with uptake rates for medical prescriptions in general.⁴ Those attending were not the "worried well" but patients referred by their general practitioners for help with a range of medical conditions such as obesity, hypertension, depression, and raised cholesterol concentrations.

The full evaluation report is available from the leisure services department of Stockport Metropolitan Borough Council (tel 061 474 4415). There is no doubt about the validity of the findings of the Stockport scheme, and we urge general practices not to look too long before leaping into a health promotion activity that could contribute towards improved cardiovascular and mental health.

FELICITY GREEN
Deputy director

Stockport Centre for Health Promotion,
Stockport,
Cheshire SK2 7AE

JANET LORD
Senior research officer

East Lancashire Public Health Resource and Intelligence Centre,
East Lancashire Health Authority,
Nelson,
Lancashire BB9 5SZ

1 Iliffe S, See Tai S, Gould M, Thorogood M, Hillsdon M. Prescribing exercise in general practice. *BMJ* 1994;309:494-5. (20-27 August.)

2 Goldberg DP. *Manual of the general health questionnaire*. Windsor: NFER Publishing, 1979.

3 Smith R. Where is the wisdom...? *BMJ* 1991;303:798-9.

4 Beardon P, McGilchrist M, McKendrick A, McDevitt D, MacDonald T. Primary non-compliance with prescribed medication in primary care. *BMJ* 1993;307:846-8.

Persistent post-traumatic stress disorder

Role of alcohol ignored

EDITOR,—The grand round presented by Brigitta C Bende and Robin M Philpott contains two major logical errors, and I am surprised that these were not mentioned in the discussion.¹ The patient was a heavy drinker with all the features of an organic mental disorder, including cognitive impairment. While he may have suffered a traumatic neurosis in the aftermath of his wartime experience, the continuing features that were the basis for the diagnosis of post-traumatic stress disorder should have been ascribed to alcohol unless they were still present after a lengthy period of abstinence. In fact, all symptoms cleared when he abstained. Frightening ideas and nightmares are common in heavy drinkers, and their content is determined by the previous experience of the sufferer.

Secondly, how can improvement be attributed to the various psychological treatments that the patient received when he simultaneously received a far more powerful treatment for his brain disorder—namely, abstinence from alcohol? Had his doctors waited to see the effects of this they would probably have found that no other treatment was necessary.

Forty per cent of all patients diagnosed as having post-traumatic stress disorder drink heavily,² and their symptoms subside when they abstain.

SAMUEL I COHEN
Emeritus professor of psychiatry

London NW11 7LT

1 Bende BC, Philpott RM, Saltissi S, Edwards RHT, Williams G, Wyatt GB, et al. Persistent post-traumatic stress disorder. *BMJ* 1994;309:526-8. (20-27 August.)

2 Wilson GT. Alcohol and anxiety. *Behav Res Ther* 1988;26:369-81.

May not need treatment in war veterans

EDITOR,—Brigitta C Bende and Robin M Philpott construe the current problems—depression and alcohol misuse—of a veteran of the second world war as being due to a 50 year old psychiatric

condition, persistent post-traumatic stress disorder.¹ When such veterans present now with disturbing wartime memories does it follow that they had post-traumatic stress disorder all along?

Firstly, an episode of psychiatric or physical disease arising for the first time may evoke emotive associations with the threat, horror, and loss of war. For example, recently a survivor of a Japanese concentration camp began to talk obsessively of his experiences, which his wife had never heard about before, in the aftermath of a near fatal cerebrovascular accident.

Secondly, the aging process may put pressure on physiological and psychological resources and thus on the adjustments and philosophies that have long characterised a person. At a time of diminishing roles and duties the past may be more vivid than the present, and many people look back over their lives in preparation for death. Extreme experiences, and the resonant questions about life and death that these threw up, may again loom large.

Thirdly, and fundamentally, a person processes trauma as a function of the social meaning assigned to it.² But such social constructions do not necessarily stand still: since 1945 Western culture has seen a dramatic rise in the power of psychological explanations for the world. Not just war but also peacetime disasters, criminal violence, childhood sexual abuse, and even bullying are now viewed as having potentially lifelong psychological consequences for victims and are much discussed in the media. This social climate influences and, indeed, may redefine what veterans think now about what happened to them during the war.

The features of post-traumatic stress disorder are not exclusive to survivors of war or other disasters; they are common in people stressed in more everyday ways, including those who have been bereaved. Our work with former combatants indicates that most of those in whom the disorder can be diagnosed do not need psychological help.³ Nor is the disorder necessarily the key to the problems of those who present in clinics. Moreover, whether the disorder is a clinical entity robust enough to have a natural cause traceable over decades is debatable. Few veterans say that war service left no mark on them, but most live unremarkably.

The authors of the paper state that post-traumatic stress disorder is often missed because doctors are not aware of it; in fact, it is now highly fashionable. As with other longstanding psychiatric diagnoses, we must take account of concerns about social labelling and the sick role. Human responses to war are multiply determined, and we must remember the inherent limitations of a narrowly medicalised framework in this complex arena.

DEREK SUMMERFIELD
Principal psychiatrist

Medical Foundation for the Care of
Victims of Torture,
London NW5 3EJ

FRANCESCA HUME
Senior psychologist

Department of Forensic Psychiatry,
St George's Hospital,
London SW17 0RG

1 Bende B, Philpott R. Persistent post-traumatic stress disorder. *BMJ* 1994;309:526-8. (20-27 August.)

2 Summerfield D, Hume F. War and post-traumatic stress disorder: the question of social context. *J Nerv Mental Dis* 1993;181:522.

3 Hume F, Summerfield D. After the war in Nicaragua: a psychosocial study of war wounded ex-combatants. *Medicine and War* 1994;10:4-25.

Former prisoners of war show symptoms

EDITOR,—In the discussion about an 80 year old man presenting with a primary diagnosis of post-traumatic stress disorder with comorbid alcohol misuse and depression the comment is made that similar symptoms have emerged at retirement in former prisoners of war seen at Liverpool School of

Tropical Medicine.¹ Over recent years people who were prisoners of war in the Far East have been screened for tropical diseases at Royal Air Force Hospital Wroughton. This has given us the opportunity to examine these veterans for psychological symptoms and to give at least an approximate answer to the implied question in the paper about their prevalence.

Goldstein *et al*, who studied 32 Americans who had been prisoners of war in the Far East, found a prevalence of psychological symptoms of 50%.² In our sample of 30 British people who had been prisoners of war in the Far East (mean age 75.4 years) we found that 30% fulfilled the criteria in the *Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised* for a diagnosis of persistent post-traumatic stress disorder.³ Moreover, 90% had at least one post-traumatic psychological symptom. Our fuller results await publication. We have also noted appreciable comorbidity, and, as in other studies,⁴ major depression has predominated. The emergence of symptoms in later life, including at retirement, has been discussed,⁵ but in our sample (as in the case discussed¹) there was ample evidence that for many people the intervening years had been restricted and blighted by wartime trauma. The possibility of post-traumatic stress disorder in the present cohort of elderly people should not be overlooked.

J C HUGHES
Registrar
L A NEAL
Consultant

Department of Military Psychiatry,
Princess Alexandra's Hospital,
Royal Air Force Wroughton,
Swindon,
Wiltshire SN4 0QJ

1 Bende BC, Philpott RM. Persistent post-traumatic stress disorder. *BMJ* 1994;309:526-8. (20-27 August.)

2 Goldstein G, van Kammen W, Shelly C, Miller DJ, van Kammen DP. Survivors of imprisonment in the Pacific theatre during world war II. *Am J Psychiatry* 1987;144:1210-3.

3 American Psychiatric Association. *Diagnostic and statistical manual of mental disorders, third edition, revised*. Washington, DC: APA, 1987.

4 McFarlane AC, Papay P. Multiple diagnoses in posttraumatic stress disorder in the victims of a natural disaster. *J Nerv Ment Dis* 1992;180:498-504.

5 Busuttill W, Aquilina C, Busuttill A. Early life trauma, infertility and late life paranoia: a relationship with post traumatic stress disorder? *Int J Geriatr Psychiatry* 1993;8:693-5.

One and two sided tests of significance

Statistical hypothesis should be brought into line with clinical hypothesis

EDITOR,—I believe that J Martin Bland and Douglas G Altman's strong preference for two sided significance tests results in one sided advice.¹ The wide acceptance of two sided statistical alternative hypotheses in the case of clearly one sided clinical or biological hypotheses has always amazed me. To my mind the statistical alternative hypothesis should be brought into line with the clinical hypothesis more often, even if this means a shift towards one sided tests. If on the basis of scientific considerations the clinical hypothesis is one sided then so should be the alternative statistical hypothesis, which then more precisely reflects the expectation of the clinical investigator.

Although statistical decisions depend on an outcome variable having or not having some critical value, in the case of an extreme result in an unexpected direction one faces the same practical problem regardless of the choice of a one sided or a two sided test and even regardless of the precise P value. The problem is to decide whether a new treatment is harmful or simply ineffective (if it is ineffective the unexpected outcome will be attributed to chance).

The authors' discussion of the outcome of the