, civilian dress is the mode and calming pictures are displayed. There is only one map of Vietnam on the PTSD unit and that is for the purpose of locating events.

Trauma discussions are most appropriate in group and individual counseling. The rest of the patient's time is devoted to healing, reconnecting endeavors. If the patient wants to regress to the trauma, we must be there to listen; but if they wish to bear witness in silence, we must respect that (*22*).

Treatment Personnel

A note must be made of the treatment personnel in catastrophic trauma programs. It has been commented that relief workers in a disaster should be defined as needing emotional relief themselves (*14*). We believe that this same principle holds true for personnel involved in rescuing survivors from catastrophe, even if this happens in the post-trauma period.

It is difficult to find personnel with specific training in therapy for catastrophic trauma. It is beneficial to recruit a sensitive, caring staff of varying professional backgrounds. Our personnel come from training backgrounds in nursing, counseling, and expressive therapy. The primary help that staff need is in dealing with the obvious countertransference to survivors. Beyond this, education is provided in the theory underlying trauma and its impact on a person's life as well as specific techniques for therapeutic intervention.

It is also helpful to have both Vietnam veterans and non-Vietnam veterans on the staff. The material of this kind of devastating trauma is very difficult to handle. We have experienced deep weeping by the staff as well as the patients. As much attention needs to be paid to the staff as to the patients. No one can sustain the exposure to purposeless death, even second hand. Time out from treatment, sufficient client-staff ratios, inservice education, and clear supervision all can alleviate early burn-out and actual dysfunction within the staff. The staff is at risk and their needs cannot be ignored.

Effects of Treatment

It is too soon to tell if our humanistic, reconnecting public health approach will have long-term effects. Virtually all of our patients have presented with the variety of symptoms and sequelae of PTSD including flash-

backs, nightmares, intrusive recollections, hyper-startle response, rage, guilt, depression, and other symptoms representative of a massive insult to the ego's integrity. Although the chronic aspects of the disorder such as guilt and depression are more persistent and must be treated over the long term, we have seen rapid destimulation of patients entering the program and subsequent reductions in the intensity and frequency of symptoms such as flashbacks, nightmares, intrusive thoughts, and hyper-startle response. This general relaxation of anxiety symptoms helps set the stage for work on the more chronic and persistent symptoms.

A description of the first 38 program graduates seen as of March 1987 indicates their many problems. Significant medical problems were presented by 76 percent, including diabetes, renal failure, high blood pressure, seizures, hemiparesis, orthopedic pain, ulcers, and obesity; 89 percent had evidence of alcohol abuse; 58 percent evidenced drug abuse; 26 percent had affective disorders; 18 percent had personality disorders; 13 percent evidenced other anxiety disorders; 2.6 percent evidenced dissociative states. Their mean length of stay has been 46.5 days. As seen in table 1, more than one-half were either divorced or separated; less than one-third were married. Approximately 40 percent were either unemployed, disabled, or unskilled workers. Of note is the fact that since the inception of the program, almost one-half of the referrals have come through the VA (table 2).

The need for continuing aftercare has been self-evident. This care may require the use of existing community-based resources such as outpatient medical and mental health resources, halfway houses, job training programs, and family counseling programs. Because of the severe addictions that these patients suffer, the use of Alcoholics Anonymous, Narcotics Anonymous, and other addictions programs can be helpful. We are dealing with chronic disordering that, while treatable, may not be curable. We therefore will be working with the trauma survivors and their families over a long period. It is not too early to consider the long range effects of PTSD and to plan for potential gerontological problems that may exist for these persons.

Some anecdotes from the treatment process are encouraging, however.

- Within the first weeks after opening, the unit ran out of tissues. Even though we do not require trauma regression, this does happen to patients. When it does, it is a powerful experience for both the patients and the staff. What is most powerful is that the patients can talk about horror at their discretion and be continually validated as people, separating the person from the events.
- We staffed heavily on the 11 p.m. to 7 a.m. shift to prepare for what we felt would be serious sleep disturbances. Indeed, everyone who had been admitted indicated that they had nightmares and often stayed up late to avoid sleep and dreams in which they would return to Vietnam. The first staff complaints came from the night staff, who were bored. The patients were sleeping and

Table 1. Characteristics of first 38 patients in Massachusetts' Vietnam Veterans PTSD Program (percentages)

Category	Measure
Age	
Mean	[1] 39.07
Range	[1]34–45
Sex	
Male	100
Female	0
Race	
White	92.11
Minorities	7.89
Marital status	
Married	31.58
Separated	18.42
Divorced	34.21
Single	15.79
Education	
Graduate education	5.26
Attended college	31.58
High school graduate	23.69
Never finished high school	39.47
Vocation	
Professional	15.78
Skilled	42.11
Unskilled	18.43
Disabled	7.89
No work	15.79
Service history	
Mean length of service	[1]4.08
Years of service	[1]1960–76
Most common service years	[1]1967–70
Service branch	
U.S. Navy	5.26
U.S. Army	[2]52.63
U.S. Marine Corps	[2]44.74

[1]Years.
[2]One person served in both the Army and the Marine Corps.
NOTE: PTSD = post-traumatic stress disorder.

Table 2. Source of referrals to Massachusetts' Vietnam Veterans PTSD Program

Category	Percent
Self	5.26
Substance abuse programs	10.53
Judicial (State prisons, court)	10.53
Outreach veterans centers	23.68
Veterans Administration	44.74
Other	5.26

'Because of the severe addictions that these patients suffer, the use of Alcoholics Anonymous, Narcotics Anonymous, and other addictions programs can be helpful. We are dealing with chronic disordering that, while treatable, may not be curable. We therefore will be working with the trauma survivors and their families over a long period.'

reported that it had been the first time in years that they had slept so soundly. The patients felt that the atmosphere was so calming that they could rest. If they did arise at night, the staff was there to listen, to talk, and to eat with them in the unit's kitchen, which has become, like many kitchens in homes, a center for interaction.

- The first five patients admitted decided that the unit needed a logo. After much thought, they surrounded a Vietnamese Service Medal with words made from the initials of their diagnoses, PTSD. Instead of spelling out "post-traumatic stress disorder," however, the patients spelled out their new-found meaning of PTSD: "Peace, Tranquility, Strength, and Direction."
- Pet therapy was not anticipated. It happened spontaneously when a beautiful calico cat adopted the unit as its home. The patients immediately took over the care of the animal whom they called P.T. P.T.'s effect was simply to help make the unit homelike. She can generally be seen curled up in a chair and is a very peaceful cat. For some of the patients, she is a calming influence. For all of us, she represents love. Caring for pets is and can be a part of a healing environment.
- Reconnecting is the watchword of our program. A wonderful and unsolicited addition has been the involvement of community groups like the Friends of the Hospital, the Elks Club, the Vietnam veterans associations, and the Jewish American War veterans. These groups have helped the patients feel the sense of connection to the community that they so desperately missed when they came home. These groups have donated paintings, afghans, food, Red Sox baseball tickets, time, and volunteers to the unit. The outpouring of caring has impressed everyone—especially the patients—and makes our reconnecting philosophy extend throughout the community, keeping the patients from their natural isolation.
- The unit has developed a culture around leaving. For so many of these men, loss is only connected with grief. There has been much anxiety when people graduate from the program. As a result, leaving the unit is emotional. When a person leaves, the staff and patients gather together in front of the building. People say words of encouragement and share their positive thoughts and hopes for the graduate. The patients hug each other and often cry. The staff gathers around and all embrace. The graduate promises to come back for the aftercare group and, in fact, does come back often with food or presents for the remaining patients. The connections are continued and leaving has become a positive, but poignant, experience.

Conclusion

Society must take responsibility for survivors of catastrophe. The role of a public health department in such circumstances is and should be to fill the gaps in the treatment system, whether these gaps are real or perceived. The responsibility in war does not end when the soldier returns. The soldier who has suffered the effects of war, either physically or emotionally, remains the responsibility of the community at large. It is that responsibility that underscores the mission of our program.

The Massachusetts' program has already attracted widespread interest. Public health and veterans' agencies from other States and the Federal Government have contacted us repeatedly to discuss this initiative and their interest in it. Mass media from many States have also reported on this project. We believe that the initiative we have described can serve as a model for others interested in helping survivors of catastrophic trauma.

Technical descriptions are helpful, but ultimately they are not sufficient for understanding a program such as ours. Massachusetts' program is not about technical philosophy or medicine. It is about hope. Hope is healing in itself and a path to going on with life. Hope is the one thing that the combat veteran and trauma survivor has lost and needs to regain. Hope is the fundamental basis of our program.

Initial results from the Massachusetts' program should encourage other States to adopt similar initiatives to assist Vietnam veterans in their jurisdictions who suffer from PTSD. This is indeed a public health problem worthy of attention.

Addendum

Between the time this article was first written and the fall of 1989, an additional 112 patients were treated in the PTSD Program. However, the MDPH announced in October 1989 that it planned to close Rutland Heights Hospital because of the State's serious fiscal problems.

A Vietnam veteran, who had previously been treated by the PTSD Program, called in crisis shortly thereafter

seeking readmission. He was told that admissions had been frozen because of the impending closure of the hospital and that therefore his request could not be honored. Nine days later he died of a drug overdose.

We dedicate this article to that veteran. His tragic death underscores the importance of providing continuing treatment and hope to that vulnerable population.

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Distance Between Homes and Exercise Facilities Related To Frequency of Exercise Among San Diego Residents

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Synopsis

Although personal determinants of exercise behavior have been studied extensively, few investigators have examined the influence of the physical environment on exercise habits. A random sample of 2,053 residents of San Diego, CA, were surveyed regarding exercise habits and other variables. A total of 385 exercise facilities in San Diego were classified into categories of either free or pay. After the addresses of respondents