What Will be the Psychiatric Consequences of the War in Bosnia?

A bad war from the psychiatric point of view, leading to hidden pathology

L. STEPHEN O'BRIEN

A senior psychiatrist in Sarajevo has stated that there will be an explosion of psychiatric problems in Southern Europe following the cessation of hostilities in Bosnia. Is he right, and if so, what sort of problems should be anticipated?

Few people would deny that war can lead to psychiatric problems. However, the extent and nature of the problems are not always easy to predict. In the early stages of World War II, in the UK many beds were set aside for the 'inevitable' shock casualties produced by sustained bombing, but they did not appear. On the other hand, it was some years before the dramatic psychological effects of a distant war in Vietnam were recognised. There is a tendency to equate war with post-traumatic stress disorder (PTSD), but this is an oversimplification. War is a complicated process and its relationship with mental health is also complicated. An attempt will be made to consider some of the factors which might influence the overall psychiatric effects of the Bosnian conflict.

If it appears that attention is concentrated upon the fate of military personnel rather than civilians, this is neither because it is felt that soldiers are more important, nor simply because of the author's experience treating soldiers. Most research into the effects of war has considered soldiers. This is hardly surprising. In 'regular' wars, soldiers are much more easily identifiable and accessible, during and after the conflict, than civilians. Armies have an interest in mental health. Not only do they have an accepted 'duty of care', but they recognise that soldiers are their primary resource. Psychiatric problems during combat reduce the fighting force, while chronic problems represent a potential loss of valuable trained and experienced men. The research on soldiers is not, however, irrelevant to civilians. The psychological stresses and responses are the same, and similar preventive and treatment measures are applicable.

The type of conflict and troops involved

While no war is good, some wars are psychiatrically worse than others. For the coalition forces, the Gulf

War was comparatively good, as was the Falklands conflict for the British. They were comparatively brief, offensive, lacked direct threat to home and family, involved mostly professional soldiers and a clearly defined enemy, and were successful. Vietnam for the Americans is an example of a psychiatrically bad war: prolonged, changing, involving 40% draftees and an ill-defined enemy, and unsuccessful. It is hardly surprising that the Gulf (McDuff & Johnson, 1992) and the Falklands (Price, 1984) have had a relatively low incidence of problems, whereas Vietnam led to the development of the diagnosis of PTSD, high rates of substance abuse and behavioural disturbance, other psychiatric morbidity, and at least a third of a million sufferers (Egendorf et al, 1981; La Guardia et al, 1983; Centers for Disease Control, 1988a,b; Resnick et al, 1989).

Atrocities of war have a powerful negative effect on mental health, not only for the surviving victims, but for the perpetrators. Post-Vietnam studies indicate that involvement in atrocities is a predictor of PTSD (Yager et al, 1984; Breslau & Davis, 1987).

It is generally accepted that trained professional soldiers cope better with combat. Some studies of Vietnam veterans indicate that idealistic volunteers had more mental health problems than draftees. This may have been associated with perceived failure or loss of ideals. The Israelis suggest that older soldiers are more vulnerable to acute breakdown in combat (Solomon et al, 1986), while there is some evidence that the very youngest are also at risk.

Most professional armies, both in peace and war, attempt to screen out those who suffer from, or have a history of, significant psychiatric illness, as well as those of below average intelligence, on the grounds that they are more susceptible to psychiatric problems.

Bosnia has the makings of a bad war from the psychiatric point of view. In essence it is a civil, ethnic, and religious war. Former neighbours fight each other in and around their homes. Goals are not clear and the conflict is prolonged. There is a direct threat to civilians, including family. The fighters are not all professional soldiers – rather, many are driven by obligation or ideology. Atrocities of various

444 O'BRIEN

types have been reported. Eye-witnesses report excessive use of alcohol as a 'stimulant' or disinhibitor. There are serious problems of provision of basic supplies and of medical services. All these factors increase the psychological pressures on civilians as well as soldiers.

At-risk groups

It seems reasonable to draw some distinctions between civilians and soldiers when considering the psychological effects of war. However, it is not being a soldier per se which puts a person at risk in wartime. On the contrary, being a trained professional soldier is probably protective. The 'Vietnam effect' which was associated with greater long-term mental health problems in veterans was mostly one of duration and intensity of actual combat exposure (Kaylor et al, 1987; Breslau & Davis, 1987). In Bosnia many civilians have a high degree of combat exposure and are therefore susceptible to psychiatric sequelae.

There have been comparatively few recent studies into the mental health effects of war on civilians. Civilian studies of severe stress have mostly considered specific groups, such as refugees or survivors of atrocities (Mollica et al, 1987; Jensen et al, 1989; Carlson & Rosser-Hogan, 1991). Work from El Salvador (Martin-Baro, 1989) suggests that in civil war the dehumanisation of social relationships is normalised by social polarisation, institutionalised lying, and acceptance of violence.

Refugees have long been considered to have different psychiatric problems from immigrants (Jensen et al, 1989). It seems likely that the Bosnian conflict will result in groups of both internal and external refugees as a result of the ethnic aspects of the war.

It is hardly surprising that survivors of various atrocities should have long-term psychiatric problems. Less obvious is the observation, from psychoanalytical work, of low self-esteem and affective impairment in the children of Holocaust survivors (Barocas & Barocas, 1979; Krell, 1990).

There is particular sympathy for children as the innocent victims of war. Some studies have shown higher rates of disturbance in young adults than in children (Felsman et al, 1990). Not surprisingly, refugee children exposed to extreme violence appear more afraid of violence than those not so exposed (Tsoi et al, 1986). In Lebanon (Bryce et al, 1989) the best predictor of pre-school children's reported morbidity was the mother's depressive symptoms, while this was associated with both war events and other social variables.

It appears that war can have an effect at a very early age or even prenatally. Israeli boys born two years after the Six Day War (Meijer, 1985) had significantly less developmental delay, dissocial behaviour and regressive behaviour than boys who were *in utero* at the time of the war, while this group were much less disturbed than those aged less than six months at the time of the war.

The already psychiatrically ill must be at increased risk as a result of the war. There is no doubt that provision of psychiatric services will be impaired by the effects of war. It seems reasonable to assume that interruption of care will have a negative effect on long-term prognosis. The newspapers have reported the plight of a large group of mentally impaired in-patients left alone in Bosnia as a consequence of the war.

In Bosnia, apart from the complication of three rather than two warring parties, there are the fourth and fifth forces of peace-keeping troops and non-military external agencies.

Professional and voluntary workers run the usual risks of war-related illness and are also very much at risk of 'burn-out' as they strive to provide care in extremely difficult and frustrating conditions. Those most at risk are those who work alone or in small groups, those required to make important decisions, and those in direct contact with the victims and with the various opposing forces.

The problems of peace-keepers are significant (Weiseath, 1990), with stresses in addition to those of war. Soldiers are not trained to do nothing. Feelings of frustration, impotence, and vulnerability arise in such situations, and stress is increased by 'non-military' tasks such as clearing civilian corpses or casualty handling of women and children. There is a danger that back home they may be considered not to have been under stress when the stresses may be even greater than those of direct conflict.

The last group at risk are the 'distant victims'. These are people affected by those directly involved in the war. There is evidence of considerable effect in some of the spouses and families of PTSD sufferers (Maloney, 1988).

The nature of the psychiatric disability

Most studies suggest that there is a relatively low presentation rate for psychiatric illness during war. For soldiers the most common problem is the acute combat stress reaction. Evidence from Israel (Belenky, 1987) and the Gulf (McDuff & Johnson, 1992; O'Brien, 1992) indicates that 60-90% of sufferers can be treated and returned to duties if mental health teams are available in theatre.

However, the Israeli evidence is that many have further problems after the war (Solomon & Shalev, 1989).

The condition most commonly related to war is PTSD. Reported prevalence rates vary widely, with rates between 12 and 54% being reported for non-serving Vietnam veterans (Stretch, 1986). The significance of such rates is not altogether clear. For example, 22% of a group of still-serving Falklands veterans (O'Brien & Hughes, 1991) fulfilled diagnostic criteria for PTSD despite apparently normal social function and a very low presentation rate. PTSD can, however, be severely disabling and persist for very many years. Preventive factors appear to be: early debriefing and intervention, acceptance and social and peer support on demobilisation, and a stable personality free from previous psychiatric problems (Raphael, 1986).

There is a clear, specific effect of war in the production of PTSD, but some question of its general effect on other conditions. However, studies suggest that in the long term there is a greater overall degree of ill-health in veterans (Centers for Disease Control, 1988a,b).

Ex-prisoners of war have a tendency to higher rates of depression and psychiatric illness overall (Tennant *et al.*, 1986; Sutker *et al.*, 1990).

Refugees from war show a range of psychiatric diagnoses and there is considerable research into particular patterns of physical symptoms associated with different experiences in different groups of refugees, for example non-organic blindness in older Cambodian women refugees (Rozee & Van-Boemel, 1989; Moore & Boehnlein, 1991). Most studies indicate that refugees have significant rates of PTSD, anxiety, affective disorder, and dissociative symptoms. Some highlight a higher rate of somatic presentation or the influence of cultural factors on illness behaviour, help-seeking and compliance.

Substance abuse has been widely reported as a significant problem following Vietnam (Nace et al, 1978). There are many reports associating the increased use of alcohol with PTSD and also disturbed behaviour following a range of wars (Bazot & Force, 1985).

The response to the problem

Specific, up-to-date data on Bosnia are not readily available, but before its break-up Yugoslavia had much in common with other Western nations. Its population was over 90% literate and had a life expectancy only four years less than Western European states. It had more hospital beds per thousand population than the USA, and more doctors

per thousand than the UK. Today Bosnian doctors are universally respected and admired as they operate by candlelight without adequate supplies of water or medication. In such changed conditions it seems unlikely that sophisticated task forces will be "convened to develop strategies for prevention and treatment of psychological, psychosocial, and psychosomatic disorders" (Hobfoll et al, 1991) in the immediate aftermath of the war, as happened in coalition countries following the Gulf War.

Perhaps the theoretical best response to the psychiatric problems of the war for the general population would be to fund mobile teams of local people tasked with facilitating access to assessment, debriefing, and if necessary, formal psychiatric treatment. It would appear appropriate for such teams to also take on an out-reach role in attempting to contact previous patients lost to follow-up during the war, although this presupposes the continued existence of medical records and the ability to locate individuals. Previous psychiatric treatment facilities would have to be rebuilt or reopened where necessary.

Empirical research would help assess, and also raise and maintain awareness of, specific problems such as those of children and the displaced.

It seems unlikely that all Bosnian soldiers will have early access to the sort of programme which will be offered to returning peace-keeping troops. Such troops have psychological support and 'critical incident debriefing' available in theatre. On return they will be held together in units for a brief 'wind-down', clean-up, and debriefing period before going on leave, and will have subsequent access to specialist treatment facilities, while their families will be advised of the likely effects of combat exposure, both normal and abnormal.

Other external aid agencies and others, including news organisations, will presumably provide similar facilities for their own personnel.

Conclusions

So will the cessation of hostilities in Bosnia result in an explosion of psychiatric problems in Southern Europe? Probably not. There is likely to be a significant increase in psychopathology as a result of the war, but it is probable that much of it will not result in presentation or identification as psychiatric illness. In the immediate aftermath of the war it is unlikely that psychiatric problems will be seen as a priority compared with physical wounds, disease, lack of housing, lack of food, lack of power, loss of manpower, and the relocation of many displaced people. It is more likely that psychiatric

446 O'BRIEN

disability will present later, when the situation has settled. Presumably some will, like the ex-Far East prisoners of war, present 40 years later when they decompensate in old age, while many more will continue with life-long hidden morbidity.

It is likely that psychiatric cases in foreigners such as the peace-keeping troops will be more conspicuous. Such morbidity will be assiduously sought and widely reported. Following the Gulf War the World Psychiatric Association (1993) produced a book on psychological aspects of the conflict, and there are other studies already recorded in the various databases. In contrast, there is very little yet being published internationally from Croatia, Serbia and Bosnia (Zivcic, 1993; Klain, 1993), where mental health professionals presumably have other priorities at this time.

That much of the psychopathology will be hidden, at least initially, does not necessarily mean that it is unimportant. Should the international community consider funding the sort of teams suggested above, or the repair of psychiatric facilities? Should we not, at the least, plan and effect a definitive research project to measure the real psychiatric cost of war?

References

- BAROCAS, H. A. & BAROCAS, C. B. (1979) Wounds of the fathers: the next generation of holocaust victims. *International Review of Psychoanalysis*, 6, 331-340.
- BAZOT, M. & FORCE, L. (1985) Alcohol, the alcoholic, and the psychiatrist in the military environment. *Information Psychiatrique*, 61, 1067-1076.
- Belenky, G. L. (1987) Psychiatric casualties: the Israeli experience. Psychiatric Annals, 17, 528-531.
- BRESLAU, N. & DAVIS, G. C. (1987) Post traumatic stress disorder: the etiologic specificity of wartime stressors. American Journal of Psychiatry, 144, 578-583.
- BRYCE, J. W., WALKER, N., GHORAYEB, F., et al (1989) Life experiences, response styles and mental health among mothers and children in Beirut, Lebanon. Social Science and Medicine, 28, 685-695.
- CARLSON, E. B. & ROSSER-HOGAN, R. (1991) Trauma experiences, post traumatic stress, dissociation, and depression in Cambodian refugees. American Journal of Psychiatry, 148, 1548-1551.
- CENTERS FOR DISEASE CONTROL VIETNAM EXPERIENCE STUDY (1988) Health status of Vietnam veterans-1. Psychosocial characteristics. Journal of the American Medical Association, 259, 2701-2707.
- —— (1988) Health status of Vietnam veterans-II. Physical health. *Journal of the American Medical Association*, 259, 2708-2714.
- EGENDORF, A., KADUSHIN, C., LAUFER, R. S., et al (eds) (1981)

 Legacies of Vietnam: Long Term Stress Reactions. New York:

 Center for Policy Research, City University of New York.
- FELSMAN, J. K., LEONG, F. T., JOHNSON, M. C., et al (1990) Estimates of psychological distress among Vietnamese refugees: adolescents, unaccompanied minors and young adults. Social Science and Medicine, 31, 1251-1256.
- HOBFOLL, S. E., SPIELBERGER, C. D., BREZNITZ, S., et al (1991) War-related stress: addressing the stress of war & other traumatic events. American Psychologist, 46, 848-855.

- JENSEN, S. B., SCHAUMBURG, E., LEROY, B., et al (1989) Psychiatric care of refugees exposed to organised violence. Acta Psychiatrica Scandinavica, 80, 125-131.
- KAYLOR, J. A., KING, D. W. & KING, L. A. (1987) Psychological effects of military service in Vietnam: a meta-analysis. Psychological Bulletin, 102, 257-271.
- KLAIN, E. (1993) Destruction and reparation in groups during the war in Croatia. *Group Analysis*, 26, 109-118.
- KRELL, R. (1990) Holocaust survivors: a clinical perspective. Psychiatric Journal of the University of Ottawa, 15, 18-21.
- LA GUARDIA, R. L., SMITH, G., FRANCOIS, R., et al (1983) Incidence of delayed stress disorder among Vietnam era veterans: the effects of priming on response set. American Journal of Orthopsychiatry, 53, 18-26.
- MALONEY, L. J. (1988) Post traumatic stresses on women partners of Vietnam veterans. Smith College Studies in Social Work, 58, 122-143.
- MARTIN-BARO, I. (1989) Political violence and war as causes of psychosocial trauma in El Salvador. *International Journal of Mental Health*, 18, 3-20.
- McDuff, D. R. & Johnson, J. L. (1992) Classification and characteristics of army stress casualties during Operation Desert Storm. Hospital and Community Psychiatry, 43, 812-815.
- Meijer, A. (1985) Child psychiatric sequelae of maternal war stress. Acta Psychiatrica Scandinavica, 72, 505-511.
- MOLLICA, R. F., WYSHAK, G. & LAVELLE, J. (1987) The psychosocial impact of war trauma and torture on Southeast Asian refugees. *American Journal of Psychiatry*, 144, 1567-1572
- MOORE, L. J. & BOEHNLEIN, J. K. (1991) Treating psychiatric disorders among Mien refugees from highland Laos. Social Science and Medicine, 32, 1029-1036.
- NACE, E., O'BRIEN, C., MINTZ, J., et al (1978) Adjustment among Vietnam veteran drug users two years post-service. In Stress Disorders Among Vietnam Veterans (ed. C. R. Figley), pp. 71-128. New York: Bruner/Mazel.
- O'BRIEN, L. S. (1992) Gulf war psychiatry: psychosomatic aspects. In *Stress, Psychiatry and War*. Paris: World Psychiatric Association.
- —— & Hughes, S. J. (1991) Symptoms of post traumatic stress disorder in Falklands veterans five years post conflict. *British Journal of Psychiatry*, 159, 135-141.
- PRICE, H. H. (1984) The Falklands: rate of British combat casualties compared to recent American wars. *Journal of the* Royal Army Medical Corps, 130, 109-113.
- RAPHAEL, B. (1986) The problems of mental health and adjustment. In When Disaster Strikes. New York: Basic Books.
- RESNICK, H. S., FOY, D. W., DONAHOE, C. P., et al (1989) Antisocial behaviour and post traumatic stress disorder in Vietnam veterans. Journal of Clinical Psychology, 45, 860-866.
- ROZEE, P. D. & VAN-BOEMEL, G. (1989) The psychological effects of war trauma and abuse on older Cambodian refugee women. *Women and Therapy*, **8**, 23-50.
- SOLOMON, Z., NOY, S. & BAR-ON, R. (1986) Risk factors in combat stress reaction: a study of Israeli soldiers in the Lebanon war. *Israel Journal of Psychiatry and Related Sciences*, 23, 3-8.
- & SHALEV, A. (1989) Physical and mental consequences of combat stress: a study of Israeli soldiers following the 1982 war in Lebanon. *Psychologie Médicale*, 21, 2085-2091.
- STRETCH, R. H. (1986) Incidence and aetiology of post traumatic stress disorder among active duty Army personnel. *Journal of Applied Social Psychology*, 16, 464-481.
- SUTKER, P. B., WINSTEAD, D. K., GALINA, Z., et al (1990)
 Assessment of long-term psychosocial sequelae among POW survivors of the Korean conflict. Journal of Personality Assessment, 54, 170-180.

- TENNANT, C., GOULSTON, K. & DENT, O. (1986) Clinical psychiatric illness in prisoners of war of the Japanese: forty years after their release. *Psychological Medicine*, 16, 833-839.
- Tsol, M. M., Yu, G. K. & Lieh-Mak, F. (1986) Vietnamese refugee children in camps in Hong Kong. Social Science and Medicine, 23, 1147-1150.
- Weiseath, L. (1990) Stress of peace-keeping. In Wartime Medical Services: Second International Conference, Proceedings, pp. 364-378. Stockholm: Forsvarets forskningsanstalt.
- WORLD PSYCHIATRIC ASSOCIATION (1993) International Symposium Stress, Psychiatry and War. Paris: World Psychiatric Association.
- YAGER, T., LAUFER, R. & GALLOPS, M. (1984) Some problems associated with war experience in men of the Vietnam generation. *Archives of General Psychiatry*, 41, 327-333.
- ZIVCIC, I. (1993) Emotional reactions of children to war stress in Croatia. Journal of the American Academy of Child and Adolescent Psychiatry, 32, 709-713.
- L. Stephen O'Brien, MRCPsych, Lt Col RAMC, Officer Commanding Psychiatric Division, Queen Elizabeth Military Hospital, Woolwich, London SE18 4QH

(First received September 1993, accepted September 1993)