AMEDD CLINICAL PSYCHOLOGY
SHORT COURSE

10 - 15 May 1992
EISENHOWER ARMY MEDICAL CENTER
Augusta, Georgia
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<td>A. David Mangelsdorff, Ph.D., M.P.H.</td>
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PROGRAM
AMEDD CLINICAL PSYCHOLOGY SHORT COURSE
10 - 15 May 1992

COURSE LOCATION: Radisson Riverwalk Hotel

MON 11 MAY

0800 WELCOMING REMARKS - BG HASTINGS
0830 REMARKS BY THE CONSULTANT OTSG
THEN, NOW, AND FOR THE FUTURE - COL LASKOW
1000 MEDICAL SERVICE CORPS UPDATE - BG MIKETINAC
1330 COORDINATED CARE ISSUES - LTC(Ret) RATH

TUES 12 MAY

0800 MMPI-2 UPDATE - DR. GREENE

WED 13 MAY

0800 STRESS INOCULATION TRAINING - DR. MEICHENBAUM
1400 POSTER SESSION

PSYCHOLOGICAL INTERVENTIONS ON CASUALTY OPERATIONS PERSONNEL - DRS. FULLERTON/BARTONE
COMBAT STRESS REVISITED: WHAT LEARNED FROM THE GULF WAR - LTC ROLAND
EVALUATION OF COMBAT STRESS TRAINING - LTC MANGELSDORFF
MENTAL HEALTH PROFESSIONAL RESERVISTS ACTIVATED IN DESERT STORM: EFFECTS ON COLLEAGUES AND PATIENTS - DRS. MAYERS/HOUSE/CASPER
US ARMY AEROMEDICAL PSYCHOLOGY TRAINING COURSE - DRS. PIACNO/BOWLES/EDWARDS
SUICIDE ATTEMPTS AND GESTURES IN AN INFANTRY DIVISION - CPT RUSSELL

THURS 14 MAY

0800 RORSCHACH UPDATE - DR. EXNER
1530 USAREUR UPDATE - LTC KLUSMAN

FRI 15 MAY

0800 CAREER ACTIVITIES UPDATE - MAJ(P) CRANDELL
0900 OVERVIEW OF DISASTER RESPONSE MEASURES - MAJ GARLAND
1000 PSYCHOLOGICAL SUPPORT DURING THE KILLEEN SHOOTING TRAGEDY - LTC SETTLES
1130 CLOSING REMARKS
On behalf of the Surgeon General of the United States Army, LTG Frank Ledford, and the Medical Service Corps Chief, BG Bruce T. Miketinac, I thank you for inviting me here today for what truly will be a memorable experience -- another in a long line of successful short courses for Army Psychology. The folks from the Department of Psychology of Dwight David Eisenhower Army Medical Center (DDEAMC) are to be commended for putting together a truly stimulating, challenging, and interesting schedule for our week here. They have additionally given all of us an opportunity to recapture and appreciate our historical roots as mental health professionals in what has to be equivalent to the world's largest HMO.

This year, I would like to dedicate our professional conference to the theme of "Contrast," i.e., to the younger and the older Army psychologists. Certainly there is enough of each among us: hair color, or lack thereof, is one discriminator; another is seating -- you will notice that most of the young officers are sitting close to the front, while the old guys are sitting in the back of the room, jabbering away.

The younger officers and clinicians... the spirited enthusiasts... making the old guys want to "do-it-again" (even though they have difficulty remembering what the "it" is) and want to tap their enviable enthusiasm and energy.... And, to the "Old Guys," to whom I fondly refer as the "former" consultants to the U.S. Army Surgeon General, or soon to be such... I want to emphatically state that all we are today was made possible, with your help. Wednesday evening at the banquet will be a golden opportunity to interact with these strategic designers who I have had the honor to continue their vision statement.

Last year, I presented to you a retrospective of the compound reaction of the entire medical department as it prepared for and engaged in a state of war. (I never thought that I would ever be commenting on those three powerful words).

Following that most intense and living room-observed series of battles, we ourselves were finally able to recognize and host a "home coming" for many of our returning combat mental health professionals. We shared with them a sense of pride and admiration for their unparalleled accomplishments. They are very special people to us, and they have set the standard by which Army psychologists will be measured for years to come.

We had a chance to validate all that we have learned about the principles of combat mental health interventions for once, lessons learned of combat mental health interventions. For once, lessons learned were not to be lessons relearned, repeated, nor forgotten.
Even as the war raged on, the parallel, peacetime initiatives of DoD Health Care continued forward, giving us an almost uncanny sense of "business-as-usual" and setting the stage for even more aggressive assaults on traditional health care expectations, roles, relationships and professional functions and standard review.

The health care delivery environment has changed. We all have been thrown into a bold, new marketplace.

I am certain that several of my senior colleagues can remember when there was a comforting sense that we were spared many of the restrictions of the health care marketplace, as experienced in the civilian sector. We operated with a seemingly endless source of revenue, and we simply had to posit a good argument in order to receive more dollars. No such situation exists today. Each of us is now confronted with DRGs, AWGs, manage-to-budget instructions from our DCSs, managed care, CQI (TQI), etc. I would confidently state that our young psychologists in the AMEDD today are better prepared than their civilian counterparts to tackle anything that the health care marketplace throws at them.

These are exciting times for Army psychology. It has been a frustrating struggle at times; it has been rewarding and gratifying at others. Nevertheless, it all has been well worth it.

Let me illustrate how the collective efforts of our team, i.e., of all of you, has fared in the past year. You may find that strange (i.e., my use of the term "TEAM"), but I think that is how it actually happens for us and for our patients/clients. There is no conceivable way that, what we do as a consultants, is a unilateral effort: hopefully, I work for and with you!

**PSYCHOPHARMACOLOGY DEMONSTRATION PROGRAM**

Two Army and two Navy psychologists are enrolled in a two year fellowship in a composite model of learning experiences at the Uniformed service University of the Health Sciences Medical School (USUHS) and Walter Reed Army Medical Center (WRAMC). The work at USUHS is essentially several courses from the first and second year of medical school including Anatomy, Biochemistry, Physiology, Clinical Medicine, Clinical Concepts, Pathology, and Psychopharmacology. All exams are taken, but grading and scores are the responsibility of the Director of Training of the Department of Psychology.

The clinical practicum of the project occurs at WRAMC and has several components: review of medical charts of long-term medication patients in the Continuing Care Clinic; and ward rounds with the staff of the Psychiatry Consultation Liaison Service and the Impatient Psychiatry Service. Each fellow is responsible for maintaining a current data base on each patient he or she sees throughout the clinical practicum.

The performance of the fellows and the design of the program is periodically reviewed pursuant to a DoD contract awarded to the American College of Neuropsychopharmacology (ACNP). This provides a group of multidisciplinary subject matter experts to give guidance to the project director.
The director's ability to freely respond to guidance concerning curriculum or administrative structure is necessarily somewhat constrained. Growing pains have been experienced in all aspects of the program. Nonetheless, all indications are that there will be future iterations of this program. The next will probably start in August of 1993 and may well include Air Force personnel.

I envision that many of the "bugs" of the current design will have been worked through by the next iteration and that there will be a year dedicated solely to didactics followed by a year long clinical practicum (unlike the present concurrent model).

If any of you are interested in participating in this program, I would strongly suggest that you let me know now. I am already beginning to review the pool of possible candidates.

AEROMEDICAL PSYCHOLOGY SHORT COURSE

This March, the Medical Service Corps sponsored the first U.S. Army Aeromedical Psychology Short Course at the School of Aviation Medicine, Fort Rucker, Alabama. Course designer and director, Captain (P) James Picano and his associate director, LTC (P) Frank Edwards, did an outstanding job at developing this three week course. More than twenty faculty, representing all of the armed forces and the National Aviation and Space Administration, were involved; and an Air Force psychologist was in attendance as a student.

The course included lectures and practical exercises (i.e., air time with hands on exposure to night vision goggle flights, hypobaric chamber "rides," application of psychological and neuropsychological assessment protocols for the unique issues facing the psychologist who is evaluating a pilot). Captain (P) Picano and LTC (P) Edwards creatively incorporated primary/preventative considerations, as well a tertiary considerations such as the use of hypnosis in assisting with post crash investigations.

BG Miketinac has been a strong supporter of this course from the beginning, and I have been given assurance that it has been budgeted and will be put on again in FY93. Priority for attendance will go to those clinicians assigned to units or installations where there are a substantial number of airframes and where there is a flight surgeon. The course will probably be in the Spring as before, and the application process is the same for all short courses.

Ph.D. CLINICAL PSYCHOLOGY PROGRAM AT USUHS

What seemed a logical initiative and mission for USUHS has unfortunately withered once again. Previous consultants also tried to start such a program; this time, however, there was explicit instruction from Congress to make it happen. Even so, I am afraid that its death knoll has been sounded and, sadly, sounded before it was given a fair chance.

My own analysis is that the design was strong and represented the traditional Ph.D. model advocated by the APA. It was well conceptualized and would have eventually withstood scrutiny by the Accreditation Office of APA. The fundamental problem was that there was no identifiable, clinical full-time, faculty salaried by USUHS; other faculty from USUHS and WRAMC
essentially dual-hatted themselves from their traditional program to this newer one.

An additional problem was a political one. Initiating the program was apparently a popular action; permitting it the time to develop a worthy curriculum and a supporting faculty base was not. A "student" was accepted, who had been formerly enrolled in another program of instruction, and another took some of the classes even though she was pursuing a doctorate in another field of psychology.

The Army and Air Force did not participate in this first version. I, personally, believed the program was not yet well enough defined to endorse the enrollment of a Health Professions Scholarship Program (HPSP) or long term civilian training (LTCT) candidate, especially since we stipulate that there must be APA approval for any academic experience under these scholarship programs. Perhaps the outcome would have been different if USUHS had developed the program around civilian students at first, as was done within the Department of Medical Psychology.

DoD Mental Health Task Force

This tri-service task force exists by Congressional directive and provides recommendations on policy and standards directly to the Assistant Secretary of Defense for Health Affairs, Dr. Enrique Mendez. Considering that there is no requirement for the mental health specialty advisors to go through their respective chains of authority, this gathering, if properly used, is a gold mine. I am also sure that there is no other group like it in DoD for other health related subspecialties. We report to a two-star admiral who conveys the data directly to Dr. Mendez. Presently, the task force is chaired by a psychiatrist; however, I see no reason why that chairperson's position could not rotate among all the professional groups represented: its constituency delineated by Congress; its helmsmanship can similarly be so directed.

The task force has made substantial input to a national quality assurance contract that will be eventually be awarded to (a) assess degree of adherence to standards and thresholds of all CHAMPUS providers, (b) the minimum components of an initial evaluation of a patient/client seeking mental health services, and (c) the minimum components of a treatment plan for that same patient/client. One of the more controversial issues it has addressed by is the notion of admission privileges for non-physician health care providers. I will comment later on this issue, but I can say at this point that this too was directed by Congress, and we are to have a tri-service plan for Dr. Mendez by the end of June 1992.

Congress also stipulated that the respective professional associations and guilds will each have opportunities to provide input. This provides an additional, external peer review process that is politically sensible and affords additional perspectives on complex issues. It also permits the American Psychological Association to have substantial influence on those DoD initiatives that directly affect a large number of its members (i.e., CHAMPUS providers). Moreover, the Council of Federal Agency Psychology Practitioners (CFAPP) of our APA, which I shall tell you more about in moment, has several members who are on both committees. This should do much to ensure that
senior leadership of the APA will be informed and knowledgeable on critical DoD policy issues.

CFAPP

CFAPP (Council of Federal Agency Psychology Practitioners), as an advisory body to APA, represents all psychology practitioners in the Federal sector, enabling us to directly influence the thinking of APA's President, Executive Director, and all of the various directorates that have a bearing on policy, standards, and legislative initiatives. For instance, representatives of the Army, Air Force, Navy, Department of Veterans Affairs, and Federal Prisons System recently met at its regularly scheduled quarterly meeting. At that meeting, Dr. DeLeon, members of the Practice Directorate, Board of Directors, Board of Professional Affairs, and Public Interest Directorate assisted CFAPP as it reviewed numerous issues affecting DoD. Those issues included (a) admission privileges for DoD psychologists, (b) post doctoral fellowship standards, (c) the status of DoD's review of its homosexuality policy and military advertising in the Monitor, (d) a request for testimony before Congress by senior DoD and Federal psychologists, (e) and questions about the limits of confidentiality and conflicts, or possible conflicts between the military's position and the proposed, revised ethics standards. The long range benefits of this direct access to the governance of APA cannot be underestimated.

APA Congressional Fellowship

I would like, at this time, to recognize and congratulate one of our most respected and beloved senior psychologists, COL Ernie Lenz. Ernie, along with four other distinguished professional colleagues (one of whom is from the Air Force), was selected as the recipient of the 1992 - 1992 APA Congressional Fellowship. Those of us who are familiar with Ernie's most impressive and colorful assignment history aren't surprised with his selection; it is a continuation of his persistent upward path toward excellence. I believe that Ernie is the first Army clinical psychologist ever to receive this appointment. I congratulate him, and I am looking forward to seeing a lot of him on the Hill in Washington.

Fellowships and Internships

Many changes have taken place within our training base over the past year, and there are a lot more to come.

As most of you know, one of our concerns over the past year was the impact of the effect the DoD policy on homosexuality, taken in conjunction with the APA's non-discriminatory policy in advertising in the Monitor, would have on our recruitment of intern candidates. Our greatest fears were not realized.

Personnel of the Office of Procurement, OTSG, aggressively sought and then implemented initiatives that mitigated the effect of the ban. For example we were given a budget of $12,000.00 to fly any candidate who completed a Clinical Psychology Internship Program (CPIP) application packet to the CONUS CPIP site of his or her choice for a visit with the staff and current intern group. In addition, Officer Procurement identified 11 of the
ROTC Educational Delays who were pursuing graduate degrees in psychology, thus enabling us to communicate with these students, provide them with literature about the CPIP, as well as the HPSP, and to put them in touch with their local procurement officers.

I also suspect that, in large part, this year's successful outcome was immensely successful due to the aggressive and qualitative recruitment initiatives by the Directors of the CPIP sites themselves. I feel, for example, that the systematic process adopted by the folks at DDEAMC, under the direction of the Director of Training, LTC Rich Neary, to be one that all sites should immediately copy for the 1993 CPIP accession year. It is, unequivocally, a quality improvement initiative. It provides data for the Regional Procurement Offices as to the effectiveness of the counselors' interventions with prospective psychology intern candidates, as well as for other subspecialties in military medicine.

Let me tell you a little more about this year's success. For the 1992 CPIP board, 37 applicants were considered, four of whom were returning LTCT officers who were selected up to three years ago for this program and one of whom was a HPSP student who was given a one year scholarship in 1991. The vast majority were from clinical and APA approved programs. There were more female candidates this year than in years past, which is clearly what is needed in order to have female, senior field grade officers who can become directors of fellowships or CPIPs and consultants to major medical commands and to The Surgeon General. Also, as you can see, the Psy.D. and Ph.D. data seem to be consistent with the trends seen in the past few CPIP boards.

Did these patterns hold consistent after Association of Psychology Postdoctoral and Internship Centers (APPIC) day in February? This is the most reliable test of success of any marketing effort for the CPIP.

APPIC Day in February was clearly a success. Before I explain why that was so, let me illustrate how the Office of Procurement assisted.

As I mentioned before, there were four candidates from the LTCT scholarship program. As these officers were already in the inventory and had an accession year group different from the civilian candidates, Procurement indicated that the four would not have to count against the normal accession number of 16 for each CPIP year (since they were already accessed and on active duty). If our training resources could support it, we could, therefore, access a total of 20 interns (i.e., 16 civilians plus four LTCTers). Knowing this possibility somewhat in advance, I asked each of the Directors of the CPIP program to float the proposal to train additional interns (i.e., > 4/site) before their respective training committees. This input was then available as deliberations about the CPIP Board candidates proceeded in January. The decision was to accept five each at DDEAMC and Tripler Army Medical Center (TAMC) and four each at Silas B. Hayes Army Hospital and WRAMC for the 1993 class.

On APPIC Day we successfully received acceptance from 14 civilian intern candidates and, adding to these the four LTCTers, we had a total of 18. In fact, we did not exhaust the order-of-merit, alternate list and told at least three civilian interns candidates from this list that we had filled all of our slots and that they were free to choose other sites. This has not happened in a long time.
The profile of the selectee group was excellent. The vast majority again were from clinical programs; there was a 50-50 split of female and male selectees; the majority were from clinical programs; and APA approved programs were well represented.

All in all, it was a truly successful recruiting year and will continue to have a positive impact past the year 2000.

On a sad note, as I am sure that you know, the installation at Fort Ord is marked for closure in the next few years. Obviously, the CPIC program there will be closed. This will be the second closure of a truly outstanding CPIP program, the other having occurred at William Beaumont Army Medical Center in 1990.

Since 1971, the Fort Ord program has recruited and trained some of our most accomplished professional mental health officers. Individuals such as Ernie Lenz (first graduating class in 1971), Frank Rath, Stan Mintz (the current IMA Clinical Psychology Consultant), Frank Brooks, Rich Rubes, Bob Thomas, Paulette Saffle, Jeff Hansen, Dale Levandowski (Psychopharmacology Fellow), Jim Picano, Greg Gahm, Patti Johnson, Mike Russell, Rebecca Dyer, and Jeff Strolrow and the list goes on and on. -- The 1992-1993 class will be the last class for Ft. Ord.

The replacement program for the Ft. Ord loss may be the Psychology Service at Madigan Army Medical Center (MAMC), Tacoma, Washington. HSC and the Office of the Surgeon General have reviewed and approved this, with a proposed start in 1993. HSC's Resource Management will be determining the additional resources needed to support this program.

There has been a substantial amount of change in our Fellowship program. As you are probably aware, the joint House/Senate Conference on Appropriations mandated that DoD Psychology submit, by June 1990, a plan for the consolidation of its fellowships into a few major medical centers. Additionally, the Army was further directed to have TAMC manage its own consolidation initiative.

Following an Impact Resource and Health Care Service study involving each of the Army fellowship sites, current and proposed, a compromise plan was submitted that addressed what was felt to be the intent of the mandate (i.e. to strengthen the psychology training base at TAMC while at the same time minimizing the adverse impact on patient services and other graduate medical education located in the existing program's hospitals. Regrettably, there clearly was no way to produce a 100% win-win situation.

Recall that the Base Realignment and Closure Act stipulated that Letterman Army Medical Center, where we had one of our two neuropsychology fellowship programs, would also close. The recommended action at that time was for the fellowship program to relocate to WRAMC. Because I did not believe WRAMC to be properly resourced to conduct this program for 1990, I recommended that two fellows train at MAMC, rather than WRAMC. There were, however, no new starts in the neuropsychology fellowship program at MAMC in 1990. The lack of applicants is really not explained. Nevertheless, that, plus the fact that the fellowship director retired in October 1991, and the increasing pressure to implement the consolidated fellowship language,
required a re-examination of proposed sites for the neuropsychology fellowship.

Therefore, the following configuration was submitted to the Congress and is in effect for the fellowship programs for the Army in July 1992: WRAMC will conduct the neuropsychology fellowship and will continue to develop that program's design moving it toward a consortium model with its existing affiliations with Georgetown University and the National Rehabilitation Center; MAMC will conduct the pediatric child psychology fellowship; TAMC will conduct the health psychology fellowship and one additional child psychology fellowship. In the near future, TAMC will additionally develop a neuropsychology fellowship program in a consortium-like model with the VA Center of Waikiki, which will eventually, physically relocate many programs to TAMC structures. The health psychology program at WBAMC, the child psychology program at DDEAMC, and the neuropsychology program at MAMC will close as of July 1992.

The fellowship programs at the newer sites will have the assistance of our most experienced and competent subspecialty professionals. My own goal is that the director of the fellowship program for each site by ABPP qualified in that subspecialty and that the assistant director be a candidate in the same process. Furthermore, I will be asking each of the fellowship directors to become a member of APPIC, and, possibly, to become a part of ABPP's initiative for the development and validation of accreditation standards.

HEALTH PROFESSIONS SCHOLARSHIP PROGRAM (HPSP)

The HPSP is alive and well for Army psychology. In January 1992, in concert with the CPIP board, four additional full scholarships were awarded. In January 1993, ten more will be awarded. This process will continue until there is a steady-state return of, at least, six students into the CPIP each year. I was recently informed by the Personnel Directorate of OTSG that this steady-state figure is likely to be increased. This particular accession initiative is not only lucrative, but practical. Scholarships are the only sensible, long term marketing strategy for Army psychology.

PSYCHOLOGY FORCE STRUCTURE

We are currently stand at 105 authorized spaces in the TDA/TO&E inventories; there are an additional 21 training slots in what is referred to as the THS account (internship, fellowships, officer advanced course, etc.) While we have steadily remained at these levels for a while, that is about to change.

Whether we call it "downsizing," "rightsizing," or "Quick-silver," it means the same thing: We are getting smaller but in ways that you might not expect and according to a timetable that is not necessarily linear with a negative slope. First, some facts about those slots, filled and empty.

There is no longer an 8th Infantry Division in Europe; its assets, including the psychologist, now belong to the "new" 1st AD. There is no longer a 3rd AD, and its assets have been distributed elsewhere.

We have 97 officers assigned to "known" authorizations throughout the TDA and TO&E structures of the Army. Remember, however, that there are a couple
of other "unknown" positions that are occupied by our brethren and several additional officers in branch immaterial positions.

Over the past year, due to six years of fewer graduating interns, fluctuating pay back policies, lower selection rates for promotion, etc., we have a situation where slots exceed resources. The requirement to have a psychologist in many of our divisions will take, by itself 7/8s of the graduating intern group.

While we still have more spaces to fill than our accession rate accommodates, I do not feel that the number of interns that we train at each of our four sites is going to change in the near future. If, on the other hand, these numbers do increase, then, of necessity, we will have to draw down these accession numbers which could have an impact on each site's required cushion number. To give an example, Proponency states that if the model for psychology is working as designed, and officers are staying or 'saving in accordance with that design, then, in FY 96, we could be looking at only 11 accessions per year. However, I do not think psychology officers have ever done anything in the military according to design, and I do not expect them to start now. We are likely therefore to continue our four sites with four interns per site for a short while.

With the accession initiatives of the past two years in place, and others soon to occur (e.g., the Fellowship Assistance Program (FAP) which would allow us to bring in a civilian for a postdoctoral fellowship billet that was unfilled), I doubt that we will have the problem of unfilled CPIP slots or the regular inventory next year. Certainly, some of the downsizing programs will have the ironic appearance of making our faces-to-spaces ratio appear even healthier.

Eighty of the 97 officers assigned have doctorates. This means that 17 officers, not in training positions, require supervision of their work to some degree by another licensed psychologist. Additionally, of the 97, 29 (including the 17 non-doctorates) do not have a license, which again requires supervision. With our go-to-war missions and with many of our positions requiring a fully credentialed, independently practicing psychologist, we simply have to improve these ratios. There are several initiatives under consideration at the tri-service, DoD level as well as initiatives at the CPIP sites.

Regarding the size of our psychology force in the future, i.e., FY 96, AMEDD Proponency's latest figures are in, although they are still in the proposal phase and are subject to change before adoption and implementation. Remember, I have already indicated that we now have many vacancies and so we are likely to see an allowable increase in our additional inventory for FY 94 in order that we will be able to fill even the proposed, reduced authorizations.

Before I show you the proposed grade structure for psychology, let me share with you some of the data for the field grade promotions over the past two years. I chose the past two years because the previous years would not provide an appropriate comparison since some many personnel policies have changes since then (e.g., floors and ceiling; combined AOC with social work officers). Using the selection opportunity rate (SOR), which is computed by dividing the total number of selected officers by those in the primary zone,
we see almost a total reversal for the 0-6 and 0-4 from 1990 to 1991, aligning the later with guidelines suggested by the Defense Officer Personnel Management Act. I strongly recommend that we all keep a close eye on the results of this year's field grade boards and see how they reflect the effect of all of the downsizing initiatives and proposals.

It is interesting to note that according to the 0-6 inventory for the FY 92/93 time frame, we will have a total of eight with only two voluntary and/or mandatory retirements during that same period. With the force structure proposals that I will shortly present to you for this field grade, this later number should grab the attention of some of us.

Speaking of proposals, here is the proposed grade structure for psychology as developed by AMEDD Officer Proponency. While not a completely triangular model from 0-3 to 0-6, there is proportionality and recognition that many of our health care facilities and training bases require several senior clinicians and managers.

The Selective Early Retirement Board process was instituted this year and will occur again next year. It is a painful process. Psychology and social work were included in this year's board action as were all of the AOCs of the Medical Service Corps. The proposal for the next year is for the same, with different rules for engagement and consideration. Enough said.

Not only will personnel be reduced, so also will facilities. In addition to Letterman closing, Forts Dix, Benjamin Harrison, Mommouth and Ord will go away.

Policy/Regulation

The May 1992, edition of the Monitor will include the most recent (11 March 1992) draft of the revised Ethics Code. I have asked the folks here at the conference to distribute that draft to you, and I would like to point out two very critical aspects of this draft. First, and foremost, I want to publicly recognize LTC Jeff Younggren, who is on the advisory board to the Ethics Committee of APA, for his outstanding work on this product. Most especially, we owe Jeff our gratitude for tackling the difficult and sensitive issue of the limits of confidentiality as it is applied in military health care. In this regard, I particularly call your attention to Principle 5.1, 5.2 and 8.3. And, we must similarly recognize the excellent and persistent efforts of LTC (Retired) Tim Jeffery, Dr. Louise Jeffery (formerly, Captain Louise Jeffery), Division 19 (Military Psychology), and many others for making this happen. I believe that it is something that is quite acceptable given the circumstances. I also call your attention to Jeffery et al.'s article on this subject in the most recent issue of the Journal of Professional Psychology: Research and Practice.

AR 40-3
Medical, Dental and Veterinary Care

I only wish that I could also report good news with respect to this regulation, but there has been a step backward I'm afraid. Unbeknownst to me or my predecessor, there was a parallel staffing action that effectively "contained" the change, if it did not kill it outright—at least for now. Specifically, I am talking about the chapters governing the participation of
psychologists on sanity and medical boards. A January 1992 message from OTSG went out to the field in an attempt to "clarify" some of the language in the DoD directive stipulating that psychologists could be members of either board. I did not conduct a thorough enough review of that message, and I did not have access to the legal review undertaken by DoD General Council at the request of our mental health associates.

The regulation effectively states that psychologists may participate on the sanity boards and may actually preside over the process. This is not a change. However, with regard to medical boards, it states (paraphrasing rather than quoting) that the unique contributions of a psychologist may be called for in the medical board process, but that the medical board itself cannot be signed by anyone other than a physician. In the case of a psychiatric diagnosis, that physician must be a psychiatrist.

Another, familiar issue that must be addressed concerns those neuropsychologists, working with neurosurgery and neurology, whose patients are before a physical evaluation board. Even more importantly, the very theses underlying the arguments of Capp v. Rank, decided by the Supreme Court of California, are germane here and must be pursued until there is full acknowledgment that psychologists are trained to make diagnoses on Axis I & II of DSM III-R and are trained to recognize those conditions necessitating referral for consideration of Axis III. It is the same old issue in a different form.

During the next year, we will again address this issue. LTC Tom Waddell, Chief, Psychology Service, WBAMC, is already making preparations for our strategy, and I would appreciate it if others would join in.

Admission Privileges

From the language and instructions in the Appropriation Committee's combined conference report for FY 92, DoD Health Affairs is required to develop a tri-service plan for an admission privilege policy for psychologists in all of DoD. Dr. Mendez has been unequivocally clear that he intends to make this happen, and we who have followed the development of Coordinated Care have respect for his resolve. The DoD Joint Mental Health Care Task Force is preparing that product, and we in DoD psychology have been working with the Practice Directorate for guidance and direction.

Initiatives such as these are like a fast moving train. We must remain vigilant to ensure that the momentum for the absolutely independent practice of psychology in military health care is maintained.

In actuality, admission privileges are part of the larger issue of the place of psychologists in hospital practice, an issue toward which APA's Practice Directorate is devoting tremendous energies and legal advisory resources.

The admission privileges plan that is developed and implemented by DoD will have to allow for the unique differences in inpatient health care protocols of each of the services. For instance, the U.S. Navy has a department of mental health in many of its medical facilities. In at least three or four facilities of which I am aware, a psychologist is the department head and "owns" the inpatient psychiatry beds. In the Army, the chief of
inpatient psychiatry "owns" the beds and orchestrates implementation of the treatment plan, regardless of the principal outpatient health care provider's discipline.

What is even more challenging to me about this initiative is the equally compelling requirement for our Directors of the Internship sites to examine their current training designs and formats and build into them the requisite training and exposure to impatient health care (not necessarily restricting that exposure to impatient psychiatry alone). When a future psychologist whom we have trained requests admission privileges, he or she is going to have to meet the standard by showing some sort of certifiable/credentialable training in this area.

In Conclusion

I hope that the thoughts that I have shared with you today have provided you at least with a thumbnail-sketch of what your profession in the Army looks like today and of the critical issues we face in the immediate future. Many of those issues are as provocative as they are challenging. Dull days for our military subspecialty are a thing of the past.

As we move through the proceedings of this year's conference, especially those addresses concerning managed care, I ask each of you to consider conducting a private inventory—an inventory that asks critical and unabashed questions about how we deliver health care and how we train our interns and fellows. Are we doing the strategically smart thing in both instances; are we, ourselves, measuring up as trainers and clinicians?

It is a pleasure to be with all of you today, and I am looking forward to seeing you individually over the course of the week. --I also look forward to seeing you in Washington in August for the Centennial celebration of our professional association's 100th birthday. Lastly, we at Walter Reed look forward to hosting the next conference for AMEDD Psychology 1993 with the overreaching theme being "Supporting Military Health Care in the Nineties and Beyond".

Enjoy yourselves this week in this lovely city of Augusta. Thank you.
MEDICAL SERVICE CORPS UPDATE

BG Bruce Miketinac
Chief, Army Medical Service Corps
MSC UPDATE

CLINICAL PSYCHOLOGY

11 MAY 1992
THE MSC OF THE FUTURE

A SMALLER CORPS

HAVING VALIDATED MFAs

GROUPED IN FEWER AOCs

WITH DOPMA PROMOTION OPPORTUNITIES

AND A SOUND EDUCATION PROGRAM

ALL BEING CONSTANTLY REVIEWED
A SMALLER CORPS

4033 (19.4)
5002 ➞ 3895 (22.1 %)

REDUCED VI & ACCESSIONS

SERB // RIF // RETIRE AT 20

VOLUNTARY SEPARATIONS

GOAL: DON'T REPEAT MISTAKES OF 1970s
SEPARATION PROGRAMS

PROGRAM OPTIONS DIFFER

<table>
<thead>
<tr>
<th></th>
<th>SSB</th>
<th>VSI</th>
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<tr>
<td>CPT W/10</td>
<td>54K OR 9K @ 20 YRS</td>
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<tr>
<td>MAJ W/14</td>
<td>87K OR 14K @ 28 YRS</td>
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WHY—WHEN TO OFFER VOLUNTARY BONUSES

VOLUNTARY VS INvoluntary

CONGRESSIONAL INTENT
### Voluntary (VSI) Separation Incentive

- Annuity payments for twice years of service
- Annual basic pay x 2.5% x years of service
- Medical Care:
  - No government health care
  - Guaranteed medical insurance, paid by individual (USVIP)
- No commissary
- Exchange and MWR while in Ready Reserve
- 6 months of free furniture storage
- Counseling and job placement services offered

### Special (SSB) Separation Benefit

- One lump sum payment
- Annual basic pay x 15% x years of service
- Medical care:
  - Transition Medical Care:
    - Four Months
    - Pre-existing conditions
  - Guaranteed medical insurance paid by individual (USVIP)
  - Commissary privileges for 2 years
  - Exchange and MWR while in Ready Reserve
  - 1 year free furniture storage
  - Counseling and job placement services offered

### Involuntary Separation Incentive

- Priority in affiliation with Guard & Reserves
- Medical care:
  - Transition Medical Care:
    - less than 6 yrs of service: 60 days
    - more than 6 yrs of service: 120 days
    - Pre-existing conditions
  - Guaranteed medical insurance paid by individual (USVIP)
  - Commissary and Exchange privileges for 2 years
  - 1 year free furniture storage

---

* Pre-existing conditions
  - Care can be provided for up to 1 year
  - Individuals must be enrolled in USVIP paid by member
  - USVIP is a quarterly renewable health insurance program paid by the individual and based on the individual's age
  - Individuals involuntarily separated may enroll in this program within 30 days of separation

---

The plan pays 80% of covered expenses after the individual pays an annual deduction of $250 for each covered person. When individual shares reach $2,500, the plan will then pay 100% up to $1 million.

The least expensive USVIP program for a married couple with a child is $72.44 per quarter for the entire family (non-smoker).

Medical/dental care will be provided in both Medical Dental MF's or CHAMPUS, with the same priority as dependents of active duty.
STRUCTURED FOR THE FUTURE

25 MFAs IN 8 AOCs

ESSENTIAL IN A DOWNSIZED ARMY

PREDICTABLE CAREER PATHS

* DA PAM 600-4
* SIZED BY YEAR-GROUPS

SPECIFIC AND IMMATERIAL POSITIONS
PROMOTION OPPORTUNITIES

DOPMA GOALS WILL BE THE TARGET

* TRANSITION PROCESS
* ULTIMATE GOAL (YEAR 2000)
  * DOPMA OPPORTUNITY RATE BY AOC
WHAT IT ALL MEANS

SEPARATION

ACCESSIONS

BY MFA
&
BY AOC

TRAINING

EDUCATION

PROMOTIONS

ARMY NEEDS

DA PAM 600-4

ENVIRONMENT

5-YEAR PLANS
ADDITIONAL ISSUES

FIVE - YEAR PLAN APPROVED

MULTIFUNCTIONAL LOGISTICS STATUS

COMMAND OPPORTUNITIES
SUMMARY

A SMALLER CORPS

HAVING VALIDATED MFAs

GROUPED IN FEWER AOCs

WITH DOPMA PROMOTION OPPORTUNITIES

AND A SOUND EDUCATION PROGRAM

ALL BEING CONSTANTLY REVIEWED
Coordinated care, also known as managed care, is the health care system solution of the 1990's. The terms coordinated care and managed care refer to systems' approaches which apply various constraints to different aspects of the health care system, including providers, consumers, and third party payors, with the goals of acceptable quality of care, with targeted levels of access and within specified cost levels. It is not a question of whether we have managed care; rather it is a question of extent and format. And, coordinated, or managed, care is not new; it is the extent of application and its impact on fee-for-service providers, health care institutions and medical suppliers that is new. Also new are the limitations felt by some beneficiaries accustomed to "on demand" health care.

A MOST CONCISE HISTORY OF AMEDD COORDINATED CARE

The military has long had coordinated care for active duty personnel. Soldiers, sailors, marines, and airmen have received all required health care from military medical facilities, or the responsible military medical commander had to purchase that care for the service member out of operational funds, so called supplemental care. This liability of operational funds for supplemental care led medical facility commanders to be very aggressive about insuring adequate resources for treating the illnesses, injuries, and wounds of active duty personnel, whether the resources were on hand in the local facility or were available only through higher levels of care, e.g. post hospital to regional medical center or evacuation a to higher echelon through joint medical regulating. This also probably led commanders to be conservative about identifying any needs for services not provided by the military medical system.

The difference in the 1990's for the Army Medical Department is that coordinated care has now expanded to include additional responsibility for the availability, cost, and quality of care for family members and retired beneficiaries. I believe this includes care provided in non-military institutions and by civilian providers under the CHAMPUS umbrella, as well as through a variety of contractual arrangements. Coordination with other military services is also now mandated for services to these non-active duty beneficiaries. It is my understanding that there will be no more cost shifting outside the commander's military capability, as the commander now will have the responsibility for all health care costs, access to that health care, and maintenance of acceptable levels of quality of that health care.

CURRENT MANAGED CARE TRENDS

The AMEDD coordinated care system can be better understood and appreciated if one has some sense of the trends in the larger, civilian health system. The journal Professional Psychology: Research and Practice has a special section on managed care in its 1991 edition. This section consists of an excellent series of articles presenting various aspects of the evolving managed health care system (see reference list). I strongly recommend reading
those articles for an understanding of the wide variety of issues, opinions and possible solutions included under the managed care concept.

I think it is equally important to understand that managed care is a highly emotional issue in the civilian sector, particularly among providers. Providers are insulted by their perceptions that their professional judgments are being called into question on a routine basis by requirements for pretreatment certification and concurrent review through submission of treatment plans. Providers are threatened by actual or potential reduction of income, due to lower approved fees, and decreased utilization, secondary to benefit limitations and closed provider panels. Policy makers feel angered by provider allegations of institutional indifference to quality of care issues and their perceptions of providers' distortions in the service of the providers' economic self interest.

As in war, the first casualty of the managed care debate is frequently truth, and all providers need to keep themselves informed and take responsibility for their opinions and resulting professional and business decisions. Beware the providers who act like Chicken Little and the managers who talk like the Baron von Munchausen.

My opinion is that managed care can only grow, and we should learn to adapt and grow with managed care and thus be able to influence the evolving health system with our values and goals. Our national professional organization, the American Psychological Association, seems to have difficulty in recognizing the reality of managed care and in developing a consistent response to it. The lead article in the most recent edition of the Practice Directorate's newsletter is headlined "Practice Directorate Implements Paradigm II to Aid in Managed Care Battle" and discusses the "ravages of managed care," the "lurking ever larger" of national health insurance and the need to "drastically reduce the impact (of managed care) on our patients and our practices" (APA, 1992). This seems to suggest that managed care should be fought, must be fought and can be beaten. An additional article does indicate that national health insurance is likely and that all current congressional bills include utilization limits (both in and outpatient) and cost containment features including fee limits and managed care options.

One means of keeping informed, in addition to reading the professional literature as cited above, is to read the health care related articles in your local newspaper and a variety of news and financial magazines. The following are some of the articles I have noted in the Washington Post in the past year.

- Marc-Yuan Cote, minister in charge of Quebec's $12 billion health and social services system states "doctors draw their power from money and their strength from lies." (7/91)

- Maryland's top health official vows to eliminate "doctor shopping, sporadic care and inappropriate use of emergency rooms" by requiring participants in the Medicaid program to have a primary doctor controlling referrals; Medicaid expenditures in Maryland climbed from $400 million in 1985 to $1,500 million in 1990. (12/91)

- Moving on health care reform - Victor Cohn - the challenge to the President and Congress that most politicians avoid addressing is that everyone will have to make sacrifices to achieve any comprehensive program. (1/92)
Reforming the health care system - Malcolm Gladwell - reining in costs means rationing the time and resources that can be devoted to certain types of patients. (2/92)

Escaping America's health care maze - Adolph Hutter - by eliminating present legal system, program administration and private health insurance costs it may be possible to pay for universal health insurance for all, developing "flexible guidelines" to be sure that appropriate procedures are available for all and that inappropriate procedures are not done. (2/92)

Shrinkage of mental health benefits - Sandy Rovner - outlines ways in which mental health services are handled differently by the health insurance industry. (3/92)

Health insurance lobby mounts efforts against adoption of Canadian system. (3/92)

Health costs could be cut by $40 billion - Spencer Rich - if private sector adopted medicare payment rates, hospitals would go from 3.5% profit to 5.7% loss and be forced to seek ways to cut costs (e.g. reduce staff ratios and lengths of stay) and payments to doctors would decline 25-35%. (3/92)

As pressures mount, doctors give up solo practices - Amy Goldstein. (3/92)

The lead article in the March 23, 1992 Fortune - Let's really cure the health system - is quite informative and I want to share one trend presented, (i.e. that traditional fee-for service health insurance is losing ground to "tightly managed HMOs and preferred provider organizations that offer discounted fees," from 95% covered by traditional insurance in 1981 to 24% in 1990).

It should be clear that I believe managed and coordinated care are here to stay, that they represent necessary changes in the health care system. If psychologists or any other groups want to be proactive in the health care system, and make a decent living while doing so, then restructuring and retraining for the new realities are essential. And, don't equate managed or coordinated care issues with other ongoing professional and guild concerns. There is overlap at times, but these are not identical issues. Without managed care there would still be freedom of choice, scope of practice, and independent practice reimbursement issues.

The remainder of my comments will be presented in three general areas before summing up: first, several simple but key formulas and a short list of essential terms; second, the issues raised by managed care for the self employed clinician; and third, the AMEDD's proposed Coordinated Care System and its implications for providers.
KEY FORMULAS AND TERMS

Formulas to remember and use:

MANAGED CARE = ACCESS X QUALITY X COST

COORDINATED CARE = ACCESS X QUALITY X COST

TOTAL COST = (COST PER SERVICE) X (# OF SERVICES)

" " = UNIT PRICE X UNITS USED

Terms to know:

HMO
PPO
CMO
UCR
peer review
pretreatment authorization
concurrent utilization review
incentives to receive care from efficient providers
greater user cost sharing
capitated payments
negotiated fee for service payments
prospective fixed payments for DRGs
claims review
extend insurance coverage to less expensive treatments

ISSUES FOR THE SELF EMPLOYED CLINICIAN

In my role as a self-employed psychologist, I try to remain aware of quality, access, and cost and of the components of cost, which also happen to be the same as the components for gross income. Let me discuss these in terms of quality, access, and cost questions that the individual provider must address.

QUALITY: The most difficult factor to define precisely and measure and yet the most important to most people involved in the health care system.

- Do my services meet or exceed the standards of care for my profession and community?

- What are the relevant standards of care?

- Do my patients progress at a reasonable rate in treatment?

- Am I qualified to provide the brief therapy that seems to be called for by some benefit limitations? Do I need training in brief therapy?

- What is really required in pretreatment and concurrent reviews?

- Are my diagnostes consistent with presenting problems and are my treatment plans consistent with both?
- Do reduced numbers of treatment sessions negatively affect outcome, or do they force clearer goal setting and better focused treatment?

- Are my patients satisfied; are their treatment needs being met? That is, are problems resolved; are symptoms remitted; do symptoms fail to return unexpectedly after termination; do patients stay with you as their provider, or do they ask for a referral to another provider; do they refer their associates to you?

- Can I meet the demands for treatment plans without compromising the patient's confidentiality and without creating excessive administrative overhead for myself? Which "on the shelf" software system would greatly ease the production of treatment plans?

- How can I respond to a defacto, continual peer review and not give into nor foster, a "big brother" situation?

ACCESS: Am I accessible to the beneficiaries in terms of type services, location, and hours?

- Can I, or others in my group practice, provide services to those with chemical dependencies, major psychiatric illnesses, or developmental disabilities?

- What are my credentials for providing services to adolescents and children?

- Can I offer a first appointment within the 72 hours called for by many contracts?

- How do I provide coverage during non-office hours?

- Do I offer enough evening and weekend hours?

- Is my office readily accessible to likely beneficiaries? What is the driving time from likely populations?

- Does the facility present a clean, safe, and comfortable image?

- What panels do I join; what fee reductions do I offer and accept to keep the various beneficiary groups accessible to my practice?

COST: As a provider, I feel the cost squeeze but also believe the overall intent in managed care is to control or contain the growth of health care costs and not reduce the absolute cost level. My challenge is to provide the required services in an effective and responsible manner at the right time for an acceptable cost.

- Do I join a provider panel which requires a preferred (i.e., reduced) fee?

- What are the current caseload numbers, referral patterns, and projected trends in my community which allow me to make informed decisions regarding fee discounts?
- Will joining a particular panel increase my referrals or at least maintain them at the current rate?

- Will providing services at a preferred rate decrease my UCR to a point where my unrestricted fee for service will be automatically reduced?

- Will the panel be open later if I don't join now, or will it be closed and the beneficiaries unable to use my services except at their own cost?

- How do I maintain a reasonable income as more of my services are delivered under managed care contracts, i.e. preferred fees?

- As there is a limit to the number of patient hours in a week, do I increase my efficiency by scheduling patients every 50 minutes with all notes made during the treatment session? Do I share more expenses with others to reduce overhead? Do I increase my efficiency by hiring and supervising associates? Or, do I do all these things?

**AMEDD COORDINATED CARE PROGRAM**

Coordinated Care Program (CCP) - an outline of program as proposed in January 1992 - revisions are expected!

Goals: To provide quality care to all beneficiaries;  
To improve beneficiary access to health care services; and  
To control health care costs.

Definition: A DOD initiative to provide commanders of military medical treatment facilities with the tools, authority, and flexibility to provide quality health care and perform the medical mission.

DoD expenditures on health care FY91  
$15.1 billion of $273.0 billion, or 5.6%

DoD O&M health care funding  
Direct health care $8.4 billion (59%)  
Champus $3.4 billion (41%)

DoD health care budget by service  
Air Force $4.5 billion (31%)  
Navy $4.1 billion (28%)  
Army $6.1 billion (41%)

Who pays U.S. health care bills?

Compare U.S. health care costs to those of Japan, Germany and Canada

CCP - Seven Essential Elements

1. Enrollment  
   - conducted by MTF  
   - by family or individual  
   - requires assignment of primary care provider for each beneficiary  
   - there will be costs to beneficiaries declining enrollment
2. Utilization management
   - pre-certification
   - concurrent review
   - case management
   - discharge planning

3. Outcome management studies
   - develop criteria for continuous quality improvement
   - develop large, measurement based data bases
   - identify variations
   - determine what worked, what did not work, which is right
   - discard poor practices/processes
   - develop improved practices guidelines

4. Primary case care manager
   - may be MTF, clinic, HMO, PPO or individual physician
   - refers beneficiary to appropriate sources of specialty care within the
     provider network
   - may use Health Care Advisor to assist gatekeeper
   - allows local managers to plan and to provide care to a defined,
     enrolled population in a timely manner
   - beneficiaries assigned to or choose a primary care case manager
   - has overall responsibility for managing the care provided to a beneficiary
     or family

5. Local design and implementation
   - establish a PPO network of providers to accommodate demand that exceeds
     MTF capability
   - use MTF if possible
   - protect GME
   - use contracts, agreements, partnerships
   - must be consistent with the mission template of the MTF

6. Specialized Treatment Facilities (STF)
   - for procedures designated for an STF, beneficiaries must use the STF or
     get a non-availability statement
   - MTF commander may make exceptions based on hardship
   - funds transfer from MTF to STF
   - will be designated only for low volume, high cost, high technology

7. Marketing and education
   - hospital commanders
   - civilian providers
   - MTF staff
   - beneficiaries
   - local health care organizations

SOME FUTURE REALITIES

The following are some of my expectations and predictions for the next
three to five years.

- Third party payors will be able to profile providers' types and lengths
  of treatments, diagnoses assigned and treated, and actual fee patterns. MTF
  commanders will have similar data about their active duty providers.
- Brief therapy will become a well defined specialty skill and will be valued more by providers than it is today.

- Managed or coordinated care programs will have to provide quality services, and reasonable access to those services, if they are to retain beneficiaries and win contract renewals. There will be no degradation of services, beyond isolated instances, and costs will not be excessively constrained.

- There will continue to be patients who are immune to case management and managed care (e.g. the non-compliant and demanding, the needy and resistant, and the organizationally defiant patient).

- Psychologists and other mental health professionals will build successful practices through:
  -- skill broadening
  -- cooperation with quality control measures
  -- group practice
  -- interdisciplinary networking
  -- automating administration
  -- cost consciousness

- Army psychologists will find that the successful practice of psychology in community mental health centers and hospital psychology services with a broad scope of practice will be excellent preparation for current and future practice in the civilian setting.

Finally, one quasi-paternalistic recommendation. Work at learning and tailoring the coordinated care system to your setting. Expect the CCP to change even as you try to implement your part of it; Congress and special interest groups will at times effect changes from outside the data focused feedback loops. Be flexible and use your judgement on when to lodge disagreement and when to adapt. You'll make the system more effective and efficient, you'll broaden the mental health resources available, you'll improve your own administrative and clinical skills and you'll prepare yourself for the next segment of your career.

REFERENCES


STRESS INOCULATION TRAINING: A TWENTY YEAR UPDATE

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Stress Inoculation Training (SIT) was first introduced in the early 1970's as a treatment approach to help (a) phobic clients who experienced multiple fears (Meichenbaum & Cameron, 1972), (b) clients who had problems controlling their anger (Novaco, 1975), and (c) individuals who had problems coping with physical pain (Turk, 1977). In 1985, a clinical guidebook on SIT was published (Meichenbaum, 1985) that has now been translated into Spanish, Japanese, German, and Italian. Since its origin, SIT has been applied by investigators in many countries to a wide array of stress-related problems and populations on both a preventive and a treatment basis; some 200 studies, published and unpublished, have treated the subject.

SIT is not a panacea. Rather, it is an heuristically useful way to conceptualize both the distress that individuals experience and the factors that lead to their behavioral changes, as well as a clinically sensitive way to provide help on both a treatment and a preventative basis. SIT does not represent a treatment formula that can be routinely applied to distressed individuals; rather, SIT is a set of general guiding principles and accompanying clinical procedures that must be individually tailored to the unique characteristics of each case.

In this paper, I will attempt to convey some of the major lessons, highlighting the strengths and limitations of SIT, we have learned over the last 20 years.

WHAT STRESS INOCULATION TRAINING (SIT) IS

SIT is a flexible, individually-tailored multifaceted form of cognitive-behavioral therapy. A central concept underlying SIT is that of inoculation or immunization, an idea common to medicine and social psychological research (McGuire, 1964). In both areas, the central notion is that bolstering an individual's coping repertoire to milder stressors, whether these be viral or attitude change efforts, can serve to defuse maladaptive responses or susceptibility to more severe forms of distress and persuasion. In a similar fashion, SIT is based on the notion that exposing clients or patients or, in an educational setting, trainees to milder forms of stress can serve to defuse responses to major life stressors.

As with medical inoculations, a person's resistance is enhanced by exposure to a stimulus strong enough to arouse defenses without being so powerful that it overcomes the individual. Since lack of preparation and surprise contribute to distressingly ineffective coping efforts, SIT bolsters client's preparedness and assimilatory processes. In this way, individuals can learn to pace themselves as they learn to master stress gradually.

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In order to enhance an individual's coping repertoire and to empower him or her to use already existing coping skills, an overlapping three phase interventional approach is employed. In the initial conceptualization phase, a collaborative relationship is established between the client(s) and the trainer. A Socratic-type exchange is used to help the client better understand the nature of stress and its effects on his or her emotions and behavior. A variety of clinical techniques including interviewing, psychological testing, and client self-monitoring are used to help the client make sense of the stress he or she is experiencing. This helps clients appreciate that the stress they experience is effected both by their appraisal of outside events and by their appraisal of their ability to cope with those events. Individuals are taught that they do not react to events directly, but that they do so only through their interpretation of them; and, moreover, that alternative interpretations and explanations are available. In addition, after empathically listening, the SIT trainer/therapist helps individuals/clients to--

(a) appreciate that the stress they experience is not abnormal and not a sign that they are going crazy or losing their minds and that their distressing symptoms reflect a normal reaction to a difficult situation;

(b) reframe their stressful symptoms as a normal spontaneous reconstructive process, a natural rehabilitative process, or an adaptive reaction and not as a weakness or failure (e.g., intrusive images and nightmares are reframed as signaling both conscious or deliberate and unconscious or automatic efforts to work through stressful events or as ways to search for meaning, while emotional numbing, denial, and avoidance are characterized as ways individuals who have experienced traumatizing events dose or pace themselves, dealing with only so much stress at a given time)--as Epstein (1989) metaphorically characterizes the denial process, "the mind is taking a time out from over stimulation";

(c) understand the nature and course of their disorder, appreciate that there are no prescribed emotional stages that stressed individuals go through (nor is there a correct way to cope), and appreciate that some individuals may experience distress many years after stressful events occur (Wortman & Silver, 1987);

(d) discover and appreciate the transactional nature of stress and how they unwittingly, unknowingly, and often inadvertently exacerbate and help maintain the very stress reactions they experience;

(e) facilitate their discovery of a sense of meaning, or, to use Figley's (1989) term, to collaboratively formulate a healing theory (i.e., an explanation of what happened and why);

(f) develop gradual mastery of stress by providing a more manageable reconceptualization--"articles of faith" and the "basis of hope" (Frank, 1987)--which acts as the basis for coping more effectively;

(g) draw a distinction between changeable and unchangeable aspects of stressful situations and to fit either problem-focused or emotion-focused coping efforts to the perceived demands of the situation (Folkman et al., 1991);
(h) break down or disaggregate global stressors into specific short-term, intermediate, and long-term coping goals; and

(i) provide a more differentiated and integrated (re)conceptualization of stress, conveying that their stress consists of different components and goes through different phases.

Thus, in a collaborative fashion, a reconceptualization of the client's presenting problem or stressful experience is individually tailored or formulated. This reconceptualization process involves the client conceptualizing his or her negative emotional arousal problems and coping efforts in terms that are addressable, rather than being overwhelming, uncontrollable, and unpredictable. As a result of such a reconceptualization, feelings of hopefulness, empowerment, and a sense of learned resourcefulness are nurtured in the client.

The second phase of SIT focuses upon the acquisition and rehearsal of coping skills and follows naturally from the conceptualization phase. In some instances, the client may already possess adequate coping skills, and clients are encouraged to use their own preferred coping strategies in a skills consolidation and rehearsal phase. In this latter instance, the focus is on removing and inhibiting factors (i.e., maladaptive beliefs, feelings of low self-efficacy, and the like) that may interfere with adequate coping. In order to consolidate coping skills already possessed or taught and practiced in the clinic, individuals may be asked to help others with similar problems.

The final phase of application and follow-through includes opportunities for the client to apply the learned coping skills on a graduated basis across increasing levels of stressors (inoculation concept). Such techniques as imagery and behavioral rehearsal, modeling, role playing, and graded in vivo exposure are employed. A central feature of this application phase is the use of relapse prevention procedures (Marlatt & Gordon, 1985). The trainer explores with the client the variety of high risk stressful situations that he or she is likely to encounter and then the client rehearses, in a collaborative fashion with the trainer (if in a group, with the other members, and, if as a couple, with the spouse or significant other), the various coping techniques that might be employed. The client is taught how to view lapses, should they occur, as learning occasions rather than as occasions to catastrophize and relapse. The follow-through feature extends the SIT training into the future through follow-up or booster sessions.

In short, SIT helps clients acquire sufficient knowledge, self-understanding, and coping skills to facilitate better ways of handling expected stressful encounters. SIT combines elements of Socratic and didactic methods of teaching, client self-monitoring, cognitive restructuring, problem-solving, self-instructional and relaxation training, behavioral and imagined rehearsal, and environmental change.

With regard to the notion of environmental change, SIT recognizes that stress is transactional in nature. The stress that a client experiences is often endemic, institutional, and unavoidable. As a result, SIT interventions often need to go beyond the client and involve significant others. It would be short-sighted to delimit interventions to just the target victimized group and not attempt to influence the stress-engendering behaviors and attitudes of community members. SIT has adopted the dual track strategy of working
directly with both the stressed population, as well as working with significant others and with community agents who inadvertently and unwittingly may exacerbate stress.

Finally, SIT recognizes that some stressful situations do not lend themselves to direct-action problem-solving coping efforts, since solutions are not always readily available (e.g., in the case of incurable illness, irreversible loss, etc.). In such instances, an emotionally palliative set of coping responses such as perspective taking, attention diversion, adaptive affective expression and humor, should be nurtured, as described by Lazarus and Folkman (1984). There are no correct or incorrect ways to cope; what works with one client in one situation may not be applicable at other times. Thus, the objective of SIT is to teach the client a flexible coping repertoire and to nurture the client’s sense of confidence and resourcefulness, so that he or she can cope with the changing variety of daily and life stressors.

HOW SIT IS CONDUCTED

One of the strengths of SIT is its flexibility. SIT has been carried out with individuals, couples, and groups—small and large. The length of the intervention has varied, from as little as 20 minutes for preparing patients for surgery (Langer et al., 1975), to 40 one-hour weekly and biweekly sessions administered to psychiatric patients and to individuals with chronic medical problems (Turk et al., 1983). In most instances, in the clinical domain, SIT consists of some 8 to 15 sessions, plus booster and follow-up sessions conducted over a 3 to 12 month period.

Obviously, the manner in which the three phases of SIT training is conducted varies, depending upon the nature of the population and the length of the training. The content of the conceptualization phase, the specific skills trained, and the nature of the application phase are each specifically geared to the targeted population. There is, however, sufficient congruence across SIT applications that SIT, in general, can be outlined; see Table 1.

THE THEORETICAL MODEL OF STRESS AND COPYING UNDERLYING SIT

SIT adopts a transactional view of stress as espoused by Lazarus and Folkman (1984) which proposes that stress occurs whenever the perceived demands of a situation tax or exceed the perceived resources of the system (individual, group, or community) to meet those demands, especially when one’s well-being is perceived as being at stake. This relational, process-oriented view of stress emphasizes the important roles of cognitive-affective appraisal and coping activities. As Lazarus and Folkman (1984) highlight, stress is neither a characteristic of the environment alone, nor a characteristic of the person alone. Instead, stress is defined as a particular type of relationship between the person and the environment, where the individual perceives the adaptive demands as taxing or exceeding available coping resources.

The affinity between the transactional model of stress and the stress inoculation approach is evinced by the fact that SIT is designed to facilitate adaptive appraisals (conceptualization phase), to enhance the repertoire of coping responses (skill acquisition and rehearsal phase), and to nurture the client’s confidence in, and utilization of, his or her coping capabilities (application and follow-through phase). Thus, the SIT approach recognizes both
personal and environmental determinants of stress and it attempts to provide training in a variety of coping skills designed to help a client deal more effectively with the varied sources of stress. In some instances, helping clients alter their cognitive appraisals may be indicated, while at other times considerable therapeutic benefit may be derived from restructuring stressful situations and training clients to do this for themselves. As noted, what constitutes effective coping is likely to vary from situation to situation; thus, nurturing a flexible coping repertoire is necessary.

SIT helps clients find a way of explaining, conceptualizing, reframing, minimizing, and coping with stress. In short, SIT helps clients to experientially rescript or to create a new narrative about their ability to cope. By carefully arranging proactive learning trials both in the clinic and in vivo, clients can collect data that they can take as evidence to unfreeze their beliefs about themselves and the world.

A CONSTRUCTIVIST NARRATIVE PERSPECTIVE OF SIT

The constructivist perspective is founded on the idea that humans actively construct their personal realities and create their own representational models of the world. The human mind is seen as a product of constructive symbolic activity; reality is a product of the personal meanings that individuals create. Individuals do not merely respond to events in and of themselves; but they respond to their interpretation of events and to their perceived implications of these events. How individuals create such meanings and realities, how they construct their world view is the subject of narrative psychology (i.e., the study of the stories we tell about ourselves to ourselves and to others).

As Meichenbaum (1977) has argued, individuals tend to engage in internal and external dialogues in "fabricating meaning" when the automacity of their acts and scripted routines is interrupted and when readjustment is required, especially when their physical or psychological well-being is judged to be at stake. A prime occasion for narrative construction, or what Bruner (1990) calls "meaning making" is the exposure to stressful events that call for readjustment.

As Epstein (1991) observed, "threatening events invalidate ... the most fundamental beliefs in a personal theory of reality ... recovery is contingent upon building a new assumptive world that can assimilate the victimization experience in an adaptive manner" (p.80). This new assumptive world is the narrative that individuals construct in making sense of and reframing their experience with stressful events.

There are many examples in the stress literature of how individuals continually struggle to make sense (i.e., to construct narratives) of what has happened and why. Silver, Boon, and Stones (1983) report that incest victims often continue to wonder painfully for many years why an adult took advantage of them as they continue to find the perpetrator's behavior incomprehensible. Baumeister, Stillwell, and Wotman (1990) and McAdams (1985) have highlighted the intimate link between the personal narrative recollections that individuals offer and their readjustment. For example, whether individuals define their roles in their narrative as those of victims or perpetrators influences the content of their narratives and the nature of their distress.
Individuals not only offer narratives of what happened, but they also provide causal explanations (attributions and accompanying justifications). The research on attribution of blame indicates that the content of a survivor's narrative influences the quality of adaptation to stressful events. When an individual's causal explanation for his or her response to a stressful life event is attributed to a behavioral characteristic that conveys the illusion of control (i.e., when the narrative conveys personal responsibility and avoids blaming others) better adjustment is evident.

Tait and Silver (1989) have also reported on the narrative features in which individuals come to terms with major negative life events. Their results indicated that the psychological impact of major life events persisted for many years for a significant proportion of the population. How the event was experienced and how individuals came to terms with it were more relevant to the psychological impact than was the event per se. The process of working through the event (i.e., the individuals' search for meaning as expressed in the survivors' attempts to put their experiences into words and to validate their reactions) serves as a way of clarifying and conveying coping needs and provides occasions for individuals to construct meaningful narratives; however, when such discussions and narrative constructions do not lead to a resolution and the search for meaning persists, recovery does not readily follow.

Kendall (in press) has recently concluded, that it is not the absence of negative thinking but, rather, the ratio of positive to negative thinking that correlates with adaptive coping. Kendall (in press) proposes that it is the "power of non-negative thinking" that is a central feature of adaptive coping narratives. Baumeister (1989) has similarly argued that one's narrative should reflect an optional margin of illusion. As he notes, "It may be most adaptive to hold a view of self that is a little better than the truth—neither too inflated nor too accurate" (p. 184).

Thus, it is not the mere presence or absence of the negative narrative but, rather, the frequency, timing, accompanying affect, meaning, and significance attached to stress symptoms and reactions that most significantly influence the adjustment process. It is what survivors say to themselves and others about their intrusive thoughts, ruminations, and nightmares that figure most prominently in the adjustment process.

The three steps of the SIT process can be seen as a narrative reconstruction process. The SIT trainer helps distressed clients to rescript what they say to themselves by encouraging them to break down or disaggregate their global stress descriptions into specific, concrete, behaviorally prescriptive stressful situations. Coping skills are taught, and clients are encouraged to practice these in vivo, collecting data and reviewing the results of their personal experiments as evidence upon which to base a change in their views of themselves and the world. In this way, SIT contributes to the clients' experiential rescripting of their narratives; and, SIT helps clients view stressful events as problems-to-be-solved rather than as a series of personal threats. The SIT trainer ensures that clients engage in self-attributions that bolster personal efficacy by providing the conditions for attribution training and encouraging clients to share their new narratives with others (e.g., to help others in similar situations). As Shafer (1981) indicates, therapy allows clients to retell their tales "in a way that allows them to understand the origins, meanings, and significance of present difficulties and
moreover to do so in a way that makes change conceivable and attainable" (p.38). What matters most about this story telling or narrative construction is not its "historical truthfulness" as Spence (1984) observes, but its "narrative truthfulness."

PREVENTATIVE APPLICATION OF SIT TO MEDICAL PROBLEMS

Since SIT is a generic approach it has been applied to a wide variety of medical problems (see Ludwick-Rosenthal & Neufeld, 1988; and Turt et al., 1983). Applications have included helping patients reduce their stress levels in dealing with such medical challenges as preparing for surgery, undergoing invasive medical examinations, and having dental treatments.

With the phenomenal growth of behavioral medicine, we can expect continued application of SIT interventions. There is a need to provide medical patients with information about possible coping efforts. They should also be given the opportunity to rehearse their coping skills, receive feedback, correct accordingly, and make personal attributions about their changes they were able to bring about.

The nature of this training must be tailored to the age of the patient population (e.g., see Melamed and Siegel, 1975) and to the patient's coping style. As Andrews (1970), Shipley et al (1979), and others have reported, patient "avoiders" may evince increased stress in response to explicit, directive coping intervention efforts.

An innovative way to present SIT in medical settings was offered by Wernick et al (1981). They taught SIT to nurses working on a burn unit, so that they could employ SIT with their patients as they debrided their patients' burn wounds. The notion of giving SIT away (i.e., training other professional groups to use SIT in vivo) is most promising.

APPLICATION OF SIT TO THE TREATMENT OF PSYCHIATRIC PATIENTS

In working with psychiatric populations, the SIT trainer recognizes that the counterproductive coping solutions that individuals employ originate early in life and often continue to operate in the present. A number of investigators have employed SIT for both inpatient and outpatient psychiatric clients, and they have employed SIT in the treatment of specific target client groups (e.g., patients who have panic attacks, phobias, who suffer from PTSD, who experience problems controlling their anger, and the like).

In most studies concerning applications in the general clinical psychiatric population, SIT has been combined with other multifaceted psycho-educational and pharmacological interventions. Comparing the relative efficacy of eight one-hour SIT sessions with and without medication in the treatment of 26 psychiatric inpatients, Holcomb (1986) reported that in terms of anxiety, depression, and overall subjective distress, SIT was superior to pharmacological intervention; and, this relative improvement was evident at a three-year follow-up, as evinced by the small number of SIT only patients who were readmitted for psychiatric problems. Weston and his colleagues (1987) worked SIT into a social skills board game training program in order to help discharged individuals who had been psychiatric inpatients. In the course of the game patients discussed and practiced various coping skills for high risk situations.
Another major clinical challenge is posed by those individuals who experience post-traumatic stress disorder (PTSD) as a result of victimization (e.g., rape, abuse, criminal/terrorist attack, etc.) or as result of exposure to an intense stressor such as military combat. Following the inoculation metaphor, the SIT treatment approach helps PTSD clients to assimilate less distressing aspects of trauma before they deal with more distressing aspects. Foa et al. (1991) found that prolonged exposure intervention (without accompanying relaxation and coping imagery training) encouraged rape victims to confront fear-engendering stimuli, both imaginally and behaviorally, and was most successful in reducing intrusive thoughts, arousal symptoms, and avoidance behaviors. This was similar to the induced intense affect exposure that Smith and his colleagues (1987, 1989) used in their stress management procedures and that Suinn (1990) used in his anxiety management training.

Repeated exposure provides clients with opportunities to practice their coping skills or, in SIT terms, to inoculate themselves against future stressful encounters. Such training opportunities help clients to develop an adaptive personal narrative about their ability to cope, reinstating a sense of personal control and predictability. With repeated experiential trials, they learn that fear and anxiety need not be overwhelming. As Epstein (1990) posits, the distressed individuals develop a more differentiated and integrated conceptual system in which they can accept life with all its imperfections, and, then, they each build a new assumptive world, assimilating their victimization in an adaptive manner.

The value of a SIT treatment format is further underscored in Barlow's (1988) important clinical work with panic patients. Barlow and other cognitive behavioral therapists provide anxiety disorder patients with imaginal and behavioral rehearsal and challenge and encourage them to behaviorally rehearse, in a graduated fashion, their coping efforts in vivo; thus, confronting what were panic-inducing situations. Relapse prevention and self-attribution treatment components are naturally included.

Another clinically encouraging application of SIT is in working with aggressive populations. A critical treatment feature of many of these SIT interventions is to help angry and aggressive clients to view interpersonal provocations as problems-to-be-solved, rather than as personal threats. Moreover, there is a need to teach them a variety of coping skills including cognitive, behavioral, and affective arousal self-regulating skills.

APPLICATION OF SIT TO INDIVIDUALS TROUBLED OR INCAPACITATED BY PERFORMANCE ANXIETY

From its origin, SIT has continually been employed with individuals who experience debilitating anxiety in evaluative situations, such as athletic competitions or test, speech, math, computer, dating, or writing anxiety. In many instances, SIT has been combined with skills training programs. There are, however, no consistent findings across these varied populations in terms of the incremental benefits that accrue from combining an explicit skills training component with other SIT features; in some studies, the combination apparently facilitated performance, while in others there were no synergistic effects. The marked diversity of populations, varied lengths of treatments and different levels of initial anxiety preclude adequate comparisons.
Smith (1980) has highlighted the value of labeling such programs for athletes and their coaches as a form of mental toughness training. They are told that the training is designed to help athletes "control the emotional responses that might interfere with performance and also is designed to help athletes focus their attention on the tasks at hand." Such a rationale is more likely to be accepted than is one of reducing stress, because many athletes have the view that stress must be experienced in order to peak. In fact, the goal is not to eliminate emotional arousal but, rather, to give athletes greater control over their emotional responses. They are given an opportunity to rehearse their coping skills under conditions of trainer-induced high arousal affect caused by affectively charged imagery scenes. In this inoculating fashion, the athletes are taught to focus their attention on intense feelings and then to practice turning them off in order to reduce and prevent high arousal levels from getting out of hand. The trainer also attends to the excessively high performance standards and distorted fear of the consequences of possible failure that distressed athletes, their parents, and their coaches may hold. In short, SIT for athletes should be packaged as an educational program in self-control and not as a form of psychotherapy. Crocker and his colleagues (1989) have proposed the need for intermittent follow-up sessions to maintain the acquired coping skills.

APPLICATION OF SIT TO ADJUSTMENT PROBLEMS ACCOMPANYING LIFE TRANSITIONS

One of the most widespread forms of stress that individuals have to cope with is the transitional demand (entry, re-entry, displacement, unemployment, and the like) that sets off a series of required adjustments. Empirical encouragement for SIT in such situations was offered by Caplan and his colleagues (1989) when they used a randomized field experiment to address the effects of unemployment. Inoculation about possible setbacks was incorporated as a critical feature of their comprehensive treatment package, which also included job seeking skills, problem-solving skills, decision making training, and ways of developing social skills. Relative to a matched attention control group, the test population showed higher rates of reemployment, higher motivation, and greater job satisfaction.

APPLICATION OF SIT TO HIGHLY STRESSED OCCUPATIONAL GROUPS

A common feature of several of the studies with highly stressed occupational groups was the employment of trainers who came from the same occupational group as the treatment group. For instance in the study by Novaco et al. (1983), marine drill instructors were taught how to cope by other drill instructors, and, in the study by Sarason et al. (1979), policemen were used to train other policemen.

This was not, however, always true. Novaco (1980) reported the SIT of probation officers, who in turn conducted SIT with their adolescent parolees. According to this diffusion paradigm, the psychologist acts as a trainer and consultant as others directly conduct SIT.

LESSONS LEARNED FROM DISMANTLING STUDIES

Most of the dismantling studies have been conducted as laboratory analogue studies on subjects exposed to experimentally induced pain. The number that compare various components of SIT is still quite limited.
Component analytic studies by Horan and his colleagues (1977) and Vallis (1984) indicated that the skills acquisition phase of SIT plays a critical role in contributing to treatment effectiveness; when this phase was dropped, efficacy fell significantly. There was also evidence that with laboratory induced pain the improvement was mediated by the subject's use of relaxation and by an accompanying decrease in his or her use of negative thinking (catastrophizing ideation). Kendall (in press) has argued that the reduction of negative ideation, which he describes as "the power of non-negative thinking," is both a by-product and a mediator of behavioral change. In fact, as discussed earlier, he reports that it is not the absence of negative thinking but the ratio of positive to negative thinking (2 to 1, respectively) that characterizes adaptive coping. In other laboratory studies, Cassens and his colleagues (1988) reported on the important role of verbal feedback as a component of SIT, while Smith and Nye (1989) reported that the failure to provide subjects with rehearsal opportunities resulted in less effective outcomes. Meichenbaum and Turk (1987) have highlighted the importance of the initial conceptualization phase as a critical component in fostering treatment adherence.

While dismantling studies can prove informative, the first research priority should be in assessing the clinical usefulness of short-term and long-term SIT relative to appropriate control groups. More documented evidence that SIT is indeed effective is needed before we begin to take it apart. In particular, it is necessary to determine whether SIT is contraindicated with any specific population or in any specific situation.

THE FUTURE OF SIT

SIT will continue to be applied to new and diverse clinical and non-clinical populations. Divorced individuals (Turner, 1985) individuals anticipating overseas job placement (Walton, 1990), victims of terrorist and hostage attacks (Oots & Wiegele, 1985), and children from high risk families (Pellegrini, 1990) are but a few of the suggested possible populations for SIT.

Also, a computer based, interactive format of SIT is now being explored. Using voice operated computers and accompanying video disks that can include coping, modeling films, a new generation of SIT individualized instructional packages is possible. Such SIT modules could be used in clinics, in the military, in business organizations, and in educational institutions on both a preventative and a treatment basis.

Whatever the modality of presentation, it is safe to predict that in the next twenty years we will see more clinical applications and research activity on SIT than we did in the past twenty years.
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Table 1

Application of Stress Inoculation Training and Closely-Related Stress Management Procedures

<table>
<thead>
<tr>
<th>TARGET POPULATION</th>
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<tr>
<td><strong>Problems with Anger</strong></td>
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<tr>
<td>Mentally retarded individuals with anger-control problems</td>
<td>Golden &amp; Consorte, 1982</td>
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<tr>
<td>Abusive parents</td>
<td>Denicola &amp; Sandler, 1980; Egan, 1983.</td>
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<tr>
<td><strong>Problems with Anxiety</strong></td>
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Table 1 (continued)

Psychiatric anxiety disorder (panic attacks, generalized anxiety post traumatic stress disorder)  

Problems with Circumscribed Fears

Multiple animal phobias  
Meichenbaum & Cameron, 1972.

Fear of flying  

Prevention of fears in children and adults  
Barrios & Shigetomi, 1980.

General Stress Reactions

Outpatient psychiatric population and chronically stressed community residents  

Women on public assistance  

General stress education  

Psychiatric Populations

Children with psychophysiological complaints  

Self-mutilating behavior  

Alcoholism  

Stress Related to Life Transitions

Coping with unemployment  

Anxiety over transition to high school  

Anxiety of adults reentering university  
Athabasca University, 1983.

Adjustment to college and medical school  

Facilitate IQ in older adults  
Hayslip, 1989.

Adjustment to joining the military  
Table 1 (continued)

**Victimized Individuals**

<table>
<thead>
<tr>
<th>Victimized Group</th>
<th>References</th>
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<tbody>
<tr>
<td>Victims of terrorist attacks</td>
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**Medical Patients--Treatment of Health-Related Problems**

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<th>Medical Patients--Treatment of Health-Related Problems</th>
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<td>Wernick, 1984; Wernick, et al., 1981.</td>
</tr>
<tr>
<td>Patients experiencing dysmenorrhea</td>
<td>Quillen &amp; Denney, 1982.</td>
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<tr>
<td>Ulcer patients</td>
<td>Berbalk, et al., 1984; Brooks &amp; Richardson, 1980.</td>
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<td>Perry &amp; Markowitz, 1986.</td>
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**Medical Patients--Preventative Interventions**

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Table 1 (continued)

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This study examines the responses to the stress of Army casualty operations during the recent Gulf War. Casualty operations workers collect, organize, verify and record detailed information regarding soldiers who are seriously ill, wounded or killed. One critical task, carried out by notifiers, was to inform the families of these soldiers of the medical condition and location of their loved ones and provide support and assistance to these families. Measures were collected from a control group of 50 non-exposed workers and a group of 47 exposed workers, notifiers. Interventions were initiated and follow up data collected. Interventions were initiated and follow up data collected. Analysis confirms an associated between exposure and various ill-effects, with psychological hardiness and social support serving as risk reducing resources.

BACKGROUND/PURPOSE

This study examines the responses to the stress of Army casualty operations during the recent Gulf War. Previous research on the nature of disasters, responses to disasters and grief reactions of the bereaved families were synthesized by a research team of the Walter Reed Army Institute of Research in response to the 1985 Gander military air disaster in which 248 soldiers died. Findings from WRAIR's research included that (a) many officers who provided assistance to bereaved families suffered psychological distress as a result; (b) there are a number of neglected groups (e.g., casualty notifiers, body handlers, and death notification officers) who were not offered psychological services; and (c) most mental health workers have not received adequate training to respond to mass casualties and are seriously underutilized. It was also suggested that casualty workers who possess certain personality characteristics (e.g., hardiness) and who reported good social support were protected to some degree from the ill-effects of stress. Operation Desert Shield/Storm provided an opportunity to both examine the possible psychological effects on the personnel of the casualty management operations center and to provide interventions designed to ameliorate the potential impact of these stresses. Of special interest were casualty notifiers, a group not previously studied despite evidence from other occupational groups (e.g., police officers) that informing families of a loved one's death or serious injury is extremely stressful (Eth, Baron & Pynoos, 1987).
INTERVENTIONS AND METHOD

Prior to the offensive ground operations, Army psychologists were requested to conduct research and psychological interventions in support of the casualty operations center. After forming and training a mental health team, and several consultative visits, baseline measures of current stresses, psychological well-being, hardiness and social support were collected. Interventions included psychological and/or pastoral counseling to individuals identified as "at risk" by baseline measures, a mandatory educational program on the impact of stress and various stress reduction methods, training in crisis line skills, cognitive rehearsal of casualty notification calls, repeated "dry runs" immediately prior to the initiation of the ground offensive, mandatory peer debriefings at the end of casualty notification shifts, command consultation, and group debriefings. Upon cessation of hostility, post measure surveys were collected.

Because of operational contingencies (i.e., a major task was supporting the functioning of a casualty management system that was predicted to breakdown under the weight of massive casualties) and ethical concerns of the impact of not providing social support and/or stress managing techniques that might ameliorate the potential ill-effects of this duty, a naturalistic or field experiment design with a modified two independent sample comparison design was utilized. A control group of non-exposed workers (N=50) was compared to an experimental group of exposed workers (N=47).

RESULTS

Results indicate that the exposed and non-exposed groups do not differ on age, race, sex, education, and marital status. The exposed group is, however, somewhat lower in rank that the non-exposed. Compared to typical samples of Army soldiers, casualty operations workers tend to be older (median age = 37), better educated, and higher in military rank. Both groups in this study are about 44% female, and about 40% black, and are composed largely of Army reservists who were activated to augment a normally small, regular staff. Many (about 40%) volunteered for casualty operations duty.

Results of t-test comparisons show the exposed group reporting significantly more psychiatric symptoms (p < .01), more negative affect (p < .01), and lower total psychological well-being (p < .01). Curiously, at the same time the exposed group reports higher morale (p < .01) and more positive affect (p = <.01) than controls. Non-parametric contrasts (Mann-Whitney U test) were applied to the social support scales, because the two samples were found to have different variances on these measures. The exposed group perceived significantly higher support from peers at work than did the non-exposed group. Interviews suggest that individuals became more friendly, close and supportive over time as they worked long hours together on emotionally difficult tasks and spent time discussing at the end of their shifts the challenges of that day.
Finally, correlational analyses were performed within each of the two groups, exposed and non-exposed. If social or psychological resources are important as stress moderators, they should be more strongly related to mental health indicators for the exposed (high stress) group than for the non-exposed (low stress); theoretically, such variables should exert greater influence under high stress conditions. The psychological resource examined was personality "hardiness," which presumably facilitates the formation of positive cognitive constructions of stressful events and circumstances. Results show the correlations between hardiness and morale, positive affect, negative affect and well-being substantially higher in the exposed group than the non-exposed (Table 1). Social support from family and support from friends outside of work correlate more strongly in the exposed group versus the non-exposed. This does not mean that social support at work was unimportant (the within group variance on work support measures is somewhat restricted, limiting the power of correlational analysis to reveal effects and one intervention to the entire organization, including both exposed and non-exposed, was to both emphasis the importance of social support in the workplace). This result does suggest that under high-stress conditions, support from family and friends outside of work becomes critical.

SUMMARY/DISCUSSION

These results confirm the stressful quality of casualty operations work, particularly notifying and assisting family members following a loved one's serious illness, wounding, or death; and they show an association between these duties and a variety of health indicators. These preliminary analyses show that exposure to wartime casualty operations appears to have some negative psychological effects, as manifested by more psychiatric symptoms, negative affect, and lower total well-being. Support among workers appears to have developed over time and may have been influenced by organizational efforts to promote social support. Paradoxically, the exposed group is actually higher in morale and positive affect. Thus, under the right circumstances, exposure to the stress of casualty operations can lead to a positive sense of meaning and accomplishment, reflected in higher morale and positive affect, even while one experiences some psychological distress associated with witnessing the pain, suffering and grief of fellow human beings. The findings regarding personality hardiness suggests an underlying psychological mechanism for healthy adjustment to stress, involving the construction of positive meaning in negative events. Further analyses of both survey and clinical data will focus on the degree to which social forces in organizations (e.g., support, cohesion, leadership) can influence and reinforce such positive attributions.
Table 1

Correlations between "response" variables and mental health variables

1. Non-Exposed (N=50) / 2. Exposed (N=47)

<table>
<thead>
<tr>
<th>Group</th>
<th>MORALE 1 / 2</th>
<th>POSAFF 1 / 2</th>
<th>NEGAFF 1 / 2</th>
<th>TOTWELL 1 / 2</th>
<th>SYMPTOMS 1 / 2</th>
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<td>.39*/.59**</td>
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* $p < .05$
** $p < .01$
The literature on combat and post-traumatic stress contains very limited information collected within actual field environments during wartime operations. The Persian Gulf War provided a unique opportunity to gather in-vivo data and update the existing epidemiological knowledge and etiological formulations on human stress reactions.

This presentation reviews information collected on the severity, incidence and types of stress reactions experienced by combat soldiers. All study participants (N=54) were assigned to special forces units during Desert Shield, Desert Storm or Provide Comfort. Comparisons are made between intensively trained combatants and a similar sample of less well prepared "support" soldiers. All groups, being assigned together, encountered the same wartime hardships.

Differences were seen between groups in number and severity of symptoms. Level of training, group cohesion, and type of mission appear to be moderating variables which effected the extent of combat stress reactions (CSR). Although 80% of the total sample reported some CSR, only two support soldiers were treated for mild cases of post-traumatic stress disorder.

Soldiers who received pre-deployment stress inoculation classes, prepared for war as members of a long-standing team, and were debriefed following missions showed fewer and less intense symptoms. The exact interaction of these variables may never be fully delineated however, important stress intervention models can be developed via future research.
BACKGROUND INFORMATION

DATA COLLECTED IN SW ASIA
3 GROUPS OF SOLDIERS
SIMILAR DEMOGRAPHICS
DEPLOYED TOGETHER
SIMILAR COMBAT EXPOSURE

CONSISTENT DATA COLLECTION
STANDARD INTERVIEW
STANDARD SURVEY FORM

COMBAT STRESS REACTION CHECKLIST
SELF-REPORT

1. Tension, pain, tremble
2. Jumpiness, startle
3. Cold sweat, dry mouth
4. Pounding heart, dizzy
5. Out of breath, cramps
6. Upset stomach, vomit
7. Diarrhea, urination
8. Bowel/bladder control
9. Unexplained, fatigue
10. Vision problems
11. Anxiety, worry
12. Irritable, complaining
13. Attention problems
14. Speech-thought problem
15. Sleep problems, dreams
16. Grief, tearful
17. Regret, mistakes
18. Anger, let down, misled
19. Lost confidence
20. Other

GTA 81 3 4/5/6

COMBAT STRESS REACTIONS
FREQUENCY REPORTED

By percent n=54 (all groups)

COMBAT STRESS REACTION
FREQUENCY REPORTED

By percent n=54 (all groups)
SUM OF AVERAGE INTENSITY
9 MOST FREQUENT CSR SYMPTOMS

SYMPTOMS REPORTED/SUPPORT TEAM
INTEL TEAM WITH SF/PERSIAN GULF

- ALL TEAM MEMBERS REPORT CSR SYMPTOMS
- ALL MOS'S AND GRADES REPORT SOME CSR
- AVERAGE NUMBER OF SYMPTOMS = 6 (Range = 10-2)
- AVERAGE SEVERITY SCORE = 2.9 on 0-5 scale
- MOST COMMON = ANXIETY, ANGER, COMPLAIN
- NEXT MOST COMMON = JUMPY, LOST CONFIDENCE
- ALL SYMPTOMS WERE REPORTED AT LEAST ONCE

All Self-Report N=11

SYMPTOMS REPORTED BY SF TEAMS
7 TEAMS/PERSIAN GULF

- 2/3 OF ALL TEAM MEMBERS REPORT CSR SYMPTOMS
- ALL MOS'S AND GRADES REPORT SOME CSR
- AVERAGE NUMBER OF SYMPTOMS = 4 (Range = 9-2)
- AVERAGE SEVERITY SCORE = 17 on 0-5 scale
- MOST COMMON = Anxiety, Next = Anger
- NEXT MOST COMMON = Bladder, Regret
- NOT REPORTED = Sweats, Breath, Stomach, Bowel, Vision

All Self-Report N=40

SYMPTOMS SUPPORT INDIVIDUALS
INDIVIDUALS WITH SF/PERSIAN GULF

- ALL INDIVIDUALS REPORT CSR SYMPTOMS
- ALL MOS'S AND GRADES REPORT SOME CSR
- AVE NUMBER OF SYMPTOMS = 15 (Range = 19-14)
- AVERAGE SEVERITY SCORE = 2.8 on 0-5 scale
- ALL SYMPTOMS WERE REPORTED
- MOST COMMON/HIGHEST SEV = Anger, Confidence

All Self-Report N=3
EVALUATION OF COMBAT STRESS TRAINING

A. David Mangelsdorff
Health Services Command
Fort Sam Houston, Texas 78234-6060

PROBLEM

In support of the Medical System Program Review, GEN Thurman tasked the Academy of Health Sciences and TRADOC with preparing training packages for Army-wide training on combat stress and battle fatigue. An evaluation of the effectiveness of the combat stress training programs was developed.

METHODOLOGY

An Army-wide survey was conducted in the Spring of 1988 to determine the sources of stress training and the knowledge of combat stress casualty management. A follow-on Army-wide survey was conducted in the Fall of 1990 to examine knowledge of stress casualty management. The methodology used in the 1990 effort paralleled that used previously in 1988. Using the 1988 data, separate models for enlisted (n=10,624), warrant (n=410), and commissioned officers (n=2,939) were developed to predict knowledge of combat stress casualty management. The 1988 models will be validated using the 1990 data (when it becomes available).

RESULTS

The findings will be used to document where training on combat stress and battle fatigue is being provided, whether the information is being retained, which areas need change, and what progress has been made in the development of programs for use by DoD and NATO. In the 1988 samples, stepwise regression models were developed.

For the 1988 enlisted sample, knowledge of combat stress casualty management was predicted by grade, helpfulness of previous stress training, and military education level. Excluding grade as a predictor, the model showed that completion of higher level career schools, military education level, and helpfulness of previous stress training were important.

For the 1988 commissioned officer sample, knowledge of stress casualty management was predicted by level of civilian education, basic officer training, and helpfulness of stress management training in unit. Excluding civilian education level, the model showed that type of unit, helpfulness of stress management training in unit, and completion of basic officer training were salient.

DISCUSSION

Even as the U.S. reduces the number of active duty personnel, the training missions will remain to support peacekeeping, continue nation building, counter terrorism, intervene in natural disasters, maintain national
security, and contribute to international alliances like NATO. DoD needs to assess where changes are needed and implement programs to be more effective.

A NATO Panel VIII (Biological Sciences) Research Study Group 10 on Psychological Fitness provided technical guidance on the selection and training of individuals psychologically fit for combat. A follow-on NATO Research Study Group 22 on Psychological Support was formed in October 1990 to identify means for improving the management of combat stress and development of appropriate training programs in the NATO nations. Training programs to provide psychological support to NATO personnel are being developed. The U.S. role in NATO needs to be maintained.
WHAT IF THEY HAVE A WAR AND DON'T INVITE ME?
RESPONSES OF NON-ACTIVATED RESERVISTS DURING
THE PERSIAN GULF WAR

Kathleen S. Mayers, Robert House, and Edward Casper

Subjects were 62 non-activated reservists during the Persian Gulf War responded to a questionnaire describing their thoughts and feelings through the prewar and war period. Surveys were completed between May and August, 1991.

THE RESERVISTS THEMSELVES

The 62 reservists who completed the written survey were not required to provide information as to their identity, age, gender, and unit affiliation or duty station. Many of them volunteered this information. The 50 reservists who were willing to give age information ranged in age from 26 to 50, with an average age of 38.5. Respondents ranged from E-5's to Colonels. Most of the respondents were affiliated with an Army Reserve hospital and the majority were female (8 males, 47 females of the 55 individuals who were willing to provide this information).

EXPECTATIONS ABOUT ACTIVATION

The majority of these reservists expected to be activated. Fifteen percent volunteered, but were never activated. Ninety-two percent indicated they expected to be activated, but the majority of these reservists expressed some ambivalence, indicating that there were times they thought they would be activated, interspersed with moments when they thought they would not be activated. One reservist indicated that she expected to be activated every minute for four months. She indicated that every phone call resulted in her asking, "Is that the call up?"

EMOTIONAL RESPONSES TO THE PROSPECT OF ACTIVATION

When talk turned to activation, most reservists began to experience uneasiness. The majority (66%) indicated they experienced anxiety, although they described their emotional response in various ways. They described themselves as being: uncertain, scared, nervous, vulnerable, stressed, apprehensive, shocked, worried, fearful, sleepless, with feelings of dread.

Many of these reservists indicated they became worried about leaving their families, especially their children. Eighteen percent acknowledged these concerns. Many reservists responded in a patriotic manner wanting to do their part, with hopes that they would be called, displaying a desire to be part of the activities. Others indicated a sense of being able to help, the feeling of being ready and willing to go. A few indicated they felt obliged to go, but were not enthusiastic. Thirty-two percent responded with statements about their readiness, most with enthusiasm, a few with grim determination. A smaller percentage indicated feelings of excitement (13%) and of being unprepared and doubtful about the ability to perform the job in austere conditions (5%). Five percent of the reservists indicated they were in denial, experiencing feelings of unbelief that this could actually be happening.
FAVORABLE WAYS THE MILITARY ACTIVATION AFFECTED RESERVISTS

Reservists were questioned about the favorable ways the military activation affected them. Descriptive responses were categorized according to content. Some of the responses fit into several categories; thus, one reservist could provide more than one response. For that reason, the total percentage exceeds 100%.

Favorable effects of the military activation on the reservist were:

None 19%

Increased cohesiveness and morale in reserve unit; increased and improved training; improved attitude of participants in training 15%

Facilitated communication with family; made family closer; increased my appreciation of family members and their appreciation of me 13%

Improved national support; enhanced public awareness; increased knowledge about reservists 13%

Made me put things in order, make a will and increase life insurance 13%

Increased my awareness of support from family, friends, employer/church; increased empathy, caring and general support from others 11%

Increased sense of mortality; faced my last wishes in case of death; facilitated communication about a plan if incapacitated 8%

Increased my awareness of my military responsibilities; allowed me to realize I'm ready for activation 6%

Felt needed; felt good we could help, wanted to contribute 6%

Helped me rethink and reset priorities 5%

Increased my patriotism 5%

Other responses included:

I became the center of attention;
I started to watch world problems on a daily basis;
I would make more money and thought I could get VA status;
I accepted the reality of activation;
Old friends from all over the country called me;
I was able to explain aspects of the military to civilians; and

It showed was possible to integrate reservists and active duty soldiers.

**Unfavorable ways the military activation affected reservists:**

- General anxiety, stress, disruption: 39%
- The inability to make plans, the feeling of being in limbo, not knowing where, when or if the reservist would be activated: 35%
- Worries about the family, family stress, children reacting to war: 26%
- Job and school uncertainties, loss of jobs, denial of jobs: 13%
- None: 8%
- Loss of cohesion and unit morale (unit was split): 8%
- Rumors were upsetting: 6%
- Resentment, feelings of being un-needed, decreased morale because the reservist was not activated: 5%
- Financial worries (decreased pay in the military): 3%
- Fear of death, chemical warfare: 3%

**Other unfavorable ways the military activation affected reservists include:**

- Afraid to answer phone
- Putting off of plans
- Not prepared (legal documents, etc.)
- Stress in co-workers
- Continual questions from co-workers
- The way the government screws things up
- Other reservists bailing out when the going gets tough
- Husband denied the possibility I could be activated
- Took a lot of time to get everything ready

Other thoughts and experiences in response to the activation of reservists before and during the Persian Gulf War included thoughts of the Vietnam War and images of casualties. One individual indicated the need to deal with angry feelings toward an uncle who was protesting the war.
EXPERIENCE WHEN WAITING TO BE ACTIVATED

The experience of waiting to be activated was extremely difficult and distressing. It was made worse by the many rumors and the lack of concrete information. Reservists indicated these experiences while awaiting activation:

Stressed, uncertain, anxious, uneasy, cranky, worried, indecisive, awful, frustrated, "like sitting on a time bomb," "waiting is the pits" 71%

Feelings of being "in limbo," life on hold, wondering when, where and if we would go, inability to plan 34%

Distress about people at work asking, "Are you still here?" embarrassment each week that the reservist returns to work, as if she is "crying wolf" 5%

Excitement, stimulation, the feeling that a life long dream was about to come true, euphoria 3%

Extremely varying moods; the feeling of being on a roller coaster; proud and anxious and then afraid to answer the phone; disappointment and stress turning to relief 3%

Other responses included:

Feeling guilty for not going;

Wanting to see friends in case I never got another chance; and

Being ready to go!

SENSE OF IMPORTANCE

Many reservists had an altered sense of their own importance to the military as a result of the reserve activation. 34% indicated that feelings of importance had increased. They related this to the realization that the military counts on reservists and that the reservists who were activated proved that they could do the job. 55% indicated that their feeling of importance to the military was unchanged. 11% indicated that they felt less important and they related this to several factors: their specialty area was underutilized in Desert Storm; they felt overlooked, unneeded and unwanted by the military.

RESPONSE WHEN NOT ACTIVATED

When they were not activated, many of the reservists described feelings of rejection and disappointment. Respondents were asked to indicate the feelings that they experienced when they were not activated; they were free to indicate as many of the feelings as they wished. Percentages of reservists acknowledging these feelings were as follows:

Relieved 81%

Disappointed 58%
Rejected 40%
Guilty 37%
Happy 34%
Angry 18%

One reservist commented that it was like a party in which you do all the planning, but don't get to go. Others felt like they weren't part of the "in group." Some questioned whether the military thought they weren't good enough. One individual commented on "survivor's guilt." It was acknowledged that staying behind represented another kind of stress. Several individuals commented on feeling a sense of relief related to the fact that casualties were not high.

PLANS TO RESIGN

A relatively small percentage of this group plans to leave the reserves. 81% indicated the intention to stay in the reserves. 6% were undecided. 8% of the reservists plan to leave. An additional 5% also planned to leave, but for reasons that did not relate to Desert Storm. They indicated the intention to switch to the active duty component, a plan to leave the reserves before Desert Storm, and the end of 20 year commitments. Of those who plan to leave or are undecided, reasons stated were feelings that training is inadequate for what is expected and a desire to avoid putting one's family through this experience again.

IMPROVING THE SITUATION

Reservists had several suggestions that could improve the situation and relieve their distress; however, most were realistic and realized that the information that they sought was not available to anyone. Many of them indicated that knowing whether or not they would be activated, the date, place, and any details would have been extremely helpful. It was suggested that better dissemination of information would help, along with improved training, rumor control, more support for single parents, activating reserve units as a whole rather than cannibalizing them, and asking people to volunteer for activation and then actually activating those who do volunteer.
U.S. ARMY AEROMEDICAL PSYCHOLOGY TRAINING COURSE

James J. Picano, Stephen V. Bowles,
and H. Frank Edwards
Presidio of San Francisco, California
Fort Rucker, Alabama

Need

There has been ample evidence to indicate that the psychological status of the individual plays a significant role in aviation safety, operational readiness, and the health and fitness of aviation personnel. Such evidence indicates a growing need for the service of aeromedically trained clinical psychologists. The Aeromedical Psychology Training Course has been developed to provide selected clinical psychologist with specialized training in the fundamentals of aviation medicine and applications of clinical psychology in aviation medicine.

Background

In November 1988, the concept for developing and implementing an aeromedical psychology training program for clinical psychologists was presented to BG Miketinac, Chief, Medical Service Corps. He directed the Clinical Psychology Consultant to the OTSG, LTC(P) Laskow, to secure positions for U.S. Army psychologists in the then existing Aerospace Behavioral Health Course sponsored by the OTSG, U.S. Air Force, at Brooks Air Force Base, San Antonio, Texas. However, this course was canceled and, to date, has not been reinstated. As a consequence, BG Miketinac recommended that an aeromedical psychology training course be developed. This was implemented in FY 92 under the sponsorship of the AMEDD Professional Post-graduate Short Course Program, and was hosted by the U.S. Army School of Aviation Medicine (USASAM), Fort Rucker, Alabama.

Objectives

This course is designed to train clinical psychologists in the fundamentals of aviation medicine and in the applications of clinical psychology in the aviation environment to better enable them to provide support to operational aviation units in conjunction with the established aviation medicine program. The overall objectives of aeromedically trained psychologists are to:

A. Assist the commander and flight surgeon to promote psychological health and wellness in the aviation environment.

B. Further enhance and sustain operational readiness and aviation safety by developing preventive interventions designed to minimize the loss of performance effectiveness associated with environmental stress fatigue, and other psychological factors in aviation personnel.

C. Provide intervention and recommendations on the aeromedical disposition of behavioral issues of importance to aviation personnel and their command.
Functions

The objectives of aeromedical psychology can be met by aeromedically trained psychologists who fulfill the following functions:

a. To provide clinical psychological consultation and support to flight surgeons and commanders regarding the assessment, treatment, and psychological disposition of aviation personnel.

b. To provide clinical consultation to commanders and unit safety officers on psychological and human factors affecting readiness, safety, performance, and retention of aviation personnel.

c. To provide education and training to aviation personnel on human factors and safety issues related to the psychological status of the individual.

d. To provide consultation to accident investigation and flight evaluation boards on individual psychological and human factors affecting performance and aviation safety.

e. To develop and implement preventive behavioral medicine programs designed to enhance and preserve wellness.

Course Training Objectives

The overall training objective of the short course is to provide the requisite knowledge and skills which will enable the clinical psychologist to function effectively as a member of the aviation medicine team. The specific course objectives are:

a. To educate clinical psychologists in the psychophysiological stresses inherent in Army aviation operations, missions, and functions.

b. To educate clinical psychologists in the mission, organization, and psychological readiness requirements of Army aviation.

c. To train clinical psychologists in the specialized applications of psychological methods and techniques to the aviation population, and to support the Aviation Medicine Program.

Course Syllabus

The three week curriculum is designed to meet each of the three specific training objectives and is organized into three topic areas: Aeromedical Factors of Flight; Operational Aviation Medicine; and Fundamentals of Aeromedical Psychology. This course also includes practical exercises in the form of flight line activities, flight simulator training, and an aeromedical psychology clinical practicum.
Aeromedical Psychology Training Course Syllabus

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## Aeromedical Psychology

### Clinical Practice of Aeromedical Psychology
- Assessing Adaptability for Military Aeronautics: 2.0
- Duties and Functions of the Aeromedical Psychologist: 1.0
- Psychological Consultation in Aviation Medicine: 1.0
- Common Psychiatric Diagnoses and Dispositions: 1.0
- Fear of Flying: 1.0
- Psychological Evaluation of Aviation Personnel: 2.0
- Neuropsychological Issues and Evaluations: 2.0
- Marital and Family Problems of Aviators: 2.0
- Alcohol Abuse: 1.0
- Aeromedical Decision-making in Psychiatry and Psychology: 1.0
- Clinical Practicum: 10.0

**TOTAL HOURS**: 24.0

### Human Factors
- Human Factors: 1.0
- Performance Effects of Fatigue in Aviation Operations: 1.0
- Cockpit Resource Management: 2.0
- Pilot Personality: 1.0
- Stress, Coping, and Pilot Performance: 1.0
- Airsickness: 1.0

**TOTAL HOURS**: 7.0

### Operational Aeromedical Psychology
- Establishing an Operational Aeromedical Psychology Program: 1.0
- Combat Stress and Battle Fatigue in Fliers: 2.0
- The Psychologist's Role in Mishap Investigation: 1.0
- Critical Incidents Stress Debriefings: 2.0
- Emotional Reactions to Aircraft Accidents: 1.0
- Hypnosis / Enhanced Recall in Accident Investigations: 2.0
- Health Maintenance of Aircrew: 1.0
- Principles of Command Consultation: 2.0
- Special Operations Overview: 1.0
- Naval Aviation Psychiatry and Psychology: 2.0
- Behavioral Medicine Interventions: 1.0

**TOTAL HOURS**: 16.0
Practical Exercise
Altitude Chamber Flight 2.0
Flight Line Demonstrations 12.0
Static Display and Briefing - Hanchey AHP 2.0
Synthetic Flight Training Systems 2.0

TOTAL HOURS 18.0

Administration
In-Processing .5
CIF equipment issue 2.0
CIF equipment return 1.0
Exam and Critique 4.0

TOTAL HOURS 7.5
Course Faculty

A. Course Director: CPT(P) James Picano
   Director of Psychodiagnosics
   LUSAH, PSF, CA

B. Assistant Course Directors: LTC(P) Frank Edwards
   Dir of Psychology Service
   LUSAH, PSF, CA
   CPT Stephen Bowles
   Chief, Human Factors Branch
   USASAM, Fort Rucker, AL

C. 1992 Subject Matter Experts for APTC:

1) John C. Patterson, PhD
   Aerospace Psychologist and Chief, Psychology
   USAFSAM, Brooks Air Force Base, San Antonio, TX

2) David R. Jones, MD
   Aerospace Psychiatrist and
   Editor, Aviation Space and Environmental Medicine
   San Antonio, TX

3) Major Walter Sipes
   Aerospace Psychologist
   USAFSAM, Brooks AFB, San Antonio, TX

4) CAPT James Baggett
   Head, Naval Aviation Psychiatry
   Naval Aeromedical Institute, Pensacola, FL

5) LCDR Jeff Moore
   Psychologist, Naval Aviation Psychiatry
   Naval Aeromedical Institute, Pensacola, FL

6) LTC Robert R. Roland
   Command Psychologist
   Special Operations Command
   Fort Bragg, NC

7) CPT Ray King
   Aerospace Psychologist
   USAFSAM, Brooks AFB, San Antonio, TX
Priority Positions Identified for Aeromedical Training

1. 25th ID
   Schofield Barracks, HI

2. 7th ID
   Ft. Ord, CA

3. 9th ID
   Ft. Lewis, WA

4. 10th Mountain Division
   Ft. Drum, NY

5. 82nd Airborne Division
   Ft. Bragg, NC

6. Womack Army Hospital
   Ft. Bragg, NC

7. Special Operations Command
   Ft. Bragg, NC

8. 5 ID
   Ft. Polk, LA

9. 101st Airborne Division
   Ft. Campbell, KY

10. CMHS
    Ft. Campbell, KY

11. 160th Special Operations Group (AVN)
    Ft. Campbell, KY

12. 4th ID
    Ft. Carson, CO

13. 1st ID
    Ft. Riley, KS

14. 1st Cavalry Division
    Ft. Hood, TX

15. Darnall Army Hospital
    Ft. Hood, TX

16. Intelligence and Security Command
    Arlington Hall Station, VA

17. 3rd ID
    FRG

18. 2nd ID
    Camp Stanley, ROK
19. Lyster Army Hospital
   Ft. Rucker, AL

20. US Army School of Aviation Medicine
    Ft. Rucker, AL

21. 6th ID 2
    Ft. Richardson, AK

22. 24th ID
    Ft. Steward, GA

23. 8th ID
    FRG

24. 3rd ACR
    Ft. Bliss, TX
Suicide attempts among active duty soldiers were investigated within a CONUS Infantry Division over a 14 month period from October 1989 to December 1990. The commander or first line supervisor of all soldiers making a suicide attempt or gesture was surveyed regarding the circumstances, including estimates of the soldier's character, efficiency, behavior, and possible stressors experienced concurrent with the event. The commander was also asked to give his perception of which agencies were needed to deal with the crisis, and his satisfaction with the services provided.

As compared to actual suicide on the post during this time period, and published data of suicide Army wide, the soldiers attempting suicide were significantly younger, of lower rank, and with less time in service than those actually dying of suicide. Suicide attempters also employed different methods, primarily self poisoning. It was concluded that the large majority of cases represented were parasuicidal behavior: Behavior which mimics suicide, but is not intended to result in death or serious injury. An argument is made to treat such cases as a separate entity from that of truly suicidal individuals.

Suicide is the third leading cause of death among active duty military personnel (Moldeven, 1988, pp. 1-15). It has further been estimated that Army personnel are killing themselves at a rate of roughly two deaths per week (Datel, et al, 1981). The United States Army Suicide Prevention Plan, (dated 27 Feb 85, as reprinted in Moldeven, 1988) cites the lack of reliable data as "perhaps the greatest impediment" to understanding the extent and causes of suicide within the Army.

Commencing in 1977, the results of Line of Duty (LOD) investigations (AR 600-33) have been compiled, capturing information on all known suicides occurring among active duty personnel. This data has been compiled in six biennial reports published in Military Medicine, (Datel and Johnson, 1979; Datel, et al., 1981; Datel, et al., 1982; Rothberg, et al., 1984; Rothberg, et al., 1988; and Rothberg, et al., 1990). The Army Suicide Prevention Program has been revised (DA PA 600-24, 1988), to include a "psychological autopsy," first offered for use in the civilian community by Litman, et a., (1963). These autopsies should, in the future, yield more detailed information than was available from the LOD reports.
Less attention has been given, however, to the more frequent but non-fatal suicide attempts or gestures by Army personnel. Such behavior, which either does not result in death or is not intended to, has been labeled with a confusing variety of terms. The most common is "attempted suicide" (Hawton and Catalan, 1983). Other labels include "parasuicide" (Kreitman, et al., 1969), "pseudo suicide" (Lennard-Jones and Asher 1959) and "deliberate self-harm" (Morgan, 1979). The present author feels the descriptive term parasuicide best captures the incidents encountered in the study: Less lethal suicidal activities not apparently undertaken as serious attempts at self-murder.

There has been very little information published on suicide gestures and attempts among active duty soldiers, and no formal mechanism for their assessment has as yet been implemented. Two studies have been done in this area with Army populations: The first, by Hauschild (1968), reviewed cases of those hospitalized in one Army hospital following "serious" suicide attempts. A second and more recent study by Rock (1988) used archival data from LOD investigations to compare serious ("real") suicide attempts to the completed suicide data already collected. These subjects were patients hospitalized for self-inflicted wounds, with or without an additional psychiatric diagnosis. Both of these studies are thus of the more serious suicide attempts. To the extent that less than 100% of all gestures reach the stage of inpatient hospitalization, they would be missed by the two previous studies.

Many researchers, particularly in America, view all suicidal behaviors as essentially unitary phenomena. Echoing this view, Rock started his 1988 article by noting that "individuals who attempt suicide are reported to have psychiatric disorders similar to those who commit successful suicides." However, other studies have suggested that only a minority of suicides or parasuicides have a diagnosable mental disorder (Newson-Smith and Hirsch, 1979; and Urwin and Gibbons, 1979). In contrast, Hawton and Catalan (1983), writing in England, state that "attempted suicide and completed suicide can be considered as largely separate phenomenon" and feel it inappropriate that in the United States researchers treat all suicidal behaviors as a single entity. They cite several observations which support the independence of the phenomenon: That the rates in Britain change independently—with declines in actual suicide during periods of dramatic escalation in parasuicide. This also holds true for Army data: Rock (1988) found the rate of completed suicides Army wide to be fairly stable, ranging from 18.4 to 10.9 per 100,000 over a period of 10 years, and fatalities co-varied with the average annual troop strength of the Army. In contrast, the rate of suicide attempts varied widely, from 49.3 to 94.0 per 100,000 and appeared to have no relationship to the death rate from suicide or Army troop strength.

Hawton and Catalan also point out the marked differences in the characteristics of those who commit suicide vs. parasuicidal individuals: Suicide increases with age, and males are more likely to die. Parasuicide decreases with age, and females are more likely to be involved. Finally, there is a marked difference in the methods employed—with the suicides using violent methods such as gunshot, but parasuicides utilizing self-poison.
At the time this study was conducted, the post was experiencing both a dramatic increase in deaths by suicide and an apparent change in the demographics of those dying. Sever completed suicides had occurred in a span of slightly over a year. All were over 30, most were officers, and none was below the rank of E-6. To augment and refine the post suicide prevention effort, a system was established to explore parasuicide as well as suicide, with the working hypothesis that parasuicide would follow the patterns observed above.

METHOD

Subjects for this study were soldiers within an infantry division at a post in CONUS. Data was collected on all suicide gestures in the Division from October 1989 through December 1990. Incidents were captured when they came to the command's attention, typically when military police became involved. All military police "blotter" reports and informal reports which reached the division surgeon's office were investigated.

The infantry division comprised a sizable faction of the active duty soldiers at a large post which also has an Army medical center and a corps headquarters. While psychological autopsies and suicide prevention efforts were conducted post wide, and non-divisional elements comprised the majority of fatalities for this time period, the present study, as a divisional initiative, involved only division troops.

A survey instrument was designed to assess the circumstances of the attempt, and the commander's impression of the person engaging in the suicide attempt, as well as stressors which may have precipitated the behavior. The survey was also designed to determine which services the command felt were needed to deal with the crisis of the attempt, and his level of satisfaction with the services provided.

RESULTS AND DISCUSSION

During the 14 month period of this study, 27 suicide gestures came to the attention of Community Mental Health Service (CMHS). During the same time period, there were 2 completed suicides within the division, and 7 within the catchment area of the post itself. The ratio of attempted suicide to completed ones was thus 13.5:1. This ratio is likely to prove unstable due to the low numbers involved. However, Rock (1988) suggested a range of ratios between 3:1 and 23:1 for suicides to gestures, "depending on the year and what data are used," and the present results lie in the middle of this range. When the present data are compared to civilian population estimates, the Army numbers are slightly higher. Farberow and Schneidman (1961) suggested a ratio of 8 to 1 for Los Angeles County, and Overstone (1973) suggested a rate of 10.8:1 for the United Kingdom.

As the population of the division was in decline over this time period due to deactivation, it is not possible to translate this into a solid rate per 100,000, but, using a monthly average over the months of the study, it is in the range of approximately 178 per 100,000 per year, again slightly higher than Farberow's estimate of 111.4 per 100,000.
That the division suffered a rate slightly higher than civilian data would suggest is not surprising. The present study sampled incidents which might not have been captured in a civilian study. Further, the demographics of an infantry division would lead us to expect a higher rate. Hawton and Catalan (1983, p. 15) point out data suggesting adults under 34 years of age attempted suicide with a ratio of more than 30 times as common as suicide, whereas in those over 55 years-of-age attempted suicide was only three times as common as suicide. The division is largely composed of persons in their early 20's, a population expected to gesture with higher frequency. That older persons are excluded would tend to explain the lower overall rate of completed suicides within the Army.

Virtually all of the persons sampled had been reacting to some stressor in their lives: 50% were facing or undergoing divorce, and large numbers were facing financial and/or occupational problems (Figures 8 and 9). These stressors are largely consistent with those previously reported for military samples engaging in suicidal behavior.

Compared to completed suicides on the post during this time period, the population engaging in suicidal gestures is significantly younger (t=6.46 P<0.001), of lower rank (t=12.5 P<0.001) and has less time in service than those actually committing suicide (Figures 3 and 6). While no female committed suicide during this time period, six of the twenty seven gestures reported were by females. This difference was not statistically significant (t=1.55 ns).

Those gesturing overwhelmingly chose a different method, self-poisoning (Figure 7), and appeared to be acting for secondary gain to influence an event in progress. Actual suicides tended to involve firearms or hanging.

In our present sample, suicide notes were left surprisingly infrequently: In only 1 of the 27 cases, 3.7% was a note left. The Army wide studies have held that 24-30% of all cases leave a note. Scheidman, et al. (1983) suggested that the rates for civilians in Los Angeles country, while lower, were still at a 12-15% rate. This would suggest that the parasuicidal behavior sampled was either more hastily or impulsively engaged in or that those staging the attempts probably had more expectation of being able to explain their motives in person.

The average soldier committing a parasuicidal gesture within the division is a male (Figure 2) with the rank of Private (E-1 to E-3, Figure 3). He has two years or less in the Army (Figure 6), and has been with his unit less than a year (Figure 1). He is employed in his primary MOS, which could be any, but appears slightly more likely to be from combat support than from combat arms. His character and efficiency are rated as acceptable by his commander (Figure 4), and he is viewed as getting along fairly well with others. If he has a problem at work it is viewed as one of lacking motivation to try rather than lacking ability (Figure 5). He made his gesture by ingesting an amount of medication and then informing a friend or coworker. He is undergoing some form of relationship crisis, and his partner may have recently been unfaithful. Work and financial problems also figure prominently in the picture.
Commanders typically viewed community mental health as their first line of defense in dealing with the crisis and viewed their unit chaplain as a close second (Figure 10). They sometimes needed the help of the military police but were less likely to turn to personnel of The Judge Advocate General's Corps, Army Community Service, or the Surgeon's Office. By and large, they felt they had received the help they needed (Figure 11).

Surveys completed by commanding officers reflected a high degree of satisfaction--first level supervisors were more likely than commanding officers to express dissatisfaction with the help received. Dissatisfaction tended to revolve around the inability to get needed information. Whether this stemmed from a lack of information flow from commander to subordinate or from the need for additional, but unavailable, information is not clear.

Differences between the suicidal and parasuicidal populations have implications for suicide prevention planning. If the primary goal of the Army Suicide Prevention Program is to preserve life, it can be argued that the primary target population should be the older, more senior personnel within the Army structure--which has not been the focus to date. The prevention of gesturing is arguably much less important: Members of the parasuicidal population come to the attention of mental health professionals as a consequence their behavior, and they can then receive treatment.

While supporting the differentiation between suicidal and parasuicidal behavior, our present discussion is not intended to suggest that parasuicidal incidents should be ignored or treated as unimportant. Buglass and McCulloch (1970) found that within three years of making a parasuicidal gesture, 3.3% had gone on to commit suicide--a small but significant number.

In conclusion, among Army personnel, parasuicidal behavior appears to occur with greater frequency among younger and lower ranking soldiers; and it is in response to a situational crisis, which frequently involves a spouse or loved one. These soldiers, on the average, are viewed as having acceptable potential and ability and are seen positively by their command, but they may be lacking in maturity and motivation. The treatment they receive, often a combination of services through Community Mental Health and the Chaplain's Office, is generally viewed by the soldier's command as adequate to deal with the crisis.

REFERENCES


**Ft. Lewis ParaSuicides 1990**

*Time in Unit*

![Graph showing time in unit]

**Figure 1**

---

**PARASUICIDE**

*Sex (n=27)*

- Female (22.2%)
- Male (77.8%)

![Pie chart showing sex distribution]

**Figure 2**

---

**PARASUICIDE**

*Rank of Soldiers*

- E-6 (3.7%)
- E-5 (25.9%)
- E-4 (14.8%)
- E-3 (37.0%)
- E-2 (18.5%)

![Bar chart showing rank distribution]

**Figure 3**

---

**Ft. Lewis ParaSuicides 1990**

*Character and Efficiency*

- Most are rated GOOD

![Bar chart showing character and efficiency ratings]

**Figure 4**
Ft. Lewis ParaSuicides 1990
Commanders Ratings Of Soldier:

Time In Service (n=27)

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Parasuicide Declines with TIS

Fort Lewis: No Basic Training

Fort Lewis Suicide Attempts
Method Used (1990) n=27

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Fort Lewis Suicide Attempts
Stressors At Time of Attempt

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<td>Job Problem</td>
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SUICIDE ATTEMPTS: FT. LEWIS
Help Needed By Command

Fort Lewis Suicide Attempts
Stressors At Time of Attempt

Satisfaction With Services
Ft. Lewis Commanders 1990

CHARACTERISTICS OF SUICIDAL VS PARASUICIDAL SOLDIERS
(Ft. Lewis 1990)

Suicides
Over 30
10 Years (+)
TIS
Senior Personnel
Officers and
senior NCO's
None under E-6:
Notes Left 50%
Violent/Lethal
Gunshot
Hangings, even
combination:
Premeditated
"Obsessive"

Parasuicides
Early 20's
New to
Military
under
More Junior
All Enlisted
None over E-6
No Notes:
Self-harm
Wrist Cutting
Impulsive
"Personality
Disorders"
I. Introduction

A. Nature of Disaster Situation

1. Types

2. Impact
   a. Individuals
   b. Groups
   c. Communities

3. Intervention strategies, normalize feelings, debriefings, follow-up availability

B. Principles of Consultation

1. Know background information

   a. Understand and internalize US Army's mission, in particular AMEDD personnel mission which is a supportive one designed solely to "preserve the fighting strength."

   1) Think of self as an industrial psychologist who works for the company on an individual basis, and

      a) As a company management consultant, you will be called upon to accomplish at least four tasks:

         (1) Disposing of problem persons; purging the system of deadwood or unproductive personnel who interfere with the company's mission;

         (2) Treating persons with problems -- productive personnel who, with some assistance can remain contributors to the company's mission;
(3) Helping management or command in appropriate placement of personnel; and

(4) Systems interventions which involve programmatic design and preventive programs which circumvent anticipated problems for active duty troops or company employees.

2) By far the greatest portion of your time will be spent providing secondary and tertiary prevention. These tasks involve making dispositions on problem personnel and their families.

3) Although you will be charged with the mission of primary prevention, there will be very few opportunities for this kind of work, unless you:
   a) Establish relationships and credibility with the chain of command--more on that later;
   b) Can predict with some degree of accuracy interventions and/or programs that will work; and
   c) Have leadership's ear. You will find it difficult to do this unless you understand the commander's mission, pressures, and aspirations.

4) It is paramount that you know the military system and/or have access to senior mental health professionals who have served in similar situations.

5) Broad clinical skills are important--not only knowledge of psychotherapy and treatment, but also teaching skills allowing you to influence training programs for paraprofessional and professional personnel.

b. Use a team approach involving interaction among you, local support groups, ombudsmen, family service organizations, and the command.

1) You will need to clarify roles and/or areas of responsibility.
2) Priorities for the unit must be understood and should be articulated. Generally, these priorities should be based upon the:
   a) Unit mission;
   b) Unit leadership; and
   c) Individual talents of the team members.

3) Priorities should be continuously monitored to allow for change.
   a) Change is often stressful and threatening and can minimize effectiveness with team members if not monitored.
   b) Avoid making commitments of unit resources without discussing changes with unit staff. Establish management by consensus.

c. Know your resources and utilize them.
   1) Maintain contact with colleagues:
      a) Mental health consultant;
      b) Regional mental health consultant; and
      c) Peers.
   2) Don't hesitate to ask for, and utilize, their advice.
   3) Establish working relationships with commanders. One technique is to ask to visit the unit after making a successful assessment of a unit member. Another technique is to volunteer to provide a briefing to the commander. In either case, know what you want to accomplish or the visit will not be fruitful.

d. Remember, the more you're perceived as part of the team, the better your chance of gaining credibility and acceptance.

e. Don't try to operate as would a clinician in private practice--coming to show the "dumb troopies" how to behave. This will only alienate, or turn off, members of the chain of command.
2. Develop effective assessment techniques. Carkhuff (1969) talks about the following skills:

a. Attending;
b. Observing;
c. Listening;
d. Responding; and
e. Developing action programs. Although these skills may appear obvious, it has been my experience that many clinicians don't apply them before they recommend solutions. They are designed to help you become familiar with, and understand, your client's needs, to clarify alternative solutions, and to facilitate problem-solving by the commander and/or the individual soldier.

3. Effectively utilize background information - assessment skills.

a. Planning - developing - implementing activities: Once one understands the problem situation, one must be capable of planning, developing, and implementing activities designed to solve practical problems.

1) Unit training programs - lectures and demonstrations, PTSD workshops, debriefing of helpers.

2) Training of paraprofessionals.

3) Command consultation on individual and/or unit problems.

b. Set practical and realistic goals; know your limitations. Many mental health officers have lost their credibility by promising more than they can deliver. Conservative estimates are always more appreciated, in the long run, than are over ambitious predictions, which cause disappointments.

c. When called upon, respond to reasonable requests in a timely manner. Good information too late is often of little consequence.

d. Don't expect change overnight; be patient and consistent. Do a creditable job on all tasks requested by units and always follow-up and ask for feedback on your consultations.
e. Remember, you support command: the commander has the right and the responsibility to accept or reject your advice. The final disposition on most staff issues rests with the commander.

4. Evaluate effectiveness.
   a. Effect on units:
      1) Set up baseline data on units you are responsible for. This baseline data should be based on the unit’s mission and priorities, requesting consultation from the service, number of personnel at risk, etc.
      2) Evaluate effects periodically.
      3) Provide feedback to units. Rethink actions.
   b. Effect on individual personnel:
      1) Set up baseline data based upon the mission, i.e., number returned to duty, incidence of suicide, etc.
      2) Evaluate periodically.

II. Killeen Shooting Tragedy
   A. Type of disaster
   B. Impact
      1. Individual reactions
      2. Group reactions
      3. Community reactions
   C. Intervention strategies
      1. Normalize feelings/create awareness
      2. Offer debriefings
      3. Be available for follow-up

III. Lessons Learned
   A. Although the community was very responsive, it became clear that there should be an established disaster plan.
B. There should be periodic, disaster-scenario training of emergency personnel, to include municipal/county agency personnel. Training should include handling of inquiries from members of the media, setting up a command center, and coordination of psychological support, etc.

C. There should be a centralized list of volunteers and other human resources which are available to assist in a disaster. This could possibly be maintained by the American Red Cross.

D. An alternative communication system is needed.
ADDENDUM

Coping with Traumatic Events

Emotional reactions following a disaster are normal. As you adjust to the physical and psychological stresses of a traumatic incident in the community, you, or someone close to you, may experience certain normal reactions to stress. There is no "right" way to feel. Common reactions include:

- Trouble falling asleep or difficulty sleeping through the night;
- Nightmares;
- Emotional and physical fatigue;
- Irritability
- A fear of reoccurrence of the shooting incident that intrudes upon your daily activities;
- Anxiety throughout most of the day and intrusive recollections of the shooting event;
- Disbelief and a sense that things are unreal;
- Emotional numbing;
- A sense of loss of control over one's life;
- Feelings of guilt; and
- Feelings of depression.

In children, we often see a somewhat different pattern depending upon age. In addition to the reactions listed above, children may show:

- Changes in conduct and increased disciplinary problems;
- Regressive behavior such as bed wetting, excessive dependence, clinging and whining, etc.;
- Distractibility and inattention;
- Heightened curiosity about safety; and
- School problems, including reluctance to attend school and worries about being away from parents and family.

Not everyone experiences these reactions. For those who do, the time of onset and the form of these symptoms of stress will vary from individual to individual.

It is important not to ignore these signs of stress. For most people these symptoms will be mild, and discussing the experiences surrounding the traumatic incident with family and friends will be enough. To aid you and your family in this regard, discussion groups will give you an opportunity to share in each others' experiences. If you would like to share your experiences with others, Mental Health Professionals, Chaplains, and the Family Support Center are ready to help facilitate discussion groups at the time and place of your choosing. Discussion groups (shooting tragedy support groups) at the work place, in units, housing areas, barracks, hospital, etc., for active duty, for family members, and for civilian employees can facilitate the healing process through this difficult time.
*Attached is a diagram of a normal emotional response pattern. As you will see from the figure, over time people in general experience three phases of emotional responses: 1) shock, 2) impact, and 3) resolution.

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