Crisis Intervention and Critical Incident Stress Management: A defense of the field

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Part I – Important Background and Terminology

1. Crisis:

An acute emotional *reaction* to a powerful stimulus or demand. A state of emotional turmoil. Three characteristics of crisis: The usual balance between thinking and emotions is disturbed; the usual coping mechanisms fail; there is evidence of impairment in the individual or group involved in the crisis.

2. Crisis Intervention:

TEMPORARY, but **ACTIVE** and **SUPPORTIVE** entry into the life of individuals or groups during a period of extreme distress. "Emotional First Aid." ***Different interventions tools are used for individuals vs. groups.***

3. Providers of Crisis Intervention:

Although some Psychiatry / Psychology is crisis oriented, most frequently crisis intervention is provided by firefighters, emergency medical or search and rescue personnel, police officers, physicians, nurses, soldiers, clergy, hospital workers, communications personnel and community members.

4. Societal Influences on the Development of Crisis Intervention:

- Religion
- Warfare
- Disasters
- Medicine
- Law enforcement
- Emergency Medical Services
- Psychiatry / Psychology

5. History of Organized and Systematic Crisis Intervention:
(Note: Crisis intervention is often referred to as "early intervention")

- 1906 Edwin Sterlin – Mining disaster in Europe
- 1917 Thomas Salmon – Battlefields of World War I
- 1943 Eric Lindermann – Coconut Grove fire Boston, MA
- 1960´s Gerald Caplan – Contributed most of the modern crisis intervention theory
- 1970´s - The field of CISM begins in 1974. *It is a subset of crisis intervention*. *It shares the same goals, principles and interventions.*
- 1980 and 90's - refinements to the CISM field

6. Goals of Crisis Intervention:

- Mitigate impact of event (lower tension)
- Facilitate normal recovery processes, in normal people who are having normal reactions to abnormal events
- Restoration to adaptive function

7. Principles of Crisis Intervention:

- Simplicity – People respond to simple not complex in a crisis
- Brevity – Minutes up to 1 hour in most cases (3-5 contacts typical)
- Innovation – Providers must be creative to manage new situations
- Pragmatism – Suggestions must be practical if they are to work
- Proximity – Most effective contacts are closer to operational zones
- Immediacy – A state of crisis demands rapid intervention
- Expectancy – The crisis intervener works to set up expectations of a reasonable positive outcome

8. Critical Incidents:

Powerful traumatic events that initiate the crisis response. These events are usually outside of the usual range of normal human experiences on the job or in one's personal life. Examples are line of duty deaths or serious injury to operations personnel. Child deaths, multiple casualty events and severe threats to emergency personnel are also classified as "critical incidents".

9. Critical Incident Stress:

A state of cognitive, physical, emotional and behavioral arousal that accompanies the crisis reaction. The elevated state of arousal is caused by a critical incident. If not managed and resolved appropriately, either by oneself or with assistance, it may lead to several psychological disorders including Acute Stress Disorder, Post Traumatic Stress Disorder, Panic Attacks, Depression, Abuse of Alcohol and Other Drugs, etc.

10. Critical Incident Stress Management:

A *comprehensive, systematic and integrated multi-tactic crisis intervention approach* to manage critical incident stress after traumatic events. CISM is a coordinated program of tactics that are linked and blended together to alleviate the reactions to traumatic experiences.

11. Who Uses Multi-Tactic Early Intervention Programs?

- American / International Red Cross
- Austrian Red Cross
- Japanese Red Cross
- Canadian Red Cross
- Critical Incident Stress Management Foundation of Australia
- National Organization of Victims Assistance
- Salvation Army
- Church of the Brethren
- Community Crisis Centers
- Crisis Hot Lines
- Hospitals
- Clergy
- Motorola Communications
- United Auto Workers
- Amtrak
- Martin Marietta Corporation
- Delta Airlines
- Lufthansa Airlines
- German Air Traffic controllers
- American Airlines
- US Airways

- Aer Lingus
- United Airlines
- Association of Traumatic Stress Specialists
- American Academy of Experts in Traumatic Stress
- International Critical Incident Stress Foundation
- National and International Disaster Relief Agencies
- Police Departments
- Fire Services
- Emergency Medical Services Organizations throughout the world
- School systems
- United States Army; United States Air Force
- United States Navy; United State Marine Corps
- United States Coast Guard
- National Health Trust of the United Kingdom
- Federal Aviation Administration
- United States Department of Agriculture
- Environmental Protection Agency
- The United Nations
- Federal Bureau of Investigation
- Secret Service
- US Marshals Service
- Bureau of Alcohol, Tobacco, and Firearms
- Federal Emergency Management Agency
- Homeland Security (many branches)
- Swedish National Police
- Finish Police
- German Air Force, Navy and Army
- Numerous other organizations, agencies and private practitioners

12. Critical Incident Stress Debriefing:

A specific, 7-step ***group*** crisis intervention tool designed to assist a homogeneous group of people after an exposure to the same significant traumatic event. The Critical Incident Stress Debriefing (CISD) is not a stand alone process and it should never be provided outside of an integrated package of interventions within the Critical Incident Stress Management (CISM) program. ***Under no circumstances should this group crisis intervention tool be considered psychotherapy or a substitute for psychotherapy.***

Part II – The Research Behind Crisis Intervention (Early Intervention)

NOTE: One cannot legitimately separate Critical Incident Stress Management from the field of Crisis Intervention or Early Intervention. The entire field of CISM is a subset of the field of crisis intervention and shares directly in its history, goals, principles and interventions. Therefore, studies which evaluated the effectiveness of the goals, principles and appropriate, well-designed applications of crisis intervention services, are studies which can be applied to CISM. It should be noted, however, that CISM is a more focused set of crisis interventions designed specifically to manage the traumatic stress associated with exposures to critical incidents.

The primary focus in the field of CISM is to *support staff members of organizations* or members of communities which have experienced a traumatic event. What CISM does not share with the field of crisis intervention is the range of the populations served. For example, CISM does not focus on primary victims such as auto accident victims, dog bite victims, women suffering post-partum depression, women who have lost a child in a miscarriage, child abuse victims, substance abusers, victims of elder abuse or sexual assault victims all of whom are typically served through various other crisis intervention programs. Should primary victims with those concerns come into contact with CISM trained personnel, the best course of action is a referral to appropriate crisis intervention or psychotherapy resources which are beyond the central focus and capabilities of most CISM teams.

The following is only a brief summary (by category of study type) of studies which support early intervention and Critical Incident Stress Management. By no means should the list be considered all inclusive. Many more studies are summarized in a document entitled, *Crisis Intervention and Critical Incident Stress Management Research Summary* which can be found on the ICISF web site in the "Related Articles & Resources" section (www.icisf.org/articles). It is suggested that readers actually read the original documents for the most accurate information.

Randomized Controlled Trials - (RCT)

1. Langsley, D., Machotka, P., and Flomenhaft, K (1971). Avoiding mental health admission: A follow-up. ***American Journal of Psychiatry*****, 127, 1391-1394.**

Key points and findings:

- 300 patients
- Inpatient treatment vs. family crisis intervention
- Crisis intervention was superior to inpatient treatment for preventing subsequent psychiatric hospitalizations.

2. Decker, J., and Stubblebine, J. (1972). Crisis intervention and prevention of psychiatric disability: A follow-up. ***American Journal of Psychiatry*****, 129, 725-729.**

Key points and findings:

- 540 patients
- Followed for 2.5 years subsequent to initial psychiatric hospitalization
- Traditional follow-up treatment was compared to crisis intervention services
- Results supported the superiority of the crisis intervention services in preventing subsequent hospitalizations.

3. Bunn, T. and Clark, A. (1979). Crisis intervention. ***British Journal of Psychiatry*****, 52, 191-195.**

Key points and findings:

- 30 individuals accompanying relatives to a hospital
- Randomly divided into "no intervention" group or "20 minutes of supportive crisis intervention"
- Crisis intervention was superior to no intervention in reducing anxiety.

4. Bordow, S. & Porritt, D. (1979). An experimental evaluation of crisis intervention. ***Social Science and Medicine*****, 13, 251-256.**

Key points and findings:

- Three group RCT (no intervention; one intervention type; multiple intervention types in combination)
- Results were indicative of a dose response relationship between intervention level and the reduction of reported distress.
- One crisis intervention tactic was better than none.
- Combined crisis intervention tactics were most helpful.

5. Deahl, M., Srinivasan, M., Jones, N., Thomas, J., Neblett, C., and Jolly, A. (2000). Preventing psychological trauma in soldiers. The role of operational stress training and psychological debriefing. ***British Journal of Medical***

***Psychology, 73,* 77-85.**

Key points and findings:

- 106 British soldiers involved in a United Nations peacekeeping operation in Bosnia
- All soldiers received an Operational Stress Training Package.
- Random selection into groups receiving CISD or no CISD
- At 6 month follow-up, CISD group had significantly lower prevalence of alcohol abuse than no-CISD group.
- CISD group members had lower scores on psychometrically assessed anxiety than no-CISD group.
- CISD group members had lower scores on psychometrically assessed depression than no-CISD group.
- CISD group members had lower scores on psychometrically assessed PTSD symptoms.

6. Campfield, K. & Hills, A. (2001). Effect of timing of Critical Incident Stress Debriefing (CISD) on posttraumatic symptoms. *Journal of Traumatic Stress,* 14, 327-340.

Key points and findings:

- 77 robbery victims
- CISD provided at less than 10 hours compared to CISD provided at greater than 48 hours.
- Victims were assessed at 2 days, 4 days, and 2 weeks.
- Post Traumatic Stress symptoms *decline* was significantly greater for the group with the more immediate CISD. Not only did they have fewer symptoms, but they also had less severe posttraumatic stress symptoms in each of the four different measurements over the two weeks.

Controlled Studies

1. Leeman-Conley, (1990). After a violent robbery. *Criminology Australia,* April /May, 4-6.

Key points and findings:

- Bank employees in Australia
- Compared one year without a CISM program to a year with a CISM program
- 107 employees in each year
- In the year without assistance there were 281 sick days within a week of the robbery. There were 668 sick days taken over the next six months. These numbers are much higher than average lost days when there have been no robberies. Average cost of medical benefits and other workers compensation was $18,488 (AUS).

- After the CISM program (called the "Post Hold-up Support Program") was instituted, the sick time utilization was 112 sick days within a week and 265 days during the next six months. This occurred despite the fact that there were more robberies in the year when help was available. Average medical and other workers compensation costs dropped to $6,326 (AUS).
- 60% reduction in sick time utilization over year without assistance
- 66% reduction in workers compensation payouts over year without assistance

2. Bohl, N. (1991). The effectiveness of brief psychological interventions in police officers after critical incidents. In J.T. Reese and J. Horn, and C. Dunning (Eds.) *Critical Incidents in Policing, Revised (pp.31-38).* Washington, DC: Department of Justice.

Key points and findings:

- Naturalistic randomized study
- 40 police officers who received CISD within 24 hours of a critical incident were compared to 31 who had not received CISD within 24 hours.
- The final evaluation took place 3 months later.
- Those with CISD were less depressed.
- Those with CISD were less angry.
- Those with CISD were less anxious.
- Those with CISD had less stress symptoms.

3. Bohl, N. (1995). Measuring the effectiveness of CISD. *Fire Engineering,* 125-126.

Key points and findings:

- Naturalistic randomized study
- Follow up investigation to the 1991 study
- 30 firefighters who received CISD within 24 hours of a critical incident were compared to 35 who did not receive CISD.
- The final evaluation took place at three months.
- Anxiety symptoms were found to be less in the CISD group.
- Symptoms of stress were less in the CISD group than in the non-CISD group.

4. Jenkins, S.R. (1996). Social support and debriefing efficacy among emergency medical workers after a mass shooting incident. *Journal of Social Behavior and Personality* 11, 447-492.

Key points and findings:

- 29 emergency medical personnel were studied subsequent to a mass shooting in Kileen, Texas. 23 died and another 32 were wounded.
- 15 EMS personnel were given CISD within 24 hours.
- 14 EMS personnel received no CISD.
- Repeated assessments 8-10 days after CISD and at 1 month

- Recovery from the trauma most strongly associated with participation in the CISD process
- CISD was useful in reducing symptoms of depression and anxiety for those who participated in the CISD compared to those who did not.
- Trauma related symptoms decreased in CISD group.

5. Chemtob, C., Tomas, S., Law, W., and Cremniter, D. (1997). Post disaster psychosocial intervention. ***American Journal of Psychiatry*****, 134, 415-417.**

Key points and findings:

- 41 crisis response workers in Hurricane Iniki
- Time-lagged design (one group finished their work as the other started theirs)
- Pre-intervention test for second group was concurrent with post-intervention assessment of the first group
- Impact of Events Scale (IES)
- Psychometrically assessed posttraumatic stress was significantly reduced in both groups after CISD and an educational program was presented.
- True study of CISM (multi-tactic approach)

6. Hokanson, M. (1997) ***Evaluation of the Effectiveness of the Critical Incident Stress management Program for the Los Angeles County Fire Department.*** **Los Angeles, CA: LACoFD.**

Key points and findings:

- Fire service personnel in Los Angeles County, California
- 3000 surveys distributed.
- 2124 (70.8%) completed.
- 600 of the 2124 had participated in a CISD.
- Goals of the LACoFD CISM program were to accelerate the recovery process after traumatic events.
- To reduce the psychological impact of the event
- 56.3% of respondents experienced a significant reduction of trauma-related symptoms within 72 hours of the CISD compared to only 45.5% indicating reduction of symptoms without CISD.
- The 72 hour incremental recovery utility for CISD was 10.8% beyond the personnel in the groups that did not receive CISD.
- 74.1% of the respondents experienced a significant reduction of trauma-related symptoms within one week after the CISD compared to only 65.5% of the personnel in the groups that did not receive CISD.
- The one week incremental recovery utility for CISD was 8.6%.
- The reduction in symptoms after CISD has implications for medical care, sick leave utilization and workers compensation claims.
- In addition the CISD process was effective in facilitating the amelioration of trauma-related symptoms.

- Of the respondents only 13.9% indicated that they had persistent trauma-related symptoms more than 6 months after the trauma and the CISD.
- 16.5% of the personnel in groups not receiving CISD reported persistent trauma-related symptoms.
- The incremental recovery utility was 2.6% for the CISD in this analysis.
- These findings have implications for workers' compensation disability claims and the incidence of early retirement and turnover.

7. Wee, D.F., Mills, D.M. and Koelher, G. (1999). The effects of Critical Incident Stress Debriefing on emergency medical services personnel following the Los Angeles civil disturbance. *International Journal of Emergency Mental Health,* 1, 33-38.

Key points and findings:

- 65 emergency medical personnel were studied after exposure to urban riots in Los Angeles.
- 42 were given CISD within 1 to 14 days after riot.
- 23 received no-CISD.
- Frederick Reaction Index (self-report symptoms of PTSD)
- Assessed 3 months after the CISD
- Those who received the CISD had significantly less symptoms of PTSD than those without the CISD.

8. Nurmi, L. (1999). The sinking of the Estonia: The effects of Critical Incident Stress Debriefing on Rescuers. *International Journal of Emergency Mental Health,* 1, 23-32.

Key points and findings:

- Sinking of *Estonia,* a large ferry boat. 994 killed.
- 105 emergency response personnel who retrieved bodies were compared to 28 emergency department nurses who received bodies at their hospitals.
- CISD provided to emergency response personnel.
- Supervisor support was the only service provided to the nurses.
- Impact of Events Scale and Penn Inventory utilized.
- Psychometrically assessed trauma symptoms were consistently lower in CISD groups compared to control group.
- Self reported satisfaction with CISD ranged from 63% to 84%.

9. Richards, D. (2001). A field study of critical incident stress debriefing versus critical incident stress management. *Journal of Mental Health*, 10, 351-362.

Key points and findings:

- Assessment of the Critical Incident Stress Debriefing (CISD) tactic versus Critical Incident Stress Management (CISM) comprehensive program.
- After robberies:

- 225 people received only CISD.
- 299 people received a comprehensive program including CISD.
- Services were initiated 3 days after the event.
- Used Impact of Events Scale, General Health Questionnaire and Posttraumatic Stress Disorder scale
- Assessed at 3 days, 1 month and 6-12 months
- Both interventions were found to be very helpful.
- However comprehensive CISM was far more effective than CISD alone when evaluated on the follow-ups.

10. Watchorn, J.H. (2001). ***Surviving Port Arthur: The role of dissociation in the impact of and its implications for the process of recovery.*** **Hobart, Tasmania, Ausatralia: University of Tasmania.**

Key points and findings:

- 96 emergency services personnel involved in response to the Port Arthur massacre in which a lone gunman killed 32 visitors in a historic area of Tasmania, Australia.
- Experiencing dissociative symptoms at the time of the incident was predictive of long term psychological and physiological distress
- Those who experienced dissociation at the event but disclosed their related thoughts and feelings at the group debriefings showed significantly less long-term psychological distress.
- CISD appears to provide an opportunity for the necessary psychological processing to commence and assist emergency services personnel in managing what might otherwise develop into PTSD.
- Baseline data were established.
- Follow-up assessments were made at 8 months and 20 months.

Meta Analyses

1. Everly, G.S., Jr. and Boyle, S. (1999). Critical Incident Stress Debriefing (CISD): A meta-analysis. ***International Journal of Emergency Mental Health,*** **1, 165-168.**

Key points and findings:

- 5 peer reviewed studies were subjected to meta-analysis.
- 341 subjects
- Specific "ICISF Model" CISD
- Various self- report measures of psychological symptoms were utilized.
- Cohen's D (measure of effectiveness of an intervention) =.86 That represents a high positive effect of specific "ICISF Model" debriefings (CISD).

2. Everly, G.S., Jr., Boyle, S. and Lating (1999). Effectiveness of psychological debriefing with vicarious trauma: A meta-analysis. *Stress Medicine,* 15, 229-233.

Key points and findings:

- 10 peer reviewed studies
- 698 subjects
- Group psychological debriefings were evaluated.
- Various self- report psychological measures were utilized.
- Cohen's D (measure of effectiveness of an intervention) = .54 That represents a modest positive effect of group debriefings.

3. Everly, G.S., Jr., Flannery, R. B., Jr., Eyler, V. and Mitchell, J.T. (2001) Sufficiency analysis of an integrated multicomponent approach to crisis intervention: Critical Incident Stress Management. *Advances in Mind-Body Medicine*, 17, 174-183.

Key points or findings:

- A statistical "sufficiency analysis" of CISM argues strongly that CISM may be considered an empirically validated clinical intervention.

Literature Reviews

1. Hiley-Young, B and Gerrity, E.T. (1994). Critical Incident Stress Debriefing (CISD): Value and limitations in disaster response. *NCP Clinical Quarterly*, 4, 17-19.

Key points and findings:

- "We recognize that CISD procedures may help some disaster victims. We are concerned, however, that an unreasonable expectation of CISD usefulness may be developing among field practitioners." (p.17).
- Personal losses and traumatic experiences may make the CISD less helpful by itself.
- If a person has pre-incident psychopathology, the CISD by itself will not be effective.

2. Dyregrov, A. (1998). Psychological debriefing: An effective method? *TRAUMATOLOGYe*, 4, (2), Article 1.

Key points and finding:

- Review of the literature
- Qualitative analysis suggests that multi-component program is effective.
- "In my opinion the debate on debriefing is not only a scientific but also a political debate. It entails power and positions in the therapeutic world. As a technique…[debriefing] represents a threat to the psychiatric elite."

- Appropriate training is required to insure CISM effectiveness.
- When implemented as prescribed, CISM appears to be an effective crisis intervention, capable of reducing signs and symptoms of distress associated with an acute psychological crisis.

3. Everly, G.S., Jr., Flannery, R.B., Jr. and Eyler, V. (2002). Critical Incident Stress Management: A statistical review of the literature. *Psychiatric Quarterly,* 73, *171-182.*

Key points and findings:

- Reviews both negative and positive outcome studies.
- Indicates strengths and weaknesses of the literature in the CISM field.

4. Everly, G.S., Flannery, R.B., and Mitchell, J.T. (2000). Critical Incident Stress Management: A review of the literature. *Aggression and Violent Behavior,* 5, 23-40.

Key points and findings:

- Qualitative review of multi-component crisis intervention programs
- Found evidence of clinical utility of crisis interventions:
- When standards are followed,
- And properly trained personnel are providing the support services

5. Mitchell, J.T. (2003). *Crisis Intervention and Critical Incident Stress Management Research Summary*. Ellicott City, MD: International Critical Incident Stress Foundation. (May be found on the ICISF web site in the "Related Articles & Resources" section (www.icisf.org/articles)).

Key points and findings:

- Summarizes both sides of the debriefing debate.
- Indicates flaws in negative outcome studies.
- Provides details on the findings or key points within each study.
- Section commentaries are provided.

Case studies

1. Breznitz, S. (1980). Stress in Israel. In H. Selye (Ed.) *Guide to Stress Research.* New York: Van Nostrand Reinhold Company.

Key points and findings:

- 600 soldiers evacuated from the front lines.
- Peer support of fellow soldiers
- Only 60 (10%) required further care.
- None required long term care.

- Overall incidence of psychiatric disturbance in Israeli combat forces dropped 60%.

2. Rogers, O.W. (1992) *An Examination of Critical Incident Stress Debriefing for Emergency Services Providers: A quasi experimental field study*. Ann Arbor, MI: UMI Dissertation Services.

Key points and findings:

- Doctoral dissertation
- Quasi experimental design
- Data suggest that there may be a powerful symptom mitigation effect from the use of CISD.
- The effect may not be evident until several weeks after the CISD.
- In the immediate 36 hour period the CISD effect appears minimal but becomes more evident over time.
- 72% of emergency personnel who were given CISD reported lower symptoms after the CISD.
- Feelings of control of one's reactions increased after CISD.
- Reported small but "…significant increases in resolution in persons who participated in the debriefing process, when controlling for other presumed influencing variables" (p.71).
- "…the resolution of stress as measured by the Critical Incident Resolution Scale…Mean scores for the participant sample are 1.06 times greater than the nonparticipant sample" (p.77).

3. Burns, C. and Harm, I. (1993). Emergency nurses perceptions of critical incidents and stress debriefing. *Journal of Emergency Nursing,* 19 (5), 431-436.

Key points and findings:

- 219 Emergency Department nurses
- 193 reported that CISD process had been personally helpful to them.
- Positives and negatives about the CISD were cited.
- 86.6% said talking about critical incident helped.
- 85.1% reported that realizing that "I was not alone in my responses to the incident helped".
- 83.0% said hearing others talk of the incident helped.
- 26.9% said CISD did not help if group leaders had no relevant experience.
- 23.1% said "I was not comfortable with some people in the group".
- 19.2% reported that CISD came too long after the critical incident.

4. Robinson, R.C. and Mitchell, J.T. (1993) Evaluation of psychological debriefings. *Journal of Traumatic Stress*, 6(3), 367-382.

Key points and findings:

- 288 emergency workers
- 31 "Mitchell Model" CISD between 1987 and 1989 in Melbourne, Australia
- Evaluation forms distributed within two weeks of the CISD.
- 96% of emergency services personnel and 77% of welfare or hospital staff stated that they had experienced symptom reduction which they attributed to the CISD.
- No one reported experiencing harm from the CISD.
- The greater the impact of an event on the personnel, the greater the benefit of the CISD.

5. Robinson, R.C. (1994). *Follow-up study of health and stress in ambulance services, Victoria, Australia.* Part I. Melbourne, Australia: Victorian Ambulance Crisis Counseling Unit.

Key points and findings:

- 823 ambulance personnel
- 45% had incidents which caused them to experience significant distress.
- 64% of the 823 were aware of CISM services.
- Of those, 71% felt that CISM services including CISD services to be very important, 26% felt that the services were quite important and only 3% felt that the services were not important.
- When only the CISD were evaluated, 37% of personnel found them to be very helpful, 45% found them to be moderately helpful and 18% found them unhelpful.
- 21% of those who went through a CISD had considerably lower symptoms, another 51% said the symptoms lowered a little. 28% of the personnel in the CISD said they had no symptom reduction.
- 48 % of the personnel said the symptom reduction was long lasting, 10% said the symptom reduction lasted up to a few weeks, 14% said the symptom reduction lasted up to a few days. 28% said they did not perceive any benefits of the CISD.

6. Busuttil, W., Turnbull, G.J., Nal, L.A., Rollins, J., West, A.G., Blanch, N., and Herepath, R. (1995). Incorporating psychological debriefing techniques within a brief group psychotherapy programme for the treatment of post-traumatic stress disorder. *British Journal of Psychiatry,* 167, 495-502.

Key points and findings:

- 34 Royal Air Force personnel with traumatic exposures experienced symptoms of PTSD.
- 12 day residential treatment program, Comprehensive, multi-tactic program
- Attendees had experienced a broad range of traumatic situations including combat.
- Psychological group debriefing was a main therapeutic feature.
- Psycho education and cognitive restructuring
- One day group follow up sessions were held at 6 weeks, 6 months and one year during the course of a year.

- Highly significant improvement demonstrated at all follow up points on all psychometric measures.
- Conclusion: psychological debriefing may be useful in the treatment of PTSD even long after the traumatic exposure occurred.
- Only 5 of 34 cases had significant PTSD symptoms at one year.

7. Tehrani, N. (1995). An integrated response to trauma in three post office businesses. *Work and Stress*, 19, 380-393.

Key points and findings:

- Sickness and absence levels in employees held captive in armed raids fell by 50% after the introduction of a multi-component trauma package.

8. Manzi, L.A. (1995). *Evaluation of the On Site Academy's Residential Program.* Research investigation submitted to Boston College.

Key points and findings:

- Week-long residential CISM program
- Serves severely distressed Emergency Services personnel who have been through significant critical incidents.
- 108 participants were surveyed. 45 (41.7%) of surveys were completed.
- The 45 completing the surveys were out of the On Site Academy program for an average of 10 months.
- 100% said it had helped them meet their goals.
- 100% of survey participants indicated that they would recommend the On Site Academy for seriously distressed emergency personnel.
- Symptoms were assessed by using a retrospective pre-test post-test design.
- Analysis indicated significant decreases in cognitive, physical, emotional and behavioral stress symptom patterns.
- Over 90% of those who attended the On Site program were able to return to work even though they had been out of work a range of 4 months to 4 and ½ years.

9. American Academy of Orthopaedic Surgeons, Department of Research and Scientific Affairs. (1996). Tales from the front: Huge response to sound off on CISD. *EMT Today*, 1, (2), Feb. / March, 3.

Key points and findings:

- 436 emergency medical responders were asked to assess their own experience with CISD.
- 350 participated in the survey.
- Of the 350 a total of 314 (90.8%) responded that CISD was beneficial to them.

10. Amir, M., Weil, G. Kaplan, Z., Tocker, T. and Witzum, E. (1998). Debriefing with group psychotherapy in a homogenous group of non-injured victims of

a terrorist attack: A prospective study. *Acta Psychiatriaca Scandinavica,* 98, 237-242.

Key points and findings:

- 15 uninjured women were victims of a terrorist attack.
- Crisis intervention: a debriefing at 2 days after incident. Then brief therapy once a week for 6 weeks plus a single meeting with their husbands.
- Use of Impact of Events Scale, PTSD Scale, SCL-90 repeated measures at 2 days, 2 months and 6 months.
- Total IES scores showed a decrease.

11. Richman, M. (1998). *The Impact of Critical Incidents and the Value of Critical Incident Stress Debriefing.* Hobart, Tasmania, Australia: The Tasmanian Emergency Services Critical Incident Stress Management Program

Key points and findings:

- Various traumatic events impacting emergency personnel between 1988 and 1998
- One of the traumatic events was the murder of 32 tourists at a historical site in 1996.
- Evaluations were based on follow-up surveys provided immediately after a CISM service and returned within 10 days.
- 586 personnel participated in the study.
- The individual CISM services were rated as at least moderately valuable by 96% of the respondents.
- CISD was rated at moderately valuable by 90% of the personnel. 67% found it very valuable
- 55.6% of the respondents felt that the CISD had brought them relief from or lessening of symptoms.

12. Mitchell, J.T., Schiller, G., Eyler,V.E. and Everly, G.S. Jr. (1999). Community Crisis Intervention: the Coldenham tragedy revisited. *International Journal of Emergency Mental health,* 1, 227-236.

Key points and findings:

- Firefighters who worked in a tornado damaged school in which 9 children were killed.
- 3.5 years passed before adequate help was instituted for the firefighters.
- At 2 years, Dr. Paulette Muni had assessed that 100% of the 18 firefighters who served inside the internal perimeter had lingering symptoms of posttraumatic stress.
- At 3.5 years, 17 (94%) of the 18 personnel still had symptoms of PTSD similar to those found by Muni at the 2nd year.
- 8 (44%) of the 18 met all of the criteria for a diagnosis of PTSD.

- 9 (50%) had at least two of the symptom domains for PTSD.
- A comprehensive package of crisis interventions was instituted.
- Three follow up sessions were utilized. The last was completed at five months after the CISM interventions.
- McNemar Change Test was conducted to see if the interventions had contributed to the change or if they were merely by chance.
- After CISM interventions were completed only 7 (39%) firefighters continued to experience symptoms from one or more of the symptom domains.
- The p value was .004. The probability of that occurring simply by chance was only 4 in 1000 cases.
- Six fire fighters had left service after the tragedy. After intervention, 5 of the 6 returned to firefighting duties.

13. Flannery, R.B., (2001). Assaulted Staff Action Program (ASAP): Ten years of empirical support for Critical Incident Stress Management (CISM). *International Journal of Emergency Mental Health,* 3, 5-10.

Key points and findings:

- Ten year review of a CISM program known as "The Assaulted Staff Action Program"
- Found to be clinically effective.

14. North, C.S., Tivis, L., McMillen, J.C., Pfefferbaum, B., Cox, J., Spitznagel, E.L., Bunch, K., Schorr, J. and Smith, E.M. (2002). Coping, functioning, and adjustment of rescue workers after the Oklahoma City Bombing. *Journal of Traumatic Stress*, 15(3), 171-175.

Key points or findings:

- 181 firefighters who worked at the Oklahoma City Bombing
- Greater number of days at site was associated with lower current job satisfaction.
- Contact with remains of children was most distressing experience for majority.
- Support of family or friends was most common coping technique.
- Use of Alcohol was second most common coping technique
- 92% had defusings and or debriefings.
- Two thirds of the group expressed satisfaction with interventions.
- Participants with psychological disorders (other than PTSD) were less satisfied.
- 89% said they would recommend those CISM interventions for their colleagues.

Other

1. Swanson, W.C. and Carbon, J.B. (1989). Crisis intervention: Theory and Technique. In Task Force Report of the American Psychiatric Association. *Treatments of Psychiatric Disorders*. Washington, DC: APA press.

Key points and findings:

- When writing for the American Psychiatric Association Task Force Report on Treatment of Psychiatric Disorders, state, "Crisis intervention is a proven approach to helping in the pain of an emotional crisis." (p.2520).
- Crisis intervention (rapid and acute psychological intervention following critical incidents and traumatic events) has demonstrated itself to be an effective means of reducing psychological morbidity.

2. Stallard, P. and Law, F. (1993). Screening and Psychological debriefing of adolescent survivors of life threatening events. *British Journal of Psychiatry.* 163, 660-665.

Key points and findings:

- Psychological debriefing was used in part to screen for teenagers in need of additional assistance.
- Psychological debriefing was followed by a positive effect for the participants.

3. Western Management Consultants. (1996). *The Medical Services Branch CISM Evaluation Report.* Edmonton Alberta: WMC

Key points and findings:

- Data were collected, analyzed and reviewed by an independent evaluation organization, Western Management Consultants.
- Of 582 nurses working in British Columbia, Alberta, Manitoba and Ontario, 236 (41%) responded to the survey.
- 65% of the nurses had at least one critical incident per year in the workplace.
- Death of a child 37% of nurses
- Attempted or actual physical assault 28%
- Break-in at nursing facilities 25%
- Verbal threats / Assaults 52%
- Suicide attempt or completed suicide of a patient 44%
- CISM was instituted by the employer (Federal Government of Canada) as a means of reducing critical incident-related stress and discord.
- 82% of the nurses who had used CISM services reported that the services met or exceeded their expectations.
- 89% of the nurses in the overall sample indicated that they were satisfied with CISM services.
- 99% of nurses indicated that the CISM program had helped them to reduce the number of sick days taken on the job. A review of three years of sick time utilization confirmed this finding to be true.
- "Survey data suggest MSB CISM significantly reduced turnover among field nurses" (p.53).

- As many as 24% of the nurses who experienced a critical incident contemplated leaving their jobs, but did not after a CISM intervention. Estimates are that a single nurse replacement would cost $38,000 (CAD).
- Financial evaluations revealed a $7.09 benefit-to-cost ratio. That may be interpreted as a 700% return on the investment of the Canadian Government.
- "It is evident that the quality of the existing program is exceptional. The MSB program is a state-of-the-art program that should be emulated by other employers, and sets a standard by which alternatives should be judged." (Western Management Consultants, 1996, p. iv).

4. Ott, K., and Henry, P. (1997). *Critical Incident Stress Management at Goulburn Correctional Centre: A report.* Goulburn, NSW, Australia: NSW Department of Corrective Services.

Key points and findings:

- CISM program installed in 1995.
- Peer support and mental health professionals
- 90% reduction in costs of assisting stressed employees.
- Lowered sick time utilization, turnover of personnel and premature retirements

Part III – Impact of Critical Incident Stress on Emergency Services Personnel: The Rationale for Crisis Intervention

There are many negative effects of traumatic stress which can be mitigated by appropriate early supportive intervention. Post-traumatic Stress Disorder (PTSD) is the most serious of numerous psychological conditions that can develop after a traumatic stress exposure. Others include Critical Incident Stress reactions, Acute Stress Disorder, panic attacks, depression, anxiety and loss of self confidence. So, PTSD should not be our sole reason for providing crisis intervention services. However, it is such an important and powerful end result of severe stress that some attention should be paid to it here.

Post Traumatic Stress Disorder (PTSD) "arises as a…response to a stressful event or situation …of an exceptional threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone (e.g. natural or man-made disaster, combat, serious accident, witnessing the violent death of others, or being the victim of torture, terrorism, rape, or other crime)." (WHO, 1992, p.148). In some cases there may be an "Enduring personality change" after exposure to a catastrophic stress (WHO, 1992, p. 209). PTSD

may precede this character change and it causes significant disruption in societal and occupational functioning (Everly and Lating, 2004).

"Overall, among those exposed to extreme trauma, about 9 percent ultimately develop Post-traumatic stress disorder." (U.S. DHHS, 1999, p.237). Others suggest the percentage is higher (Yehuda, 1999). The lifetime prevalence of PTSD ranges between 1.3% (Davidson, Hughes, and Blazer, 1991) and 8% (American Psychiatric Association, 1994).

Emergency personnel may not fare as well as the general population:

- The career prevalence of PTSD in a major urban fire department was estimated to be in excess of 16% (Corneil, 1993).

- Urban fire fighters had a range of traumatic exposures between 85% and 91% and their PTSD rate in the course of a career was between 15% and 31% (Beaton, Murphy, and Corneil, 1996).

- A random sample of Kuwaiti firefighters indicated a PTSD rate of approximately 18%. (Al-Naser and Everly, 1999).

- A random sample of 40 ambulance personnel from the London Ambulance Service was tested. 60% had high levels of stress and 17% were classified in the severe category (Thompson and Suzuki, 1991).

- Ravenscroft (1994) studied 1,420 EMS personnel in the London Ambulance Service. 15% of front line staff crossed the threshold for the diagnosis of PTSD.

- Robinson (1994) studied 1,380 ambulance personnel in Victoria, Australia. 65% of the officers reported that they were currently experiencing stress reactions to previous traumatic events. 17% reported pervasive, strong stress reactions quite similar to the symptoms of PTSD.

- A sample of suburban police officers demonstrated a 13% PTSD rate. (H. Robinson, Sigman, and Wilson, 1997).

- Suicide rates among law enforcement personnel may be 3 times greater than the national average and have been associated with the stress of dealing with other people's traumatic events (Newsweek, September 26, 1994).

- Symptoms of distress in emergency personnel are positively correlated with exposure to traumatic stressors in a dose-response relationship (Wee, Mills, and Koelher, 1999; Weiss, Marmar, Metzler and Ronfeldt, 1995).

- These points argue compellingly for intervention efforts to alleviate distress among emergency personnel and others (Duffy, 1979; Kentsmith, 1980; Butcher, 1980).

- There is a strong argument for providing acute Psychological First-Aid as early as is practical following a traumatic event (Bisson, McFarlane and Rose, 2000).

References for Part III:

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American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders*. (4th ed). Washington, DC: American Psychiatric Association.

Beaton, R., Murphy, S. and Corneil, W. (1996). *Prevalence of posttraumatic disorder symptomatology in professional urban fire fighters in two countries.* Paper presented to the International Congress of Occupational Health, Stockholm, Sweden.

Bisson, J., McFarlane, A., Rose, S. (2000). Psychological debriefing. In E. Foa, A. McFarlane and M. Friedman (Eds.) *Effective treatments for PTSD,* (pp. 39-59). New York: Guilford Press.

Butcher, J. (1980). The role of crisis intervention in an airport disaster plan. *Aviation, Space and Environmental Medicine,* 51, 1260-1262.

Corneil, D.W. (1993). *Prevalence of post-traumatic stress disorders in a metropolitan fire department.* Unpublished doctoral dissertation. Baltimore, MD: Johns

Hopkins University.

Davidson, J.R.T., Hughes, D., and Blazer, D. (1991). Post-traumatic stress disorder in the community: An epidemiological study. *Psychological Medicine, 21, 713-721.*

Duffy, J. (1979). The role of CMHCs in airport disasters. *Technical Assistance Center Report*, 2(1), 7-9.

Everly, G.S., Jr. and Lating, J. M. (2004). *Personality-Guided Therapy for Posttraumatic Stress Disorder.* Washington, DC: American Psychological Association.

Kentsmith, D. (1980). Minimizing the psychological effects of a wartime disaster on an individual. *Aviation, Space and Environmental Medicine,* 51, 409-413.

Ravenscroft, T. (1994). *Going critical : GMB / Apex and T& G Unions 1994 survey of occupational stress factors in accident and emergency staff in the London ambulance service.* London: GMB /Apex and T&G Unions.

Robinson, R. (1994). *Follow-up study of health and stress in ambulance services, Victoria, Australia, Part I.* Melbourne, Australia: Victorian Ambulance Crisis Counseling Unit.

Robinson, H., Sigman, M., and Wilson, J. ((1997). Duty-related stressors and PTSD symptoms in suburban police officer. *Psychological Reports,* 81, 835-845.

Thompson, J. and Suzuki, I. (1991). Stress in ambulance workers. *Disaster Management,* 3(4), 193-197.

United States Department of Health and Human Services (1999). *Mental health: A report of the Surgeon General.* Rockville, MD: USDHHS.

Wee, D.F., Mills, D.M. and Koelher, G. (1999). The effects of Critical Incident Stress Debriefing on emergency medical services personnel following the Los Angeles civil disturbance. *International Journal of Emergency Mental Health,* 1, 33-38.

Weiss, D.S., Marmar, C., Metzler, T., and Ronfledt, H. (1995). Predicting symptomatic distress in emergency services personnel. *Journal of Consulting and Clinical Psychology,* 63, 361-368.

World Health Organization. (1992). *International classification of disease, mental and behavioral disorders* (10th) edition. Geneva, Switzerland: WHO.

Yehuda, R. (1999). Biological factors associated with susceptibility to posttraumatic stress disorder. *Canadian Journal of Psychiatry*, 44, 34-39.

Part IV – The International Critical Incident Stress Foundation's Role in Critical Incident Stress Management

The International Critical Incident Stress Foundation is a non profit, open membership foundation dedicated to *education in crisis intervention and stress management* and to the *reduction of disabling stress* especially in the emergency services professions. The Foundation coordinates the efforts of nearly 700 voluntary critical incident stress management teams in 28 countries. ICISF is the largest provider of crisis intervention and acute stress management education in the world. The Foundation, through its cadre of over 500 approved instructors, offers 30 different one or two-day courses to over 30,000 people a year around the globe.

Some facts for consideration:

*** Current ICISF membership: 6,213**
*** Number of teams currently registered with ICISF: 643**
*** Number of Mental Health Professionals serving on ICISF CISM teams: 5,888**
*** Average Number of Mental health professionals trained per year for the last five years: 5,000 (Total approximately 25,000 world wide)**

Part V – Why is There No Outcry from the Thousands of Mental Health Professionals Trained in CISM?

If there is a problem with the small group crisis intervention tool, CISD, it is reasonable to assume that appropriately trained clinicians would react strongly to it. Yet there is no outcry from the mental health community. Why?

Potential Reason for No Reaction	Comment
1. Clinicians do not know that the CISD tool is a problem	Not a reasonable explanation because there is simply too much brain power among the mental health professionals. About 10,000 of them have a Ph.D.
2. Mental health professionals are incapable of mounting a reaction to the CISD problem.	History does not support this contention. When an American Psychological Association publication published a study suggesting that incest victims are not seriously harmed, the outcry from mental health professionals was so vehement that the American Psychological Association was forced into writing several editorials that rejected the study as seriously flawed. Even the United States Congress threatened a rebuke if APA did not respond to the outcry.
3. Mental health professionals willingly engage in providing CISDs which they know to be harmful.	No mental health professional would function in such a manner because it would violate the ethical practices in their respective fields and their careers would be seriously threatened by the legal ramifications of such foolhardy behaviors.
4. Mental health professionals provide questionable services because they have some vested interest in the CISD.	Given the fact that most volunteer their time and often pay their own expenses for training such a reason makes no sense.
5. They have explored the CISM field and have not found that it is harmful or inaccurate.	The most logical and acceptable reason of all for no reaction to CISD.

Part VI – The Reasons Thousands of Mental Health Clinicians Involved in CISM Choose to Ignore the Negative Outcome Research on CISD

A. ***No evidence has been found that any of the <u>negative outcome</u> researchers have been trained in the field of CISM or the CISD small group crisis intervention tool. The list below demonstrates this lack of training. Note that the International Critical Incident Stress Foundation, the world's largest crisis intervention training organization, can find no records indicating that these individuals have taken any ICISF approved CISM training course at any time.***

Negative Outcome CISD Researchers

Name	Location	ICISF membership?	ICISF Training?
Adler, A.	UK	N	N
Alexander, J.	UK	N	N
Bannister, C.	UK	N	N
Bisson, Jonathan	UK	N	N
Bryant, Richard	Australia	N	N
Carlier, I.V. E.	Netherlands	N	N
Carr, V. J.	Australia	N	N
Carter, G. L.	Australia	N	N
Cotton, Peter	Australia	N	N
Devilly, Grant J	Australia	N	N
Donohue, L.	UK	N	N
Ehlers, A.	UK	N	N
Emmelkamp, P.M.G.	Netherlands	N	N
Gagnon, F.	Canada	N	N
Gersons, B.P.R.	Netherlands	N	N
Gray, M.	UK	N	N
Harrison, B.	UK	N	N
Harvey, A. G.	Australia	N	N
Hobbs, M.	UK	N	N
Hazell, R. L.	Australia	N	N
Hulsbosch, A. M.	Netherlands	N	N
Jenkins, P.	UK	N	N

Kamphuis, J.H.	**Netherlands**	**N**	**N**
Kenardy, Justin	**Australia**	**N**	**N**
Lamberts, R. D.	**Netherlands**	**N**	**N**
Lee, C.	**UK**	**N**	**N**
Lewin, T.	**Australia**	**N**	**N**
Lowe, J.P.	**Canada**	**Y**	**N**
Lumley, J.	**UK**	**N**	**N**
Lygo, V.	**UK**	**N**	**N**
Macnab, A. J.	**Canada**	**N**	**N**
Mayou, R.	**UK**	**N**	**N**
Mc Farlane, Alexander	**Australia**	**N**	**N**
McNally, Richard	**USA**	**N**	**N**
Potter, A.	**UK**	**N**	**N**
Rose, Susanna	**UK**	**N**	**N**
Russell, J.A.	**Canada**	**N**	**N**
Slade, P.	**UK**	**N**	**N**
Small, R.	**UK**	**N**	**N**
Van Emmerik, A.A. P.	**Netherlands**	**N**	**N**
Van Uchelen, A. J.	**Netherlands**	**N**	**N**
Voerman, A.E.	**Netherlands**	**N**	**N**
Waldenstrom, U.	**UK**	**N**	**N**
Webster, R. A.	**Australia**	**N**	**N**
Wessely, Simon	**UK**	**N**	**N**
Worlock, P.	**UK**	**N**	**N**

Please note: *zero percent (0%) trained*. In addition, records indicate that only one person on the list holds membership in the International Critical Incident Stress Foundation. That is only .02% of the people on the above list.

Now we will summarize the training records of the positive outcome researchers.

Positive Outcome CISD Researchers

Name	location	ICISF membership?	ICISF Training?	
Armstrong, Kevin	**USA (WA)**	**Y**	**Y**	**multiple courses**
Bohl, Nancy	**USA (CA)**	**Y**	**Y**	**multiple courses**
Boyle, Steve	**USA (MD)**	**Y**	**Y**	
Burns, Carolyn	**USA (IL)**	**Y**	**Y**	**multiple courses**
Busuttil, Walter	**UK**	**N**	**Y**	
Campfield, K.	**UK**	**N**	**N**	

Chemtob, Claude	**USA (HI)**	**N**	**Y**	**multiple courses**
Deahl, Martin	**UK**	**N**	**N**	
Dyregrov, Atle	**Norway**	**Y**	**Y**	**multiple courses**
Everly, George S.	**USA (MD)**	**Y**	**Y**	**multiple courses**
Eyler, Victoria	**USA (MD)**	**N**	**N**	
Flannery, Raymond	**USA (MA)**	**Y**	**Y**	**multiple courses**
Harm, I.	**USA (IL)**	**N**	**Y**	
Henry, Paul	**Australia**	**N**	**Y**	
Hills, A.	**UK**	**N**	**N**	
Hokanson, Mel	**USA (CA)**	**Y**	**Y**	**multiple courses**
Jenkins, Sharon	**USA (TX)**	**N**	**Y**	
Law, W.	**USA (HI)**	**N**	**N**	
Leeman-Conley, M.	**Australia**	**N**	**Y**	
Marmar, Charles	**USA (WA)**	**N**	**Y**	
Nurmi, Lasse	**Finland**	**Y**	**Y**	**multiple courses**
O'Callahan, W.	**USA (WA)**	**N**	**N**	
Ott, Karen	**Australia**	**Y**	**Y**	**multiple courses**
Richards, David	**UK**	**N**	**Y**	
Robinson, Robyn	**Australia**	**Y**	**Y**	**multiple courses**
Thomas, S.	**USA (HI)**	**N**	**Y**	
Turnbull, Gordon	**UK**	**N**	**Y**	**multiple courses**
Wee, David	**USA (CA)**	**Y**	**Y**	**multiple courses**
Yule, W.	**UK**	**N**	**Y**	

In stark contrast to the first list above of negative outcome researchers, *79.5% of the names of positive outcome researchers are found in the training records of the International Critical Incident Stress Foundation*. In addition, *38% of these people hold a membership in ICISF.* Training in crisis intervention concepts and applications is essential if appropriate research is to be performed.

B. Inappropriate target populations have been chosen by the researchers.

The Critical Incident Stress Debriefing was developed specifically for applications to homogenous groups after they have experienced the same traumatic event. Please note this quotation on the description of the "formal debriefing" in the original article on CISD.

- "…the facilitator…should have a fairly good background in group dynamics or group interactions." (p. 38)

- "A good working knowledge…of the operational procedures of the emergency services group are essential for the success of the debriefing." (p.38)
- "…group discussion of the incident" (p. 38)
- "Participants…."; "members"; "…group"; "…Groups…" (Mitchell, 1983, p. 38)

Yet in virtually every negative outcome study to date the original group design of the CISD process has been abandoned in favor of individual applications with:

- dog bite victims
- sexual assault victims
- road traffic accident victims
- women who have experienced a miscarriage
- women who have undergone Cesarean section
- burn victims

- None of these primary victims are members of homogeneous groups.
- The "Sine qua non" of good group work is homogeneous group.
- The mission or situation must be complete or at least moved beyond the acute, threatening or overwhelming stages (primary victims are in acute, threatening or overwhelming stages).
- The group members should have had roughly the same exposure to the traumatic event.

C. Inappropriate interventions were provided under circumstances for which the CISD group process was never intended.

The current negative research and the inflammatory negative media regarding early intervention in general is proof that the basic goals of crisis intervention, CISM and CISD have not been understood. Elizabeth Capewell (2002) from the Centre for Crisis Management and Education in the United Kingdom says it quite well.

> "The effect of debriefing on people cannot be tested and measured as if it were a pill. However, a study of the

research shows that it often is. The impact is only judged in terms of measurable symptoms and whether these are reduced as a result of one brief 'debriefing' session i.e., debriefing is being viewed as a treatment of an individual's symptoms – a purpose for which it was not designed. A further study of the research shows that the 'debriefing' being given deviates a long way from the original criteria for its use and its protocol. The research often tests 'debriefing' on direct victims of trauma. These victims may be physically injured and medicated. They may be debriefed within hours of arriving in hospital soon after their traumatic incident. Rather than a carefully assessed group session individuals are subjected to an intense 1:1 session of detailed recall of their incident, catharsis and education conducted by people with very little training in debriefing (in one case, medical students). Such research cannot be said to be testing Mitchell's CISD model but rather the debriefing method designed by the researcher for inappropriate people in situations unsuitable for CISD." [Elizabeth Capewell, (2002). Reclaiming Process in Crisis Intervention: A review of Critical Incident Stress Debriefing (CISD).]

The negative outcome studies used the term "debriefing" to refer to an amalgam of interventions, but reflected primarily one-on-one counseling with medical patients. Such an application is in no way reflective of, or similar to, the clinical standard group crisis intervention (CISD). The table below summarizes some of the differences:

Negative Outcome Studies	**Standard CISD applications**
- **One-on one** individual contacts	- homogeneous **groups**
- **Primary victims** such as dog bites, auto accident victims, rape victims, industrial accident victims	- **Secondary homogenous groups** such as emergency personnel, hospital staff, and employees
- 5 minutes up to one hour **(ave. 41 min**.)	- **one to three hours**
- **situation ongoing** or slowly resolving	- **situation complete** or resolved
- **different levels of exposure to various events**	- **roughly same exposure to the same event**

- exposure here is personal	- another person's trauma
- situations that produce **profound life alterations for the victims**	- someone else's traumatic events that are **distressing to work with** but which usually have little life altering effect on the workers
- **Poorly defined intervention**	- **Clearly defined protocols and procedures**
- **Inadequately trained single provider**	- **Well trained team** with a mental health professional
- **No planned follow-up**	- **follow-up required**
- **No integrated strategy**	- within a comprehensive, systematic and multi-component approach to managing traumatic stress within an organization (**clear strategy**)
- Goals appear to be the **complete elimination of PTSD symptoms** or to cure PTSD or to treat depression or to treat other disorders (all unrealistic)	- Goals are to (1) **mitigate impact**; **(**2)**Enhance normal recovery** of normal people having normal reactions to abnormal events; (3) **assess** those who may need additional assistance and **assure appropriate referrals.**

D. The negative outcome researchers have engaged in a mixing and blending of terms to a point that it is difficult to tell what was done to who and by whom.

- A portion of this confusing of terms has been caused by the wording in the original article on CISD {Mitchell, J.T. (1983). When disaster strikes…The critical incident stress debriefing process. *Journal of Emergency Medical Services,* 8(1), 36-39.} That article represents the very first article in the CISM field ever written. It represents new thinking at the time, new concepts, and new terminology. An error occurred in the terminology in that CISD represented both the umbrella program as well as a specific small group technique. This

error was quickly corrected as the field developed and the term "formal CISD" as described in that first article was dropped. From then on, the term "Critical Incident Stress Debriefing" was used for a specific seven phase small group crisis intervention process. The umbrella term which implies a comprehensive, sytematic, integrated and multi-component program became "Critical Incident Stress Management". (LifeNet vol.1, no.1, Spring 1990, pp. 1, 2).

- The correction in terminology was made many times in peer reviewed and non peer reviewed journals and in the ICISF presentations at conferences and in ICISF publications."…in the earlier expositions, the term CISD was used to denote the generic and overarching umbrella program / system, while the term "formal CISD" was used to denote the specific 7-phase group discussion process. The term CISM was later used to replace the generic CISD and serve as the overarching umbrella program / system…" (Everly, G.S., Jr. and Mitchell, J.T. (1997). *Critical Incident Stress Management: Assisting Individuals in Crisis, A Workbook.* Ellicott City, MD: International Critical Incident Stress Foundation.)

- "In a direct effort to undo the confusion created by the dual usage of the term CISD and, more importantly, by the inferred, but erroneous, tacit endorsement of CISD (the small group discussion) as a standalone crisis intervention, the use of the term Critical Incident Stress Debriefing as the label for the cumulative strategic crisis intervention system was abandoned in favor of the term Critical Incident Stress Management." (Everly, G.S. Jr., Flannery, R. B., Eyler, V., Mitchell, J.T. (2001). Sufficiency analysis of an integrated multicomponent approach to crisis intervention: Critical Incident Stress Management. *Advances in Mind-Body Medicine,* 17(3), 174-183).

- Keep in mind that the "Formal CISD," now known only as "Critical Incident Stress Debriefing" was never developed for use with individuals. It was from the inception of the concept a small group process. Different intervention techniques are utilized with individuals.

- The following quotes from the original description of the formal CISD confirm that it was intended for group use. The quotes appeared earlier in this paper and they are repeated here because of their importance.
- "…the facilitator…should have a fairly good background in group dynamics or group interactions." (p. 38)
- "A good working knowledge…of the operational procedures of the emergency services group are essential for the success of the debriefing." (p.38)
- "…group discussion of the incident" (p. 38)
- "Participants…."; "members"; "…group"; "…Groups…" (Mitchell, 1983, p. 38)

Although the current negative literature is replete with examples of blending and mixing terms (e.g. CISD and CISM; crisis intervention and counseling, psychotherapy or treatment) only one example will be used here to illustrate this problem.

Van Emmerik, A.A.P., Kamphuis, J.H., Hulsbosch, A.M., Emmelkamp, P.M.G. (2002) Single session debriefing after psychological trauma: a meta-analysis. *Lancet*, 360, 766-771.

About the study:

- The authors confuse crisis intervention with psychotherapy. They are not the same.
- The terms "counseling," "psychotherapy" and "crisis intervention" in the article are used as if they were synonymous.
- The authors mistakenly claim that single session debriefings are the standard of practice in the field. They are not the standard and never have been.
- The authors blend into their meta-analysis counseling or therapy sessions, individual consultations, group processes that are clearly not CISDs and interventions that are not even crisis intervention contacts. There are in this study things that the authors call "CISD" but instead they are group processes that violate the standard procedures in the field. There are even "debriefings" that are described by the authors as not being CISDs. The authors then proceed to describe all of these different types of interventions as if they were CISDs. They put everything under one label, "CISD."
- *The most fatal flaw in the study is that the interventions assessed are not all the same thing.* If you are measuring different things within a study that erroneously claims that they are all the same then you cannot draw any legitimate conclusions. Measuring the exact same thing is <u>THE STANDARD</u> of all meta-analyses. (see the Mullen citation in the "E" section below).

- Each of the studies in the meta-analysis is an older study which has already been review and critiqued. They are repeated in this analysis. There are no new studies in the *Lancet* meta-analysis. Each of the studies is seriously flawed. Putting them all in a new wrapping does not improve the quality of the studies. They were gravely flawed when they were first written and they remain so now.
- The authors even state that they are unable to draw any conclusions regarding group interventions because they only studied debriefings involving individuals.

E. Major Flaws Exist in All of the Negative Outcome Studies

1) Bisson, J.I., Jenkins, P., Alexander, J., and Bannister, C. (1997). Randomized Controlled trial of psychological debriefings for victims of acute burn trauma. *British Journal of Psychiatry,* 171, 78-81.

About the study:

- Individual debriefing substituted for the group process. Individual and group interventions are not the same. One cannot generalize from individual interventions to group interventions or vice versa.
- Despite its randomization efforts the study groups turned out not to be equal to each other. *Parity of the study groups was not achieved by randomization.*
- The burned individuals receiving the "debriefing" had more serious burns, longer hospital stays and greater financial difficulties than the individuals not receiving the debriefing. All those issues are predictors of negative outcomes.
- The debriefing was given to individual burn patients in a hospital, frequently while they were in pain and on medications. It should be noted once again that the specific seven step group process of CISD was designed for teams of emergency workers, hospital employees and members of homogeneous groups who have experienced a traumatic event. It was never designed to be utilized on single severely injured primary victims.
- The debriefings were stand-alone ("one off") interventions <u>not</u> part of a comprehensive program. CISM requires that a debriefing be part of a package of interventions which includes at least follow-up.
- The debriefings were applied by apparently inadequately trained personnel.
- The debriefing was much shorter than standard debriefings (43 min. on average).
- The debriefing sessions did not adhere to standards of practice in the CISM field.
- The debriefings were misapplied to inappropriate individuals. They were used on people for whom they were never intended.
- The interventions were provided under inappropriate condition such as in the patient's room within a burn center.

2) Carlier, I.V. E.., Voerman, A.E., and Gersons, B.P.R. (2000) The influence of occupational debriefing on post-traumatic stress symptomatology in traumatized police officers. *British Journal of Medical Psychology,*73, 87-98.

About the study:

- Individual interventions, not group debriefings. When you use a model designed for group on individuals, you change the nature of the intervention (Dyregrov, 1998).
- Some of these "debriefings" were as short as 5 minutes in length.
- These "debriefings" do not correspond to the standards of practice for CISD.

3) Conlon, L., Fahy, T.J., and Conroy, R. (1999). PTSD in ambulant RTA victims: A randomized controlled trial of debriefing. *Journal of Psychosomatic Research,* 46, 37-44.

About the study:

- Individual interventions instead of group
- Motor vehicle accident victims 16 to 65 years of age
- Had very low scores on first contact (not within the range of clinical concern)
- Single person, single intervention
- "debriefing" lasted 30 minutes only.
- CISD individuals reported higher initial symptoms than controls (more intense injuries and more distressed).

4) Dolan, L. Bowyer, D, Freeman, C. and Little, K. Critical Incident Stress Debriefing after Trauma: Is it effective? (Unpublished study)

About the study

- Hospital emergency department patients
- Those presenting with life-threatening or near life threatening experiences including road traffic accidents, house fires, industrial accidents
- Wide battery of tests to assess stress, general health symptoms and PTSD
- One-on-one interventions. Not measuring the same thing as group.

5) Hobbs, M., Mayou, R., Harrison, B and Worlock, P. (1996). A randomized controlled trial of psychological debriefings of road traffic accidents. *British Medical Journal,* 313, 1438-1439.

About the study:

- Individual debriefing was substituted for the standard group process.
- The authors attempted to randomize the study participants into debriefed and non-debriefed categories. Equality of category was not established. The "debriefed" people had sustained more serious injuries than those who did not receive a "debriefing."
- The debriefings were stand alone and not part of a comprehensive program.
- The investigators and providers may not have been adequately trained.
- The results on the post test (15.97) were not significantly different than those on the pre-test (15.13) nor were they clinically meaningful. *There was no statistically significant difference between those scores.* As a matter of fact the

scores did not even approach the level of clinical concern in either case. A score of 26 would be required before it was considered clinically meaningful.

- The authors then conclude that the debriefing process is harmful. This conclusion defies reason. In summary, individuals who are not equal in the intensity of injuries sustained are compared by using non-standard interventions. Their scores are lower than those that would be clinically meaningful and their pre and post test scores are not statistically significant. Yet the authors conclude that the debriefing, rather than some other causative factors such as more severe injuries, is the culprit.
- It should be noted, however, that the authors did not study the specific group intervention CISD. No generalization beyond the procedures addressed in the study can be made. Any conclusion that suggests that the specific group CISD process is harmful would entail a quantum leap beyond the available data.

6) Kenardy, J.A., Webster, R.A., Lewin, T.J., Carr, V.J., Hazell, P.L. and Carter, G.L. (1996). Stress Debriefing and patterns of recovery following a natural disaster. *Journal of Traumatic Stress*, 9, 37-49.

About the study:

- Study started after more than one year had passed
- No baseline data was available
- Huge maturation effect (other things could have happened to study subjects during that time)
- Individuals who were not part of homogeneous groups were assessed.
- A year later, people were asked if they had a debriefing. No way to verify.
- "Debriefing" process not defined in any way. "We were not able to influence the availability or nature of the debriefing…" (p.39).
- "…there were no controls over the debriefing processes" (p.47)
- The authors imply that there were several types of "debriefings" utilized
- Authors assumed that a "debriefing" had actually occurred. "It was assumed that all subjects in this study who reported having been debriefed did in fact receive posttrauma debriefing. However, there was no standardization of debriefing services…" (p.47). There was no proof that participants were actually debriefed.
- Failure to insure the standardization and reliability of the independent variable (debriefing) renders the results unintelligible and incapable of being generalized.

7) Lavender, T. Walkinshaw, S.A. (1998). Can Midwives Reduce Postpartum Psychological Morbidity? A randomized trial. *Birth*, 25 (4): 215-219.

About the study:

- Mid-wives assisting child birth mothers provided individual contacts.
- High proportion of single mothers in the study (68 were single compared to 43 married). That fact could contribute to some of the post partum stress effects.
- Heterogeneous sample not homogeneous
- High level of psycho morbidity in the controls

- Individual and group interventions are different. This fact cannot be ignored.
- Study designed to reduce the "the onset of depression rather than PTSD".
- Debriefings are not designed to reduce post partum depression in primary victims.

8) Lee, C., Slade, P., and Lygo, V (1996). The influence of psychological debriefing on emotional adaptation in women following early miscarriage. *British Journal of Psychiatry,* 69, 47-58.

About the study:

- No group debriefing was provided. The "debriefing" was of an individual nature. The individual interventions differ substantially from the group interventions. To argue that individual interventions are the same as group interventions defies the experience of clinical practice and the expertise of experts in the field (Yalom, I. (1970) *The Theory and Practice of Group Psychotherapy.* New York: Basic Books).
- Women who had suffered a miscarriage were studied.
- Investigators and providers were not adequately trained to utilize the model.
- Authors conclude that debriefing is ineffective as a treatment for the symptoms of depression. Since debriefing is not a treatment, this should be of no surprise.
- The originator of the CISD model (Mitchell, 1983) never suggested that it would be a treatment for clinical depression or any other psychiatric disorder.
- The utilization of debriefing as a treatment for any significant psychological disturbance is inappropriate since it is crisis intervention and not psychotherapy.
- The people who received the "debriefing" should have been given therapy.
- The "debriefing" in this study was used by untrained people for an unintended purpose in inappropriate circumstances and for a population for whom it was not designed (individual patients in a hospital who were upset and depressed after a terrible personal loss and while some of them were medicated).

9) Mayou, R.A., Ehlers, A. and Hobbs, M. (2000). Psychological debriefing for road Traffic accident victims: Three-year follow up of a randomized controlled trial. *British Journal of Psychiatry,* 176, 589-593.

About the study:

- This study was simply a 3-year follow-up of Hobbs, et al., (1996{see above}) thus it suffers from the same methodological flaws.
- Individuals, not groups, were given interventions.
- Those who received "debriefing" remained symptomatic and in fact worsened. This is certainly a predictable result when *they started off three years earlier with more serious injuries*. More serious injury is a predictor of negative outcome far more than receiving a debriefing.

10) McFarlane, A.C. (1988). The longitudinal course of posttraumatic morbidity. *Journal of Nervous and Mental Disease,* 176, 30-39.

About the study:

- Victims of major bush fires in Australia
- 23% were injured and most lost property
- Unspecified, non-standardized "debriefings"
- In fact, neither Mitchell's CISD, nor Dyregrov's PD, had been taught to frontline rescuers at the time of either of these studies (R. Robinson, 2002, personal communication. Dr. Robinson is the Director of the Victorian Ambulance Service Counseling Service in Melbourne, Australia and the President of the Critical Incident Stress Management Foundation of Australia).
- Short term positive effect
- Long term effect called into question as pre-existing neuroticism interacted with "debriefing"
- Self selection bias in the study
- PTSD was best predicted by pre-morbid, non-event related factors, such as family history of psychiatric disorders, concurrent avoidance and high levels of neuroticism and a tendency not to confront conflicts.
- The delayed PTSD group had higher pre-morbid neuroticism scores, greater property losses, and chose to attend the undefined "debriefings".
- The only time the negative effect of a non specific "debriefing" showed up was when the person had higher pre-morbid neuroticism scores.
- It was impossible to determine any influence of the "debriefing" because of the pre-existing psychopathology in the study participants.
- The delayed onset posttraumatic stress group not only had higher pre-morbid neuroticism scores, and greater property loss, but also attended the undefined debriefings. These factors were causally and inextricably intertwined.
- It is inappropriate to draw conclusion from this study since CISD was never studied.

11) Rose, S. and Bisson, J. (1998). Brief early psychological interventions following trauma: A systematic review of literature. *Journal of Traumatic Stress*, 11, 697-710.

About the study:

- For a "systematic" review of the literature there is a surprising dearth of citations of positive outcome studies and a preponderance of negative outcome studies.
- A review of the literature that does not at least engage in a reasonable review of the available positive outcome studies is academically bankrupt.

12) Rose, S., Berwin, C.R., Andrews, B. and Kirk, M. (1999). A randomized controlled trial of individual psychological debriefing for victims of violent crime. *Psychological Medicine,* 29, 793-799.

About the study:

- Study done on physically and sexually assaulted victims.

- Individual interventions. Violates standard application of CISD.
- Not part of a comprehensive systematic approach.
- Out of 2,161 victims identified by police or the emergency department only 157 (7%) agreed to participate.
- Services were provided 21 days after the attack (This is quite late in CISD terms).
- Obviously much more going on with sexual assault victims than a CISD could be expected to handle. Evidence of intense disturbance can be seen in the fact that only 11% of those who participated (only 7% of the total number of victims) agreed to follow up evaluation.
- Most evaluation contacts made by phone, mail or home visits. Not group CISD.
- Misapplication of the CISD procedure in inappropriate circumstances to an inappropriate population by untrained personnel. It was not CISD.
- This is bad clinical practice, not CISD.

13) Rose, S., Bisson, J., & Wessely, S. (2002). Psychological debriefing for preventing post traumatic stress disorder (PTSD). *The Cochrane Library*, Issue 1. Oxford, UK: Update Software.

About the study:

- The latest review of single session debriefings recommends that they be stopped.
- ICISF could not agree more.
- Single session debriefings (one-on-ones with primary victims who receive a one shot contact with no follow-up and no other services) are a very bad practice.
- ICISF and other crisis providers do not recommend single session debriefings.
- **Note: Most important conclusion:** The authors of the most recent Cochrane Review of psychological debriefing have concluded, "We are unable to comment on the use of group debriefing, nor the use of debriefing after mass traumas" (p.10).

14) Small, R., Lumley, J., Donohue, L., Potter, A. and Waldenstrom, U. (2000). Randomized controlled trial of midwife led debriefing to reduce maternal depression after operative childbirth. *British Medical Journal,* 321, 1043-1047.

About the study:

- 463 women subjected to Caesarean, forceps or vacuum delivery.
- Abandoned the standard group debriefing model for individual debriefing.
- Apparently inadequately trained midwives provided the "debriefing".
- No baseline measures
- "Debriefing" not clearly described other than a one-on-one discussion with the mid wife.
- "Debriefing" took place while women were in hospital recovering from the obstetrical surgery (often in pain and on medications).
- Assessment took place 6 months later.
- No clear description of protocols for the "debriefing" process.

- The intervention was found to be ineffective as a treatment for symptoms of depression. (It was never designed as a treatment for depression)
- Of interest is the fact that 94% of the women (437 out of 463) reported the "debriefing" was either "helpful" or "very helpful".

15) (Stevens and Adshead) Hobbs G., Adshead, G. (1997). Preventive psychological intervention for road crash victims. In M. Mitchell (Ed.) *The Aftermath of Road Accidents: Psychological, Social and Legal Perspectives,* 159-171. London, UK: Routledge

About the study:

- Auto accident victims
- Dog bite victims
- Assault victims
- One-on-one intervention with primary victims, not with homogenous groups
- Non specific "debriefing" of individuals

16) Van Emmerik, A.A.P., Kamphuis, J.H., Hulsbosch, A.M., Emmelkamp, P.M.G. (2002) Single session debriefing after psychological trauma: a meta-analysis. *Lancet,* 360, 766-771.

About the study:

- The authors confuse crisis intervention with psychotherapy.
- The terms "counseling," "psychotherapy" and "crisis intervention" in the article are used as if they were synonymous.
- The authors mistakenly claim that single session debriefings are the standard of practice in the field. They are not the standard and never have been.
- The authors blend into their meta-analysis counseling or therapy sessions, individual consultations, group processes that are clearly not CISDs and interventions that are not even crisis intervention contacts. There are in the study things that the authors call "CISD" but instead they are group processes that violate the standard procedures in the field. There are even "debriefings" that are described by the authors as not being CISDs. The authors then proceed to describe all of these different types of interventions as if they were CISDs.
- *The most fatal flaw in the study is that the interventions assessed are not all the same thing.* If you are measuring different things within a study that erroneously claims that they are all the same then you cannot draw any legitimate conclusions. Sameness of intervention is <u>THE STANDARD</u> of all meta-analyses.
- Each of the studies in the meta-analysis is an older study which has already been review and critiqued. There are no new studies in the *Lancet* meta-analysis. Each study is seriously flawed. Putting them all in a new wrapping does not improve the quality of the studies. They were gravely flawed when they were first written and they remain so now.
- The authors even state that they are unable to draw any conclusions regarding group interventions.

17) Wessely, S., Rose, S., & Bisson, J. (1998). A systematic review of brief psychological interventions (debriefing) for the treatment of immediate trauma related symptoms and the prevention of post traumatic stress disorder (Cochrane Review). *Cochrane Library*, Issue 3, Oxford, UK: Update Software.

About the study:

- This study is frequently referred to as the "Cochrane Report" or "Cochrane Review" and it is the basis of much of the negative reactions in the literature.
- The Cochrane Review is supposed to be completely independent. Yet two of its authors were primary investigators on two negative studies contained within the report. Independence is therefore compromised.
- The term "debriefing" is used very inconsistently in the 11 studies which make up the report (They are reviewed elsewhere in this section.) The different studies are not measuring the same things as noted earlier in this section.
- The "debriefings" described in each of the studies in the report in no way resemble the Critical Incident Stress Debriefing process as it is taught and practiced in the USA and other countries following the ICISF guidelines.
- The studies in the review were focused on individual patients in hospitals, in pain and often on medication. There were no applications with groups. The CISD was designed for groups of operations personnel or an organization's staff. The use of "debriefing" on heterogeneous individuals instead of homogenous groups is a clear violation of the standards of practice. This is especially so when the target populations are in the acute stages of medical distress.
- The interventions studied are one shot singular interventions. Stand alone or "one off" interventions violate the standards of practice of CISM. All debriefings should have at least follow-up contacts.
- Each of the studies in the review had serious methodological deficiencies
- *NOTE*: "We are unable to comment on the use of group debriefing, nor the use of debriefing after mass traumas."(p.14). The report draws no conclusions about group interventions. The studies are only exploring individual interventions. Yet, many who have read or quoted this report have generalized negative results from individual interventions to group interventions. There is no data to suggest that the interventions are the same and generalizations to other types of debriefings cannot be made.
- The studies in the review violated the standards of practice for CISM. The investigators were never trained in the model.
- These facts suggest a lack of independent review.
- NOTE: See article by Olsen, (2001) for more information on Cochrane reviews. Olsen's Citation and a description of the study can be found below.

Points for Consideration Regarding the Research

1. Mullen, B. (1989). ***Advanced BASIC meta-Analysis.*** **Hilldale, NJ: Earlbaum.**
Key points and findings:

- Details combinatorial statistical procedures
- Meta-analysis represents a procedure wherein the researcher aggregates the data generated from similar dependent variables (measures of stress symptoms) compiled from research studies which purport to use the ***same*** independent variable (e.g. group CISD).
- Mullen strongly emphasizes the extreme importance of making sure that the independent variable (what you are doing to the subjects in a study) is the **same** thing or the analysis will be invalid.
- The goal of reducing the chance of systematic error derived from set, setting, and selection biases is reduced in that the likelihood that several independent researchers using independent samples drawn from varying populations all perpetuated the same systematic experimental error is extremely unlikely.
- If you are not measuring the ***same*** procedure no legitimate conclusions can be drawn from the research.
- In order to maintain the scientific integrity of qualitative as well as statistical reviews, the operational fidelity and standardized replicability of the independent variable (intervention) must be assured. It is the sine qua non of meaningful analysis.

2. Olsen, O., Middleton, P., Ezzo, J., Gotzsche, P.C., Hadhazy, V., Herxheimer, A., Klwijnen, J., and McIntosh, H. (2001). Quality Of Cochrane reviews: Assessment of sample from 1998. ***British Medical Journal.*** **323: 829-832**
Key points and findings:

- Assessment of the quality of Cochrane reviews
- Ten methodologists independently examined the quality of a sample of Cochrane Reviews published in 1998. (Coincidently, the first Cochrane report on debriefings came out in 1998.) Random assignment of the reviews was made to the evaluators.
- Two reviewers on each report. If one picked up on a problem the report was more thoroughly evaluated.
- 53 studies were reviewed.
- Major overlapping problems were identified in 15 of the reviews (29%)
- The major problem for 9 of the studies (17%) was that the evidence did not fully support the conclusions drawn.
- In 12 (23%) of the reviews the conduct of the review or the reporting of the findings was unsatisfactory.
- Stylistic problems were identified in 12 (23%) of the reviews.

- The problematic conclusions all gave too favorable a picture of the experimental intervention.
- Users of the Cochrane reviews "should interpret the reviews cautiously…." (p.830).
- "Errors occur, and potential biases may emerge…[and] some Cochrane reviews have need of correction and improvement." (p.830).

3. "In all the controversy, criticism and research debate…certain constants are emerging. The most effective methods for mitigating the effects of exposure to trauma…, those which will help keep our people healthy and in service, are those which use early intervention, are multi-modal and multi-component…and these components are used at the appropriate time with the right target group."
Dr. Hayden Duggan, International Association of Fire Chief's ICHIEFS on line resource, 09/01/02

4. **There Has Never Been a Study That Indicates That Harm Has been Done By Any CISM Service If The Following Two Conditions Are Present:**

- **Personnel have been properly trained in CISM**
- **Providers are adhering to well published and internationally accepted standards of CISM practice**

5. "It is recommended that the use of PD [psychological debriefing] is restricted to its original area of application (i.e. groups of professionals), and in accordance with original descriptions, since a preventive effect has been found only when used in this way." (p.434).
"No evidence has been found for the effectiveness of PD as an individual treatment of direct victims." (p. 434).
"Comparisons of studies adhering to and diverging from the original description of PD revealed that the effect obtained seems to depend on deviations from the traditionally defined features." (p.433)
"The fact that deviations influence the results obtained is significant, and a strong argument for a return to the use of PD in accordance with the original defining features." (p.434).

Arendt, M. and Elklit, A. (2001). Effectiveness of Psychological Debriefing. *Acta Psychiatrica Scandanavia, 104: 423-437*

6. “We are unable to comment on the use of group debriefing , nor the use of debriefing after mass traumas.” (Cochrane Review, 2001)

7. “…The evidence that debriefing may lead to less subsequent alcohol abuse suggests that coping styles may be enhanced by this early intervention.” (Litz et al. *Clinical Psych. 2002)*

8. Bisson, McFarlane and Rose recently critiqued their own opposition to “psychological debriefings” They concluded that their own research had a bias toward individual “debriefings” They stated that their own research on debriefing as well as that of others may have not followed standard debriefing practices

9. Bisson, McFarlane and Rose went on to say: “…There are also many potentially important factors that have not been adequately systematically evaluated in the studies to date including time between the trauma and the PD, nature of the trauma, facilitator experience / quality and nature of the PD. To focus solely on the later reduction of PTSD and other psychological symptoms is probably too simplistic an approach to take to determine whether or not PD is beneficial as an early intervention. It would therefore be premature at present to conclude that PD should be discontinued as a possible intervention following trauma. While there is not evidence to support the preventive value of debriefing delivered in a single session there is strong argument for providing acute psychological first aid and forming a treatment alliance as early as practical following a traumatic event.” (position paper ISTSS PTSD Treatment Guidelines Committee, 2000).

10. British Department of Health (2001) has “acknowledged concerns over the validity of the Cochrane report” {Department of Health. *Treatment Choice in Psychological Therapies and Counseling.* London, England: Crown, (p.24)}. The British Department of Health is particularly concerned that many of the studies of early intervention (debriefing) have not assured the quality nor the operational fidelity of the intervention.

11. Yule (2001) argues that the published reviews bear little resemblance to the intervention as they are actually practiced in the field. {Yule,

W. (2001), When disaster strikes – the need to be wise before the event: Early intervention strategies with traumatized children, adolescents and families. *Advances in Mind-Body Medicine*, 17, 191-196.}

F. Randomized Controlled Trials Are <u>Not</u> the Only Way to Measure Outcomes

Perhaps the words of Dr. Martin Deahl of St. Bartholomew's and Royal London School of Medicine and Dentistry and the University of London would be helpful here. These words were written as a reaction to the Cochrane Review in September, 2000.

> "Outcome research into the effectiveness of acute interventions such as debriefing raises important questions about the ethics as well as the status of conventional RCT methodology as the imprimatur of Evidence Based Medicine (EBM). RCTs have become the dominant paradigm of treatment outcome studies to the virtual exclusion of observational or case studies. CISD was designed for groups of emergency services workers following traumatic events. Conducting a methodologically rigorous RCT of group debriefing would be extremely difficult given that group trauma generally only occurs in unpredictable and often chaotic circumstances such as war or disaster. In emergency situations such as these the operational imperative is paramount and investigators must do the best they can with the available material under difficult and at times extremely fraught circumstances. Irrespective of whether or not debriefing reduces long-term morbidity many individuals find it subjectively helpful at the time. Under these circumstances can it therefore be ethically justifiable to employ "non-intervention" controls denying individuals short term support whatever the long term outcome? In conflict, following disaster or accident, naturalistic studies, often conducted opportunistically remain useful and have considerable heuristic value despite methodological shortcomings particularly relating to sample selection and randomization to different treatment conditions. Applying the stringent criteria demanded by the arbiters of EBM such as the Cochrane library to trials of preventive interventions means that much useful work might go unpublished. Clinicians might well lament that in attempting to satisfy such rigorous methodological criteria

> RCTs have become so divorced from clinical reality that their findings become meaningless…RCTs are not the sine qua non of EBM and debriefing studies which challenge their hegemony and lend credibility to observational studies have important implications for the ways in which the quality and value of research evidence is assessed both in social psychiatry and empirical science in general." (p.26)

See also: Bisson, J and Deahl, M.P. (1994). Psychological debriefing and preventing post traumatic stress. *British Journal of Psychiatry*, 1656: 717-720

Petticrew, M. (2001). Systematic reviews from astronomy to zoology: Myths and misconceptions. *British Medical Journal*, 322, 98-101.

Key points and findings:

- "There is a misconception that systematic reviews can only include RCT"

Seligman, M. (1995). The effectiveness of psychotherapy. *American Psychologist*, 29, (12), 965-974.

Key points and findings:

- "I no longer believe that efficacy studies are the only, or even the best, way of finding out what treatments actually work in the field. I have come to believe that the 'effectiveness' study of how patients fare under the actual conditions…in the field, can yield… 'empirical validation'." (1995, p. 966).
- "Random assignment…may turn out to be worse than useless for the investigation of the actual treatment of mental illness in the field" (1995, p. 974).

Seligman, M. (1996). Science as an ally of practice. *American Psychologist*, 51, 1072-1079.

Key points and findings:

- Argues cogently for the power of nonrandomized experimental and even survey research designs.
- Seligman believes that efficacy studies are simply the wrong method for field research because they omit too many of the crucial elements that characterize what is actually done in the field; for example, the level of competence of the interventionist, the real-time self correcting nature of the intervention, the complexity of the intervention and the nature of the precipitating stressors.
- Keep in mind that randomized designs do not eliminate selection or assignment error. They simply serve to diminish the likelihood of systematic error.
- Alternatives to randomized studies include measurement of the potential sources of systematic error, the use of large sample sizes drawn from diverse constituencies and properly designed meta-analytic approaches.

- Large scale, self report survey research has a low likelihood of possessing systematic error.
- Self report survey data may contribute in a meaningful manner to the issue of effectiveness of an intervention.
- "…efficacy studies are not necessary, sufficient or privileged over effectiveness studies in deciding whether treatment works." (p.1077)

Institute Of Medicine (1990), *Broadening the base of treatment for alcohol problems*. Washington, DC: National Academy Press.

Key points and findings:

- The Randomized Controlled Trial (RCT) does not guarantee that the outcome obtained will generalize to the real world.
- Quasi Experimental designs offer a sound alternative for studying the effects of an intervention.

Speer, D. and Newman, F. (1996). Mental Health Services outcome evaluation. *Clinical Psychology , Science and Practice,* 3, 105-129

Key points and findings:

- Non equivalent comparison group designs offer promise as reasonable proxies for randomized studies.

G. Inappropriate Outcome Measures Were Often Applied

Deahl, M.P., Srinivasan, M., Jones, N., Neblett, C, and Jolly, A. (2001). Evaluating psychological debriefing: Are we measuring the right outcomes? *Journal of Traumatic Stress,* 14, 527-529.

Key points and findings:

- Some researchers may be choosing the wrong dependent variables.
- They choose psychotherapy dependent variables instead of crisis intervention variables.
- Results are suspect when that occurs.
- British soldiers in Bosnia had significant reduction in alcohol abuse.
- Researchers recommended a broader range of outcome measures in future trials of debriefing.
- Sick leave, alcohol use, group morale, motivation to work and ability to function at work should be measured instead of PTSD symptoms.
- Authors express concern that the wrong dependent variables are being explored and that we should not be using dependent variables that are psychotherapy oriented when we are providing crisis intervention services. What you can expect

crisis intervention to achieve will be less than what one should expect that psychotherapy can achieve. Mixing those up means that faulty interpretations of findings are more likely. Caution in research design and methodology is urged.

H. The "Type-III" Error was Present in Every Case.

Most serious researchers are familiar with "Type I" errors in which the null hypothesis is rejected when it is true or the "Type II" errors in which the null hypothesis is accepted when it is false. {see Rosenthal, R. and Rosnow, R. (1991).*Essentials of Behavioral Research: Methods and Data Analysis (2nd Ed.)* New York:McGraw-Hill, Inc.}

Merzel and D'Afflitti (2003) suggest that there is a "Type III" error. They say, "…the modest results associated with community-based programs derive in part from a lack of specificity of the intervention's causal mechanisms, thereby limiting the capacity to apply the model accurately and leading to "Type III" errors – that is, the inability to detect effects owing to faulty model implementation." {Merzel, C. and D'Afflitti, J. (2003). Reconsidering Community-Based Health Promotion: Promise, performance, and potential. *American Journal of Public Health,* April 2003, 93(4), 557-574.}

One of the primary reasons mental health professionals who are trained in CISM are rejecting or ignoring the negative outcome studies is that, as they review them, they see clearly that those studies have misapplied the crisis interventions, particularly the small group CISD process. The conclusions of the negative outcome studies are therefore considered "Type III" errors. Well trained CISM mental health professionals have concluded that the negative outcome studies are not even remotely reflecting the actual applications of CISM procedures as they have been trained to use them.

Study	Population	Followed Standard Procedures?
Bisson et al.	Burn patients	**No**, 1:1, not homogeneous group
Carlier et al.	Police officers	**No**, 1:1, not homogeneous group
Conlon et al.	Motor vehicle accident victims	**No**, 1:1, not homogeneous group
Dolan et al.	Accident victims	**No**, 1:1, not homogeneous group

	House fire victims Industrial accidents victims	
Hobbs et al.	auto accident victims	**No**, 1:1, not homogeneous group
Kenardy et al.	Earthquake victims	**No**, Surveyed people one year later No controls of several "debriefing" processes, huge maturation effect Uncertain as to whether debriefings were actually provided
Lavender & Wilkenshaw	birth mothers	**No**, Untrained midwives provided 1:1 "debriefing" services to women after delivery to prevent post partum depression
Lee et al.	women who miscarried	**No**, 1:1 "debriefing" services to women who miscarried a baby
Mayou et al.	auto accident victims	**No**, 3 year follow up to Hobbs study On auto accident victims. Note: all those who received a 1:1 "debriefing" were more seriously injured than those who did not receive the 1:1 "debriefing" More serious injury is a far greater predictor of negative outcome and it cannot be logically concluded that the "debriefing" caused the negative outcome.
McFarlane	bush fire victims	**No**, standardized debriefings were not even available in that part of Australia in 1988. Confounding variables were involved in the study and legitimate conclusions are impossible.
Rose et al.	sexual assault victims	**No**, 1:1, not homogeneous group
Small et al.	birth mothers	**No**, 1:1, not homogeneous group Aimed at preventing post partum Depression
Stevens and & Adshead (Hobbs, & Adshead)	dog bite victims auto accident victims assault victims	**No**, 1:1, not homogeneous group

The Issue of Possible Harm from Critical Incident Stress Debriefings

The three Cochrane studies that are used to claim that debriefings are causing harm are among the worst methodologically (Bisson et al., 1997; Hobbs et al., 1996; and Mayou et al., 2000. See specific references in the negative outcomes articles section above). The Bisson study randomly assigned 110 burn patients to either a "debriefing" or a control status. The standard group debriefing was abandoned in favor of an *individual* adaptation. All of the debriefed individuals had more severe burns and spent more time in the hospital than the non debriefed individuals. Direct comparison was, therefore, inappropriate. The "debriefed" individuals had more severe traumatic stress scores at 13 months. The authors actually concede that the differences between the debriefed and the non debriefed individuals at pretest were "associated more strongly with poorer outcome as measured by the IES at 13 months than were [debriefing] status." (p.79).

The Hobbs, Mayou, Harrison and Worlock (1996) study consisted of a randomized trial of 106 auto accident victims. Fifty-four were given an *individual* "debriefing". Fifty-two were assigned to a non debriefed status. The individuals who were debriefed had more severe injuries and spent more time in the hospital than those who did not receive an individual "debriefing. Both factors predicted poorer psychological outcomes. The individuals receiving the "debriefings" had higher traumatic scores at follow-up. These data have been used to argue that debriefing is harmful. The actual traumatic stress scores were not in a clinical range (causing clinical concern) at any time. The overall change went from 15.13 (an average symptom's endorsement of "rarely") to 15.97 (levels that generate clinical concern begin at 26). The change in the numbers appears to have no clinical significance whatsoever.

The third study (Mayou, et al., 2000) was simply a 3 year follow-up of the Hobbs, et al. study. It therefore has the same methodological flaws. In all three studies the pre-intervention differences predicted negative outcome, rather than the "debriefing" intervention. Campbell and Stanley (1963), in their classic monograph on research design, point out that when randomization fails to attain equivalent groups pre-treatment, the experiment is no longer considered a true experimental design and may be flawed beyond meaningful interpretation. {Campbell, D. and Stanley, J. (1963)

Experimental and Quasi-experimental Designs for Research. Chicago, IL: Rand McNally.}

Before anyone jumps on the "let's leave all this to the mental health professionals and get our emergency personnel out of the crisis intervention business" band wagon, some consideration should be given to the following items.

1. Emergency personnel are highly reluctant to seek mental health services of any kind.
2. Research exists that peers can be even more successful in assisting one another than trained mental health professionals (for only one example see Breznitz, 1980, #1 in the case studies section of Part II.)
3. Organizations should not assume that all will be well if mental health professionals are providing therapy instead of a comprehensive crisis intervention system with linkages to appropriate professional care.
4. Smith, Glass and Miller (1980) performed a meta analysis of 400 psychotherapy outcome studies. Nine percent of the outcomes were negative after therapy. Shapiro and Shapiro (1982) looked at over 1800 effect sizes and concluded that 11% were negative and 30% were null. Mohr (1995) reviewed over 40 psychotherapy studies. All showed some deterioration as a result of psychotherapy. Lambert (2003) estimates that 5-10% of patients deteriorate during psychotherapy. An additional 15-25% show no measurable benefit. McNally, Bryant and Ehlers (2003) have data that shows that up to 29% of Cognitive Behavior Therapy (CBT) drop out of therapy at least in part due to the distress caused by the treatment. That is a particularly important finding in that CBT is being suggested by some mental health professionals as a possible alternative to crisis intervention.
5. Some therapies, such as Cognitive Behavior Therapy, are contraindicated with extreme anxiety and feelings of panic, marked dissociation, severe depression, suicidal risk, homicidal risk, anger, unresolved prior trauma, ongoing significant stressors and acute bereavement (Bryant and Harvey, 2000, pp. 145-146). Those very same reactions are those that are faced by crisis

interventionists on a regular basis. In fact, crisis intervention has been quite successful in calming these intense experiences.

6. Alternatives to crisis intervention such as CBT require that assistance be postponed for 4 to 6 weeks and that 8 to 12 psychotherapy sessions then be provided. This can be a remarkably expensive alternative in financial terms. There might be intensified and prolonged suffering for emergency personnel who are told to wait for 4 to 6 weeks when they only really need a little immediate help from some friends during a period of emotional turmoil.

Summary

Where should we go from this point? Potential harm should be acknowledged if CISM standards are not followed and if providers are not well trained. CISM teams should commit themselves to full participation in a comprehensive, systematic, integrated and multi-component program of crisis intervention. They should never engage in stand alone interventions. Teams should be carefully supervised and advised by CISM trained mental health professionals. Potential CISM Team members should be carefully assessed before acceptance. Mechanisms should be in place for the removal of personnel from a team who fail to adhere to acceptable standards of practice in the CISM field and who refuse to correct their mistakes.

More research is clearly indicated. But instead of trying to prove that something does or does not work, efforts should be made to more clearly understand what interventions should be implemented for which populations and at what times and by whom. Dependent variables should be appropriate to the intervention and not mixed up with treatment dependent variables. Research should focus on what factors make an intervention more likely to succeed. We should also learn what factors are likely to detract from an intervention's success. Once these factors are clarified, every effort should be made to train CISM team members to do the very best things that enhance the potential for successful interventions and reduce the chance of failure.