

## POST-TRAUMATIC STRESS DISORDER (PTSD) TREATMENT EXPERIENCE IN BEDFORD EAST - AUDIT AND REAUDIT

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### SUMMARY

Post-traumatic stress disorder (PTSD) can develop following exposure to a stressful event of an exceptionally threatening or catastrophic nature. Symptoms experienced by PTSD sufferers can include re-experiencing the trauma through intrusive 'flashbacks' and recurrent dreams or nightmares, avoidance of stimuli associated with the stressor, hyperarousal, emotional blunting and an inability to remember aspects of the period of exposure to the stressor.

We performed an audit of the treatment of PTSD in patients under the care of the Bedford East Mental Health Team to examine the psychological and pharmacological treatments currently being used and compared these with data collected in 2008.

In summary, in the last 2 years there has been an increase in the identification of PTSD patients in Bedford East. These patients are a group with high levels of comorbidities and risk factors, and are challenging to treat. As a result of this, a wide range of agents including antidepressants with augmentation, mood stabilizers and antipsychotic agents are used in their treatment, many of which are outside of NICE guidelines. There appears to be less availability of psychological therapy in these patients than we would expect. We discuss reasons for this and suggest possible solutions.

**Key words:** Post-traumatic stress disorder – psychological interventions – antidepressants – antipsychotics - mood stabilisers - comorbidities

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### INTRODUCTION

Post-traumatic stress disorder (PTSD) can develop following exposure to a stressful event of an exceptionally threatening or catastrophic nature. Symptoms experienced by PTSD sufferers can include re-experiencing the trauma through intrusive 'flashbacks' and recurrent dreams or nightmares, avoidance of stimuli associated with the stressor, hyperarousal, emotional blunting and an inability to remember aspects of the period of exposure to the stressor (WHO). These symptoms can cause significant impairment of function and reduction in quality of life for sufferers.

A range of different treatments, both psychological and pharmacological have been used to treat PTSD. Current UK guidelines published by the National Institute of Clinical Excellence (NICE 2005) recommend that trauma focused psychological therapies, such as trauma focused cognitive behavioural therapy (CBT) or eye-movement desensitisation and reprogramming (EMDR), should be used first line in the treatment of PTSD with pharmacological treatments used as second line in certain cases. The drugs recommended by NICE in for the treatment of PTSD are paroxetine, mirtazepine, amitriptyline and phenelzine, with olanzapine as an adjunct in some cases.

We performed an audit of the treatment of PTSD in patients under the care of the Bedford East Mental Health Team to examine the psychological and pharmacological treatments currently being used and compared these with data collected in 2008. We found large differences in treatments currently given and

national guidelines and also an increasing use between 2008 and 2010 of multi-drug therapy in this population of difficult to treat patients.

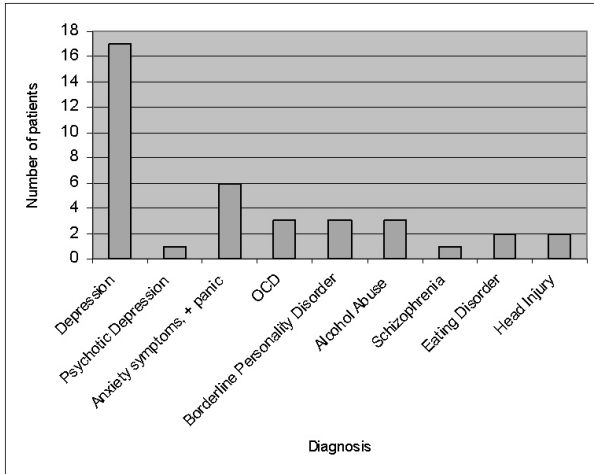
### METHODS

A search was conducted on a computer database of 1060 patients who were under the care of the Bedford East Mental Health Team, UK in August 2010 to identify those patients with a diagnosis of PTSD. A total of 64 patients with PTSD were identified (25 male, 39 female). The gender, risk factors, co-morbidities, psychological therapy and pharmacological therapy of these patients was re-audited. The results of this 2010 re-audit were then compared with those obtained from an audit performed on Bedford East patients with PTSD in November 2008.

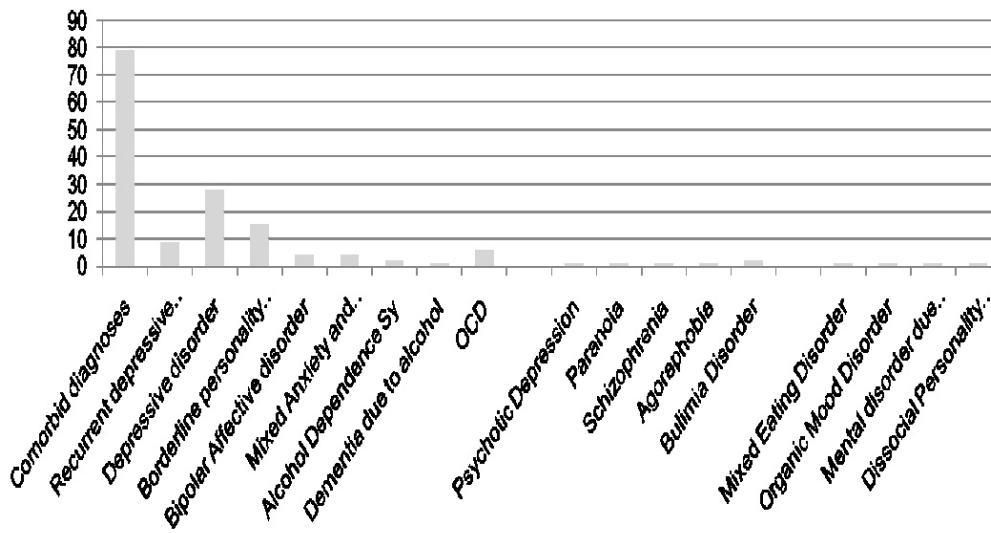
### RESULTS

In the 2010 re-audit, 64 patients suffering from PTSD were identified, increased from 26 patients in 2008. Of these patients 39% (25 patients) were male compared with 50% (13 patients) in 2008.

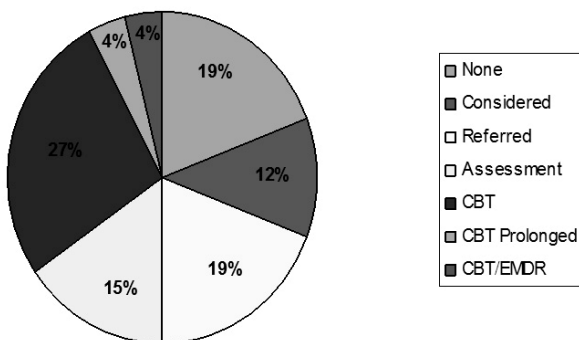
The number and types of comorbid diagnoses present in the 2008 and 2010 data were assessed (Figure 1 and 2). In the 2008 data 38 comorbid diagnoses were present and 79 in the 2010 data. In some cases more than one comorbid diagnosis was present in a patient accounting for the greater number of comorbid diagnoses than patients.



**Figure 1.** Number of patients with each comorbid diagnosis (2008 data)



**Figure 2.** Number of patients with each comorbid diagnosis (2010 data)



**Figure 3.** Psychological therapy status (2008 data)

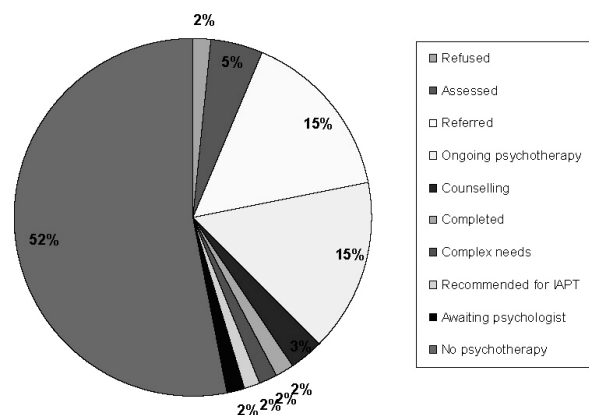
In the 2010 data we found that 9 patients were receiving a second antidepressant agent as augmentation (Figure 7), while no patients were receiving more than one antidepressant in the 2008 data.

Antipsychotic medications were in use in 23% of patients (6 patients) in the 2008 data and this had

In the 2010 group, the number of patients with risk factors was also assessed. 84% of the patients (54 of 64 patients) were found to have major risk factors and 8 patients with major risk factors present had been discharged.

The psychological therapy status of the patients was assessed (Figure 3 and 4) and the 2008 and 2010 data compared. The percentage of patients who were currently receiving or had completed psychological therapy was 35% (9 patients) in 2008 but this had decreased to 20% (13 patients) in 2010.

Pharmacotherapy use was also assessed. Antidepressant therapy was used in 81% (21 patients) of patients in the 2008 data and this had slightly increased to 91% (58 patients) in the 2010 data. A range of different antidepressant agents were being used in these patients (Figure 5 and 6), but the most common class used was serotonin selective reuptake inhibitors used in 50% (13 patients) in 2008 and 59% (38 patients) in 2010.



**Figure 4.** Psychological therapy status (2010 data)

increased to 38% (25 patients) in the 2010 data. The types and doses of antipsychotic medications used in 2008 and 2010 are shown in figure 8 and 9 respectively.

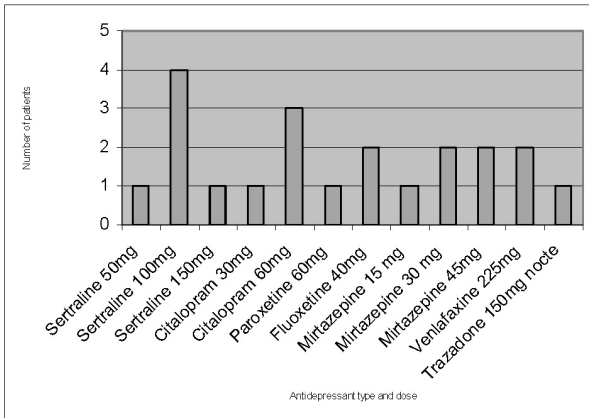


Figure 5. Antidepressant therapy (2008 data)

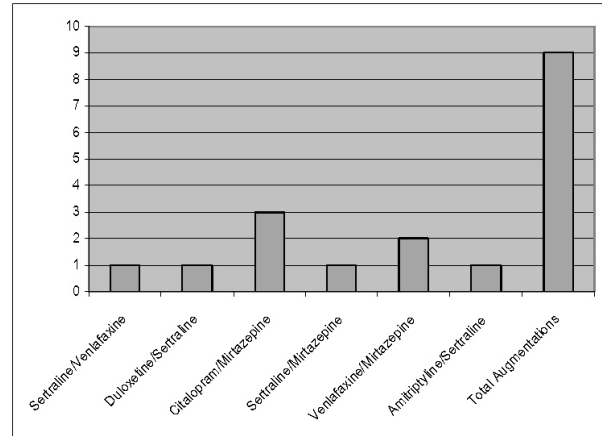


Figure 7. Use of antidepressant augmentation (2010 data)

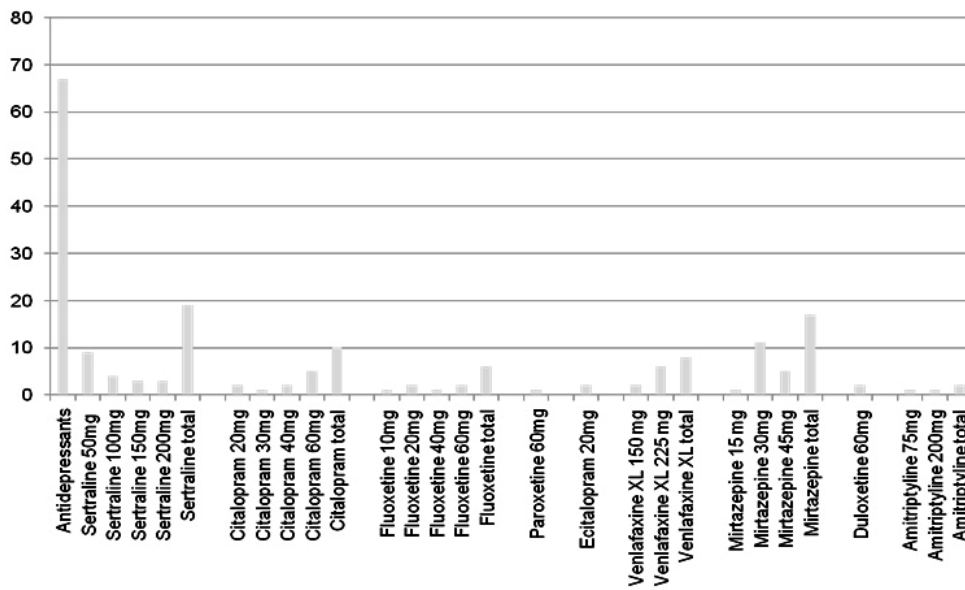


Figure 6. Antidepressant therapy (2010 data)

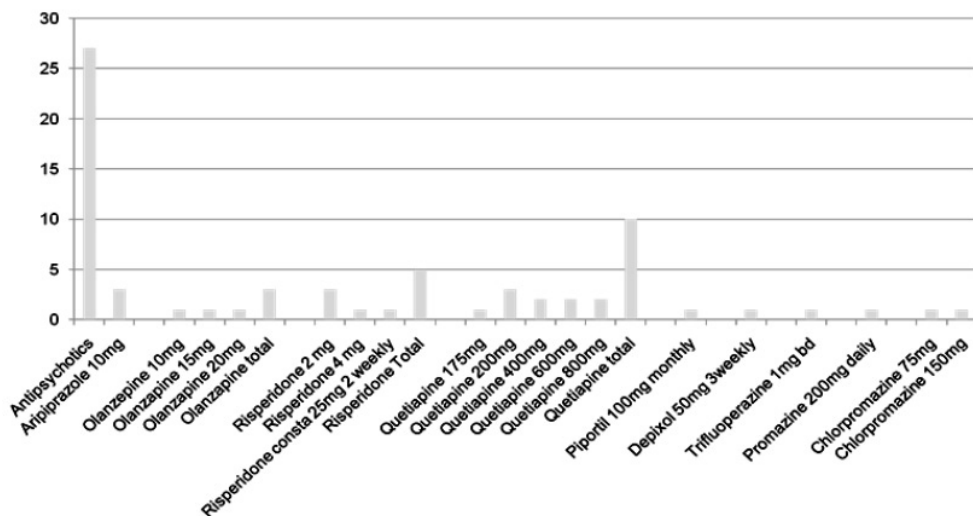
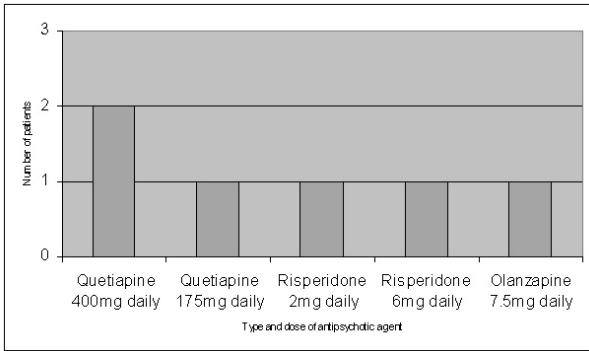
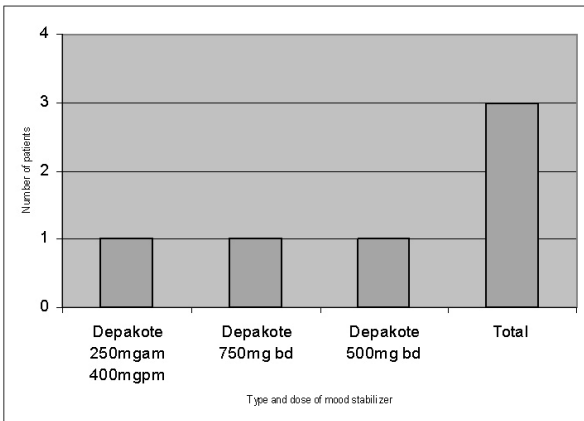


Figure 9. Antipsychotic agents (2010 data)

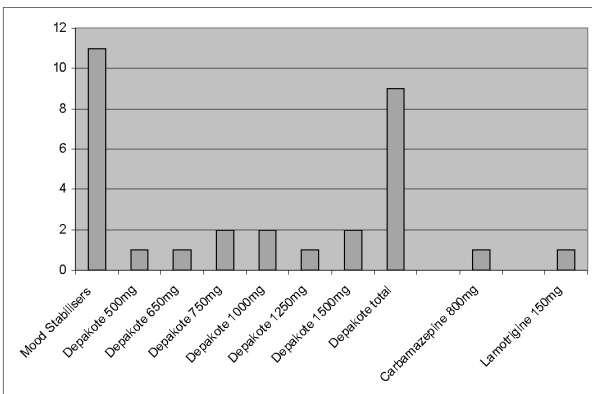


**Figure 8.** Antipsychotic agents (2008 data)

Mood stabilizers were in use in 12% of patients in 2008 (3 patients) and 17% (11 patients) in 2010. The types and doses in use are shown in figure 10 and 11.



**Figure 10.** Mood stabilizers (2008 data)



**Figure 11.** Mood stabilizers (2010 data)

## DISCUSSION

In this study we have compared the comorbidities and management of patients with PTSD in the Bedford East Mental Health Team patient population at two different time points. We observed changes over time in the treatment of these patients and also differences between the management of these patients and national guidelines at both time points.

We observed an increase in the number of patients with PTSD in the Bedford East Mental Health Team patient population between 2008 and 2010 from 26 patients to 64 patients. This is likely to be due to increased awareness of PTSD and more accurate identification of these patients. However, over the period of time, several patients had been transferred into Bedford East CMHT as a result of changes in the catchment area of the local CMHTs.

The majority of patients have at least one comorbid psychiatric diagnosis (88% in 2010, 56 out of 64 patients). The most common comorbid diagnosis in both 2008 and 2010 was depression. In 2010, 84% (54 of 64 patients) also displayed major risk factors. This suggests that these patients are a complex and high risk group.

PTSD can be a chronic and difficult to treat condition. There is evidence to suggest that psychological therapies can be effective as a treatment for PTSD and current UK guidelines recommend trauma-focused psychological therapies as a first line treatment for PTSD (NICE 2005). A meta-analysis by Bradley et al., which included data from 26 studies, found that 67% of patients who completed treatment with psychotherapy no longer met criteria for PTSD following treatment (Bradley 2005). Another meta-analysis by Bisson and Andrew that included data from 33 trials found that trauma-focused CBT, EMDR, stress management and group CBT were all effective in the treatment of PTSD compared to standard care/waiting list (Bisson 2007). The same meta-analysis also found that trauma-focused CBT, EMDR and stress management were more effective than the other psychological therapies they assessed.

However, despite evidence to suggest the efficacy of psychological therapy in the treatment of PTSD, in both 2008 and 2010 the majority of patients in our population were not yet receiving any psychological therapy. In 2008 only 35% of patients (9 patients) were currently receiving psychological therapy and by 2010 this has decreased to only 20% (13 patients) who were receiving or had completed psychological therapy. The low number of patients receiving psychological therapies is likely to be due to the lack of availability of these resources and long waiting times. However, there are other factors. Many patients who suffer from PTSD in our group are patients who first developed this condition as a result of the Balkan Wars of the 1990s and who came to the UK quite some time later, and thus the diagnosis of PTSD in these patients was delayed (Jones 2009). By contrast, patients who contracted PTSD in this country were usually identified and treated soon after the development of the illness (Jones 2009). The treatment of this second group is usually successful, in the sense that it is possible to enable them to return to normal functioning (Jones 2009). One difficulty, however is that it is likely that in many patients with PTSD, symptoms such as flashbacks may return from time to time even though normal functioning is resumed. Hence, even in those patients who have

returned to normal functioning, it is difficult to be certain that the condition has ceased to be troublesome, since there is no consensus on the degree of reduction of symptoms which can be considered to be 'a cure' and hence indicates discharge back to primary care. Studies need to be done in the future to determine when it such a point of discharge could be reached.

If symptoms are more complex than PTSD, including personality changes of borderline type, then much more complex psychological interventions are necessary, hence the involvement of complex needs services for some of our patients.

Those of our patients who are refugees and who are ongoing attenders in Outpatients with PTSD present an even more difficult problem. Many have language difficulties, and hence it is difficult to provide psychological therapy. They have had PTSD symptoms for several years, and in coming to the UK, they have often lost skilled jobs and now have difficulty gaining a place in society commensurate with the one they had lost. Hence they are in a position of 'Social Defeat'. This is compounded by shame being an important element of war trauma (Urlic 2009a, b).

In the countries affected by the Balkan Wars, group psychotherapy is used to deal with the very large numbers of patients with PTSD after the wars (Britvić 2006). One group who have described such work have shown that psychotherapy can reduce the intensity of PTSD symptoms, but they comment that the changes in the personality of veterans with PTSD are deeply rooted (Britvić 2006). Hence they point out that traumatic experiences lead to the formation of rigid defense mechanisms, which cannot be significantly changed by long-term group psychotherapy (Britvić 2006). It seems that these comments may explain the difficulties we appear to have in treating this very challenging group of patients. One solution to the difficulties demonstrated by these patients could be the development of such psychotherapeutic groups. Such groups could be organized by an NGO, specifically organized to support patients of Balkan origin.

While many patients were not receiving any psychological therapy, we found that pharmacological therapy was common in our patients. The majority of patients in both 2008 and 2010 were found to be receiving antidepressant therapy. A range of different types of antidepressant therapy are in use in this population including serotonin selective reuptake inhibitors (SSRIs), serotonin- noradrenergic reuptake inhibitors (SNRIs), tricyclic antidepressants and noradrenergic and specific serotonergic antidepressants (NaSSAs). In most cases (50% in 2008 and 59% in 2010) the type of antidepressants used was an SSRI. Only 1 patient of the 21 patients receiving antidepressants in 2008 and 20 of the 58 patients given antidepressants in 2010 were on one of the antidepressants recommended by NICE (paroxetine, mirtazepine, amitriptyline and phenelzine).

In 2008 patients receiving antidepressant therapy were all receiving only a single antidepressant while by 2010, 9 patients were receiving augmentations of a second antidepressant agent. These augmentations are not recommended by NICE for PTSD (NICE 2005). Their use reflects the difficulty of treating these patients.

There has also been an increase in the use of antipsychotic agents to treat PTSD in this population. Of the patients receiving these agents in 2010, all 25 had major risk factors identified. One patient had schizophrenia as a comorbidity and one had psychotic depression but the other 23 patients did not suffer from psychosis.

Similarly, the use of mood-stabilizers has also increased. In 2010, only 2 of the 11 patients treated with these agents suffered from bipolar affective disorder as a comorbidity. The increased use of both antipsychotic agents and mood-stabilizers in our PTSD patients reflects complex multiple symptoms and risks presented by these patients and the difficulties in treating them.

The use of pharmacotherapy over psychological therapies is against NICE guidelines, which recommend psychological therapies as first line treatment. The use of pharmacological therapy over psychological therapy in our patient group is probably due to the better availability of this treatment type. A number of studies have looked at the efficacy of different pharmacological therapies in PTSD and many of these have suggested that there may be a role for pharmacotherapy in the treatment of PTSD (Kozarić-Kovačić 2008). Unfortunately, many of these studies are lacking in sample size, randomization and blinding. A meta-analysis in 2006 looking at data from 35 short term studies found a significant reduction in symptom severity in the medication treated group compared to the placebo group in 17 studies (Stein 2006). However, this meta-analysis was unable to demonstrate a superior efficacy of a particular class of drug. In order to properly elucidate the efficacy of pharmacological treatment in PTSD further work in the form of large scale, randomized controlled trials is still needed.

In summary, in the last 2 years there has been an increase in the identification of PTSD patients in Bedford East. These patients are a group with high levels of comorbidities and risk factors, and are challenging to treat. As a result of this, a wide range of agents including antidepressants with augmentation, mood stabilizers and antipsychotic agents are used in their treatment, many of which are outside of NICE guidelines. Difficulties in providing psychological therapy for some of these patients has been observed. This highlights the need for better access to and provision of these services.

We suggest the development of a group psychotherapy service oriented to the culture of the refugees among our patients.

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