

PERCEIVED EFFECTIVENESS OF CRITICAL INCIDENT STRESS DEBRIEFING BY AUSTRALIAN NURSES

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Key words: clinical events, critical incidents, registered nurses, stress debriefing, sharing, understanding, procedure, group dynamics

ABSTRACT

This paper examines the perceived effectiveness of stress debriefing by a sample of 129 Australian hospital nurses and the relationship of their perceptions to demographic variables such as qualifications and work area. The survey generally showed debriefing as helpful, but lack of helpfulness was also recognised because of time taken from personal lives and adverse group processes. Factor analysis identified five scales; three helpful ('Understanding', 'Sharing', and 'Cohesion') and two, unhelpful ('Procedure' and 'Dynamics'). Results suggested that helpfulness of debriefing was unrelated to demographic differences. Although further research is required to replicate these findings, they suggest that replacing the current ad hoc forms of debriefing available at the hospital with a standardised model would overcome shortcomings identified by respondents.

INTRODUCTION

The earliest description of Critical Incident Stress Debriefing (CISD) in nursing literature appeared in 1988 when Jimmerson described a program modelled on Mitchell's (1983) prototype. This was seen as a turning point for emergency nurses because they could acknowledge the psychological impact of their work. According to Jimmerson, (1988, p.44A) the experience of CISD had eroded the view of the emergency nurses being 'unhurttable superbeings' and 'pillars of strength'.

In the following decade, the value of CISD in mitigating critical incident stress (CIS) experienced by nurses was recognised by the nursing profession (Cudmore 1998; Jefferson and Northway 1996; Wright and Casier 1996; Laws and Hawkins 1995; Appleton 1994; Martin 1993). Martin (1993, p.39) considered that implementation of Critical Incident Stress Management (CISM) programs in hospitals provided caregivers with a way of countering the insidious, cumulative effects of emotional trauma because 'medical/surgical nurses, oncology nurses, neonatal nurses - *all* nurses involved in traumatic events' could benefit from them. Following the categorisation of critical incidents experienced by the nurses in her study, Appleton (1994) suggested that debriefing could be useful in assisting nurses to cope with CIS and recommended the availability of peer support groups and counselling for all acute care agencies.

Laws and Hawkins (1995) argued that debriefing was essential but lamented the lack of wide recognition of CIS in Australian hospitals and the sparsity of CISD facilities for nurses. Lam et al (1999) also identified the urgent

need for support services such as debriefing and counselling. Jefferson and Northway (1996) reported that CIS was real for nurses, occurred regularly in hospitals, and the time for ignoring potential short and long term-effects of such stress for health care workers was long past. Wright and Casier (1996) proposed CISM as an effective, inexpensive and collaborative approach to mitigating the impact of traumatic events. Similarly, Cudmore (1998) considered developing a policy/protocol for instigating debriefing following critical incidents to circumvent potentially harmful effects of cumulative and critical incident stress for accident and emergency staff.

Despite adoption of CISM programs by the nursing profession throughout the 1990s, a few articles appeared in the literature reflecting doubts about the efficacy of debriefing (Macnab et al 2000; Northcott 1998; Hudson 1995). Northcott (1998, p.32), citing studies critical of debriefing (Bisson 1997; Brom et al 1993; McFarlane 1988), stated that the effectiveness of debriefing in reducing psychological stress and preventing Post Traumatic Stress Disorder (PTSD) was unconfirmed or possibly made no difference. She recommended treating any problems that occurred with prolonged therapy, claiming, 'the right culture and relationships can do much more to ensure well being after traumatic events than the reactive strategies that are so often mobilised'. Hudson (1995) reported that admonitions that one must be debriefed or suffer a post traumatic stress syndrome were false because research had demonstrated that 77% of individuals who suffered acute stress disorder went into spontaneous remission. Furthermore, she suggested that debriefing could exacerbate stress. Cotterill (2000) suggests that CISM is only one option for dealing with critical incident stress and proposes clinical supervision as an alternative.

Of the few published studies evaluating the efficacy of debriefing, three supported the value of debriefing for hospital nurses (Burns and Harm 1993; Mitchell, 2001; Robinson and Mitchell 1993), one was inconclusive (Roffey-Mitchel and Jeavons 1998). Burns and Harm (1993) found that only 32% of nurses surveyed about debriefing had ever participated in debriefing and, of those, 88% reported the process helpful in reducing stress.

Robinson and Mitchell (1993) evaluated debriefing with mainly emergency service personnel, but a small sample of welfare/hospital personnel, including 17 nurses, was included. Of the latter group, 84% found debriefing helpful and 44% were happy with the process. Emergency personnel reported more cognitive stress such as: sleep disturbances; flashbacks; preoccupation with the incident; and, fear of the future than welfare/hospital personnel who reported more emotional distress (sad, weepy, numb, feeling horrified, fearful, enraged, uneasy and shocked). Robinson and Mitchell (1993) suggested that occupation and gender

were both relevant to understanding the stress response and further work was required to separate these variables.

This controversy about the efficacy of debriefing highlights the need for further investigation of Australian nurses' experiences. The usefulness or not of debriefing for nurses would provide valuable support for its introduction in hospitals and identify necessary modifications. The hospital in which this study was undertaken did not, at the time, have a formal debriefing program, although the staff counsellor had been trained in the procedure so may have offered it to individuals. Some staff may also have experienced debriefing at previous places of employment. The objectives of this study were to determine (1) nurses' perceptions of the effectiveness of stress debriefing, and (2) whether their perceptions of stress debriefing were associated with any of the demographic variables: gender, age, nursing qualifications, method of obtaining initial practising certificate, number of years post-registration, current area of work and years of experience in that area.

METHOD

Participants

This study formed the second part of a broader study into critical incident stress in a 750-bed metropolitan teaching and research hospital (O'Connor and Jeavons, 2002). The sample represented 59% of full-time registered nurses (RNs) from the whole study who had attended one or more debriefing sessions in the course of their work. It comprised 129 nurses (88% female) with a mean age of 32.6 years (SD=8.5 years). The original study targeted all full time RNs, with a response rate of 40%. This was lower than expected, possibly because it was conducted pre-Christmas and during major hospital restructuring.

Participants had practised full time equivalent nursing for nine years (SD=6.4 years) and worked in their particular area for four-and-a-half years (SD=3.6 years). Fifty-eight percent had obtained their initial practising certificate by college diploma and university degree (22% and 36%, respectively). Highest qualifications and areas of work are shown in Tables 1 and 2, respectively. Designated titles of the nurses (Table 3) show the largest category of nurses were Division 2 RNs (Enrolled Nurses) (35%).

Table 1: Highest qualifications of RNs (n=129)

Qualification	Sample numbers	Sample (%)
Hospital certificate	10	7.8
Diploma	4	3.1
Degree	38	29.4
Masters degree	5	3.9
Postgraduate certificate/diploma	55	42.6
Other qualification	17	13.2
Total	129	100.0

Table 2: Areas of work of RNs (n=129)

Area of Work	Sample numbers	Sample (%)
Aged care	2	1.6
Intensive care	13	10.1
Oncology	4	3.1
Psychiatry	17	13.2
Coronary care	2	1.6
Medical	11	8.5
Spinal care	3	2.3
Paediatric	2	1.6
Emergency department	7	5.4
Neurology	5	3.9
Surgical	23	17.8
Operating theatre	9	6.9
Mixed medical/surgical	10	7.8
Other	21	16.2
Total	129	100.0

Other: ie renal, palliative care and respiratory medicine

Table 3: Designated titles of RNs (n=129)

Title	Sample number	Sample (%)
RN Division 1	8	6.2
RN Division 2 (EN)	45	34.9
RN Division 3	4	3.1
Associate Nurse Unit Manager (ANUM)	21	16.3
Nurse Unit Manager (NUM)	14	10.8
Clinical Nurse Specialist/ Nurse Educator (CNS/NE)	24	18.6
Other	13	10.1
Total	129	100.0

DATA COLLECTION AND MEASURES

Following ethics committee approval, data were collected using a survey questionnaire that asked for demographic and debriefing information.

Debriefing Questionnaire (DQ). This section contained 20 statements relating to helpfulness or lack of helpfulness of debriefing. It was designed by the authors, based on earlier studies by Burns and Harm (1993) and Robinson and Mitchell (1993). Reliability and validity information was not used for this type of measure but factor analysis indicated the extent to which the items in the scale represented consistent concepts. Debriefing was defined as a structured group meeting, emphasising ventilation of feelings, discussion of reactions to the event, and, education and information about coping strategies. The wording of some statements was altered to obtain equal positive (meaning statements that said it was helpful) and negative (statements

that said it was not helpful) items in the scale. These were randomly ordered to avoid biased responding. Respondents were asked to rate level of agreement to statements: 0 neutral; 1 strongly disagree; 2 disagree; 3 agree; 4 strongly agree. The neutral category gave respondents the option of non-commitment. Participants were asked whether debriefing should be voluntary and what other interventions they considered appropriate following a critical incident.

Analysis

Data obtained for the study were analysed using Statistical Package for Social Sciences 6.1 (SPSS). Descriptive statistics summarised the characteristics of respondents and DQ responses.

Factor analysis of the DQ was undertaken firstly to determine the factor structure of the scale. Principal Components Analysis (PCA) with oblimin rotation was performed because it was assumed that all items on the DQ would be correlated with each other since they reflected aspects of helpfulness and lack of helpfulness of debriefing (see West 1991, p.139).

The second purpose was to reduce nurses' responses to a small number of factors to study the relationship between their debriefing experiences and demographic variables. This was analysed using Multivariate Analysis (MANOVA) using the five PCA scales as dependent variables. Four potential independent (demographic) variables were reduced (qualifications, from seven to four levels; basis for obtaining initial practising certificate, from three to two categories; current area of work, from 15 to six areas; title, from eight to five titles) to increase numbers of respondents in cells. Gender was unaltered. Correlations were then obtained between the independent variables with the averaged five scales. Finally, relationships between the effects of the demographic variables and the DQ scales were investigated in a 4-way MANOVA.

RESULTS

Results of the descriptive analysis

Although respondents identified the process as helpful in alleviating distress (Table 4), reasons for lack of helpfulness were also strongly endorsed (Table 5). The items that received low mean Likert scale scores do not indicate that these factors were unhelpful (in the case of helpful items), merely that some respondents did not feel that this item had been important to them. As the neutral option was scored 0, this could reduce mean scores. Helpful themes were: communication, sharing with others who had experienced the same incident, group-cohesion, and self-understanding/stress education. Lack of helpfulness related to: poor timing and duration of the debriefing, discomfort with the group process and poor leadership qualities. Most believed that attending debriefing should be voluntary and many

Table 4: Ranked responses for helpfulness of debriefing by respondents (n=129)

Debriefing statement	Mean Likert scale score
1. Being part of the group that had also experienced the incident.	3.3
2. Talking with others about the event.	3.3
3. Hearing others talk about the incident.	3.3
4. Hearing how others were handling the stress.	3.2
5. Realising I was not alone.	3.0
6. Understanding my situation.	2.9
7. The group gained solution, support, and direction.	2.5
8. It promoted departmental cohesion.	2.2
9. Understanding myself.	2.2
10. My stress levels were less intense.	2.1
11. Learning about stress from the leaders.	2.0
12. The independent forum was helpful.	1.7

Note: Although items were altered in order to obtain an equal number of positive and negative items on the DQ and to enable random ordering, items are presented in this table as statements for helpfulness of debriefing according to their item source.

Rankings based on mean scores on a 5-point Likert scale in response to whether respondent considered the statement helpful: 0, neutral; 1, strongly disagree; 2, disagree; 3, agree; 4, strongly agree.

selected alternatives or supplements such as support group and/or stress management classes.

Results of factor analysis

The sample size of 129 for the 20-item DQ met the desired number of cases to variable ratio for the PCA (Tabachnick and Fidell, 1996). The correlation matrix indicated that a considerable number of correlations exceeded 0.3 and thus the matrix was suitable for factoring. The factorability of these items was further supported because the Bartlett Test of Sphericity was significant and Kaiser Meyer Olin measure of sampling adequacy was greater than 0.6 (0.7).

Analysis of the DQ produced six factors with eigenvalues greater than one. However, inspection of the scree plot (Tabachnick and Fidell, 1996) indicated that a five-factor solution was most appropriate. The eigenvalues for these factors were 4.03, 2.24, 1.72, 1.34, and 1.13 and the factors accounted for 20.15%, 11.19%, 8.64%, 6.71% and 5.65% (total 52.3%) of the total variance.

The pattern matrix is shown in Table 6. Individual factor loadings of at least 0.40 were taken as the criterion for deciding whether an item was retained in the construction of the DQ. At this magnitude all items but one (Item 18) loaded on only one factor.

Items that loaded on the first, second and fourth factors reflected helpful aspects of debriefing. The

Table 5: Ranked responses for lack of helpfulness of debriefing by respondents (n=129)

Debriefing statement	Mean Likert scale score
1. I resented the time the debriefing took from my personal life.	3.0
2. I was not comfortable discussing the event in a group.	2.7
3. It was too soon after the event to be helpful.	2.5
4. The leaders had no relevant experience.	2.4
5. The leader did not seek discussion from participants who would not open up.	2.3
6. It was too long after the event to be helpful.	2.3
7. It was too short to be helpful.	2.1
8. There were people present in the group with whom I was uncomfortable.	2.1

Note: Although items were altered in order to obtain an equal number of positive and negative items on the DQ and to enable random, items are presented in this table as statements for lack of helpfulness of debriefing according to their item source.

Rankings based on mean scores on a 5-point Likert scale in response to whether respondent considered the statement lacked helpfulness: 0, neutral; 1, strongly disagree; 2, disagree; 3, agree; 4, strongly agree.

five items that loaded on the first rotated factor denote an 'Understanding' dimension. The five items that loaded on the second rotated factor suggest a 'Sharing' dimension. Although the three items that have a loading on the fourth factor suggest a 'Cohesion' dimension, the loading of one item ('It was not helpful because the leader did not seek discussion from participants who would not open up') appears to indicate that respondents were responding more to the cohesion aspect of debriefing than to its helpfulness and needs further clarification.

Only one item ('realising that I was not alone') has a dual loading on DQ factors, indicating that participants may have considered this at both a social support and cognitive level. They may have experienced debriefing as helpful because they understood that they were not alone and, concomitantly, gained an appreciation that others were similarly affected by the incident through sharing their experience of the incident.

The third and fifth factor items reflected lack of helpfulness. The three items on the third factor appear to denote unhelpful aspects of 'Procedure:' Timing, duration and leadership. Items on the fifth factor appear to denote adverse aspects relating to the group 'Dynamics'.

To further the analysis, five scales were constructed by summing equally weighted scores of the items identified as loading significantly on respective factors. The correlations between the Understanding and Sharing factors was -0.11; Sharing and Dynamics factors, -0.22; Procedure and Dynamics factors, -0.17; and between the

Table 6: Pattern matrix of debriefing questionnaire items

Item	Factor loadings (loadings less than 0.40 not reported)				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
20 Learning about stress from the leaders was helpful.	0.72				
17 My stress responses less intense.	0.64				
09 The group gained solution, support and direction.	0.55				
15 It was helpful in understanding myself.	0.51				
07 It was helpful in understanding my situation.	0.49				
11 Being part of a group that had also experienced the incident was helpful.		-0.78			
03 Talking with others about the incident was helpful.		-0.77			
10 Hearing others talk about the incident was helpful.		-0.63			
18 Realising that I was not alone was helpful.	0.47	-0.56			
02 Hearing how others were handling the stress was helpful.		-0.55			
12 It was too short to be helpful.			-0.78		
14 It was too long after event to be helpful.			-0.74		
05 The leaders had no relevant experience.			-0.49		
16 It was helpful because it promoted departmental cohesion.				0.76	
01 It was not helpful because the leader did not seek discussion from participants who would not open up.				0.52	
13 The independent forum was helpful.				0.47	
08 Not comfortable discussing event in a group.					0.74
04 There were people present in the group with whom uncomfortable.					0.72
06 I resented the time debriefing took from personal life.					0.57
19 Too soon after event to be helpful.					0.45

Extraction Method: Principal Components Analysis; Rotation Method: Oblimin with Kaiser Normalisation; Rotation converged in 13 iterations.

Table 7: Means: Standard deviations and Cronbach Alphas for the five scales constructed from the factor analysis of the Debriefing Questionnaire (DQ)

Scales	Number of items (range)	Number of cases	Mean	SD	Cronbach α
UNDERSTANDING	5 (0-16)	127	11.71	3.93	0.58
SHARING	5 (0-20)	127	16.18	2.99	0.74
PROCEDURE	3 (0-12)	127	6.80	3.14	0.66
COHESION	3 (0-12)	127	6.30	2.93	0.40
DYNAMICS	4 (0-16)	127	10.31	3.26	0.62

Cohesion and Dynamics factors, 0.25. Scales of Sharing, Procedure and Cohesion were effectively independent, as their intercorrelations were less than 0.1. Table 7 records scale means, standard deviations (SD) and the Cronbach alpha (α) coefficients of internal consistency for the scales.

As can be seen, the potential range for Understanding, Sharing and Dynamics is moderate, for the remaining scales, low. The relatively high negative skew for the Sharing scale indicates that it is more helpful than the other helpful scales. Apart from the Cohesion scale, which

shows low reliability (0.40), the remaining scales show moderate reliability.

Finally, in order to compare the means of the DQ scale, a repeated measures ANOVA was conducted where the dependent variables were the averaged mean scores of the items. Using Wilks' criterion, inspection of means indicated that the Sharing scale was the most significant of the five scales on the DQ ($F(4, 120) = 41.10, p < 0.000$) and was significantly greater than the other scales that did not differ significantly from each other.

Table 8: Correlations of Debriefing Scales (DQ)

Scales	Number of respondents	Pearson product moment correlation	Probability
Sharing by Procedure	126	0.27	0.002
Sharing by Cohesion	122	0.20	0.032
Sharing by Dynamics	126	0.31	0.001
Procedure by Cohesion	125	0.31	0.000
Procedure by Dynamics	127	0.38	0.000
Cohesion by Dynamics	125	0.51	0.000

Results of multivariate analysis

Significant findings were obtained for the DQ scales (Table 8) and confirm the Factor Analysis findings that the five scales of the DQ are interdependent. However, no significant relationships were found between any of the variables of age of respondents, full-time equivalent post-registration nursing practice and years in current area.

Results of the 4-way MANOVA revealed a significant multivariate main effect for only Qualifications ($F(15, 121) = 1.923, p=0.020$). There were no significant interaction effects. Univariate tests were conducted to identify which Qualification was specifically related to Understanding. Findings suggested that nurses with post-graduate qualifications ($n=61, \text{mean}=2.12$) and nurses with hospital certificate qualifications ($n=10, \text{mean}=3.02$) accounted for significance with that factor ($p<0.05$). The former nurses experienced the Understanding obtained from debriefing as 'moderately helpful' while the latter group experienced it as 'considerably helpful'. However, because a series of analyses were examined for statistical significance this result needs to be treated as tentative. No significant ($p<0.05$) correlations were found between gender and experiences of debriefing.

DISCUSSION

Survey respondents identified the most helpful aspects of debriefing as being part of a group who had also experienced the incident, hearing others talk about it, realising they were not alone, and hearing how others were handling their stress. Lack of helpfulness items receiving strongest endorsement were 'resented the time debriefing took from their personal lives' and 'felt uncomfortable discussing the event in a group'. Some respondents also endorsed poor leadership issues.

Resentment about the time debriefing took from their personal lives suggested that those respondents had attended debriefings outside of work hours. This encroachment on non-work time may also have worked

against their active participation in the group and reduced the potential value of debriefing. Furthermore, defusing, a shortened form of debriefing, provided prior to staff leaving work, will often eliminate the need for a full critical incident debriefing and reduce the overuse of debriefings (Westerink 1995). Education of all staff, especially nurse unit managers, about appropriate times to use defusing or debriefing, and goals and advantages of each could allay resentment, especially if scheduled before staff left work.

The greatest consensus between this sample and Burns and Harm's (1993) concerned talking to others and hearing them talk about the incident and reduction of stress. However, the greatest disparity occurred for lack of helpfulness, represented by: resentment of the time debriefing took from their personal life, feeling uncomfortable discussing the event in a group and the debriefing being conducted too soon after the event. Variations in findings were probably due to different modes of scoring, differences in sampling procedures and social context. However, when the two levels of helpfulness indicated in this study were combined, reasons for helpfulness roughly equated those of Burns and Harm (1993). In contrast, when the two levels of agreement for lack of helpfulness were combined, a large disparity was evident. For example, this sample more strongly endorsed 'resenting the time debriefing took from their personal life' and 'felt uncomfortable discussing the event in a group' compared to low endorsement by Burns and Harm's (1993) sample. Low endorsement concerning resentment of the time the debriefing took by the USA sample suggested that the debriefing model had been integrated into the work environment and was an accepted procedure for post-critical incident management. Even though only 32% of Burns and Harm's (1993) sample had participated in debriefings, services available would very likely have been consistent with the CISM model based on its popularity within the nursing profession in the USA at the time. Emergency nurses were therefore likely to utilise the service during their work time. Furthermore, the lower endorsement by them of other statements regarding lack of helpfulness indicated that they received debriefing from those trained in its application and were likely to have been acquainted with the debriefing model (CISD) for longer than Australian counterparts.

The five DQ scales offered a parsimonious explanation of the 20 statements relating to helpful and unhelpful aspects of debriefing: three related to helpfulness, Sharing, Understanding and Cohesion; two scales, Procedure and Dynamics, to lack of helpfulness. With regard to the helpful scales, the majority endorsed Sharing, which represented aspects of communication and social support, followed by Understanding. Low correlation of the Cohesion scale with the other DQ scales suggested that its items should be interpreted individually. Understanding, a cognitive process whereby participants

re-appraised or reframed their role in the incident as a result of information from other participants at the debriefing, was the only scale related to a demographic variable. Nurses with hospital certificates found its aspects more helpful compared to nurses with university qualifications which suggests that the former group benefited from educational aspects offered by debriefing possibly because of lack of exposure to stress management during their training in contrast to their university educated colleagues.

The Sharing and Understanding scales comprised elements identified by Everly and Mitchell (1998) as essential to trauma recovery. For example, 'Sharing' included items associated with communication and social support that reflected verbalisation and 'normalisation' of the trauma through discussion and appreciation that others at debriefing experienced similar reactions (Everly and Mitchell 1998). 'Understanding' items related to other essential elements for trauma recovery, mobilisation and stress management. Mobilisation occurred when individual and group strengths were recognised and utilised to assist recovery.

The Cohesion scale was represented by two helpful items, (promotion of departmental cohesion and independent forum) and one item reflecting lack of helpfulness (leader not seeking discussion from participants who would not open up). One explanation was that respondents focussed on the cohesion aspect of the scale and their belief that failure of the leader to encourage participants to speak up worked against cohesion. Alternatively, respondents might have experienced being in the group but not being pushed to talk as beneficial when they had the opportunity to listen and learn from the reactions of others. This would be consistent with 'normalisation'. With regard to lack of helpfulness scales, more respondents endorsed 'Dynamics' rather than 'Procedure'. The former reflected personal discomfort such as with discussing the event in a group; the latter, adverse aspects such as leader's lack of relevant experience. Evidently, personal factors about the process were of greater concern than aspects related to the application of debriefing. It is likely that high endorsement of statements concerning 'Dynamics' were consistent with national characteristics. Generally, Australians are less likely to disclose personal information, particularly in a work setting, because they fear evaluation as 'not coping', which could jeopardise job security. This possibly reflected lack of education and familiarity with an appropriate debriefing model.

There are some limitations to this study. These findings are specific to a relatively small sample of full-time RNs working at an Australian metropolitan hospital. The survey was conducted prior to introduction of CISD/CISM in the hospital to explore nurses' experiences and use the findings to modify the proposed program. Although this study attempted to capture the essence of debriefing according to the study on which it was based

(Burns and Harm 1993) by providing a specific definition of the process, many respondents may have applied their own interpretation to its meaning. Nonetheless, the generally positive findings regarding debriefing are promising because they suggest that replacing the various ad hoc forms currently available with a standardised model, would not only improve the quality of service at the hospital, but overcome shortcomings identified by respondents. A standardised approach would also ensure that providers would receive appropriate training and staff members, pre-incident education about CIS and various types of intervention.

CONCLUSIONS

These findings provide an initial description of Australian nurses' perceptions of their experiences of debriefing in a hospital setting. For future research, the distinction and definition of the type of debriefing being evaluated by a study, as well as the training of the people providing it and the population to whom the process is applied remain essential. Otherwise the issue of what is being evaluated will remain unclear and lead to inaccurate results. These distinctions would enable researchers to discover which method of debriefing led by what type of leader is effective and with which population. In addition, a combined quantitative/qualitative research design is recommended to assist the identification of helpful processes of debriefing.

REFERENCES

- Appleton, L. 1994. What's a critical incident? *The Canadian Nurse*. September: 23-26.
- Burns, C. and Harm, N.J. 1993. Emergency nurses' perceptions of critical incidents and stress debriefing. *Journal of Emergency Nursing*. October: 431-436.
- Cotterill, W.S. 2000. Debriefing in the intensive care unit: A personal experience of critical incident stress. *Nursing in Critical Care*. March-April. 5:82-86.
- Cudmore, J. 1998. Critical incident stress management strategies. *Emergency Nurse*. 6:22-27.
- Everly, G.S. and Mitchell, J.T. 1998. A new era in crisis intervention. Key concepts in Critical Incident Stress Management. *Frontières*. Hiver Printemps: 43-46.
- Hudson, S. 1995. New responses to stress and trauma. *Australian Nursing Journal*. 2:13.
- Jefferson, R. and Northway, T. 1996. Staff helping staff - Establishment of a critical incident stress management team in a tertiary care centre. *Canadian Association of Critical Care Nurses*. 7, Spring: 19-22.
- Jimmerson, C. 1988. Critical incident stress debriefing. *Journal of Emergency Nursing*. 14:43-45A.
- Lam, L.T., Ross, F.I., Cass, D.T., Quine, S. and Lazarus, R. 1999. The impact of work related trauma on the psychological health of nursing staff: a cross sectional study. *Australian Journal of Advanced Nursing*. March-May, 16(3):14-20.
- Laws, T. and Hawkins, C. 1995. Critical incident stress. *Australian Nursing Journal*. February: 32-34.
- Macnab, A.J., Russell, J.A., Lowe, J.P. and Gagnon, P. 1999. Critical incident stress intervention after loss of an air ambulance: Two year follow up. *Prehospital and Disaster Medicine*. 14:8-12.
- Martin, K.R. 1993. Critical incidents: Pulling together to cope with the stress. *Nursing*. May: 39-41.
- Mitchell, G.J. 2001. A qualitative study exploring how qualified mental health nurses deal with incidents that conflict with their accountability. *Journal of Psychiatric and Mental Health Nursing*. 8:241-8.

Mitchell, J.T. 1983. When disaster strikes: The critical incident stress debriefing process. *Journal of Emergency Medical Services*. 8(1):36-39.

Northcott, N. 1998. Don't accept the debrief. *Nursing Times*. 94(10):32.

O'Connor, J. and Jeavons, S. 2002. Nurses' perceptions of critical incidents. Manuscript under review.

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

Roffey-Mitchel, K. and Jeavons, S. 1998. An evaluation of debriefing for nurses in a hospital setting. *Critical Times*. 1:4-5.

Tabachnick, B.G. and Fidell, L.S. 1996. Principal components and factor analysis. In *Using multivariate analysis*. 2nd edn. New York: Harper and Row, Publishers.

West, R. 1991. *Computing for psychologists*. Amsterdam: Harwood Academic Publishers.

Westerink, J. 1995. Developing critical incident stress management programs. *The Australian Counselling Psychologist*. 11:19-25.

Wright, C. and Casier, S. 1996. Critical incident stress management: Navigating through crisis in critical care. *Canadian Association of Critical Care Nurses*. 7:25-29.
