

## AN AUDIT TO IDENTIFY FACTORS AFFECTING RESPONSE TO TREATMENT AMONG DEPRESSED PATIENTS WHO HAVE DOCUMENTED SUICIDAL IDEATION/ATTEMPTS IN A BEDFORDSHIRE COMMUNITY MENTAL HEALTH TEAM

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### SUMMARY

**Introduction:** In recent years there has been a general move towards treating depressed patients in the community if at all possible. One factor that may reduce the likelihood of discharge from secondary care is suicidality (Butler et al. 2010). The aim of this audit was to identify factors associated with continued suicidality among patients in a CMHT.

**Subjects and methods:** We searched an anonymised database of patients and identified all those with previously documented suicidal thoughts or attempts. We also noted the presence of factors such as alcohol problems, drug problems, augmentation therapy and 'other risk' factors (e.g. financial problems or homelessness). We then looked at clinical notes to find out whether or not, according to the latest clinic letter, patients were still reporting suicidality. This facilitated comparison of the aforementioned factors between the group of patients in which suicidality was still present (group N) and the group of patients in which suicidality was no longer a feature (group Y).

**Results:** Of the 56 patients with suicidal thoughts or attempts there were 44 in group N (79%) and 12 in group Y (21%). Overall, alcohol problems, drug problems and 'other' risk factors were proportionally more common among group Y than group N, although sometimes the difference was marginal. Conversely, the percentage of patients on augmentation therapy was greater in group N than group Y. When considering individual diagnostic categories the above trends generally stood for the F32 category, although not necessarily for the F33 category.

**Discussion:** The audit provides an insight into the sorts of factors that might influence outcomes among depressed patients. However, there are limitations to the audit such as small sample size and lack of a fixed follow-up period.

**Conclusions:** Although the results are suggestive, it is difficult to make firm conclusions about patient outcomes on the basis of this data. The audit provides a useful starting point, especially in considering the treatment of patients within the BECMHT. However, further research on a wider scale is required before more general conclusions can be made about factors influencing response to treatment among depressed patients.

**Key words:** depression - risk factors – suicidality - substance abuse – alcohol – abuse - augmentation strategies

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### Introduction

In recent years there has been much emphasis on treating depressed patients in primary care if at all possible (Agius et al. 2005).

An audit of patients in the Bedfordshire East Community Mental Health Team (BECMHT) identified suicidality as one factor – along with alcohol and drug problems – that may negatively influence outcomes as indicated by reduced rates of discharge back to primary care (Butler et al. 2010).

The purpose of the current audit was to enhance understanding of factors influencing response to treatment among patients with previously documented suicidal thoughts/attempts.

Alcohol and drug problems were among the factors selected for investigation. In addition, we considered the broad category of "other risk factors" (history of child abuse, homelessness, financial problems etc) as well as rates of augmentation therapy and also non-modifiable risk factors such as age and sex.

In this way, we hoped to identify factors that were associated with continued suicidality and thus might be acting as a barrier to the overall aim of treating patients in the community.

### Subjects and methods

From an anonymised database of over 100 patients treated by the BECMHT, we identified 58 patients with documented suicidal thoughts or attempts. In terms of ICD diagnosis, 29 were F32 ('depressive episode'), while 25 were F33 ('recurrent depressive episode'). Of the remaining patients, 3 were F44 ('mixed anxiety and depression') and 1 was 'uncoded' (no known diagnostic category, but our records of the patient included the phrase 'depression'). For each patient, various factors were documented: (1) age; (2) gender; (3) alcohol problems; (4) drug problems; (5) use of augmentation therapy; and (6) 'other' factors.

We viewed patients to be taking augmentation therapy if their depression was treated with anything

other than a single anti-depressant. Thus, examples of augmentation therapy include 2 antidepressants, an antidepressant plus a mood stabiliser, or an antidepressant plus an antipsychotic. Where augmentation therapy was present, it was recorded whether or not patients were on regimens outlined in current NICE guidelines or in the STAR\*D study (Rush et al. 2006).

We then examined the clinical notes to see whether or not, according to the latest clinic letter, patients were still reporting either suicidal thoughts or suicide attempts. This allowed comparison of the aforementioned factors between the group of patients in which suicidality was no longer present (group N) and the group of patients in which suicidality was still a feature (group Y).

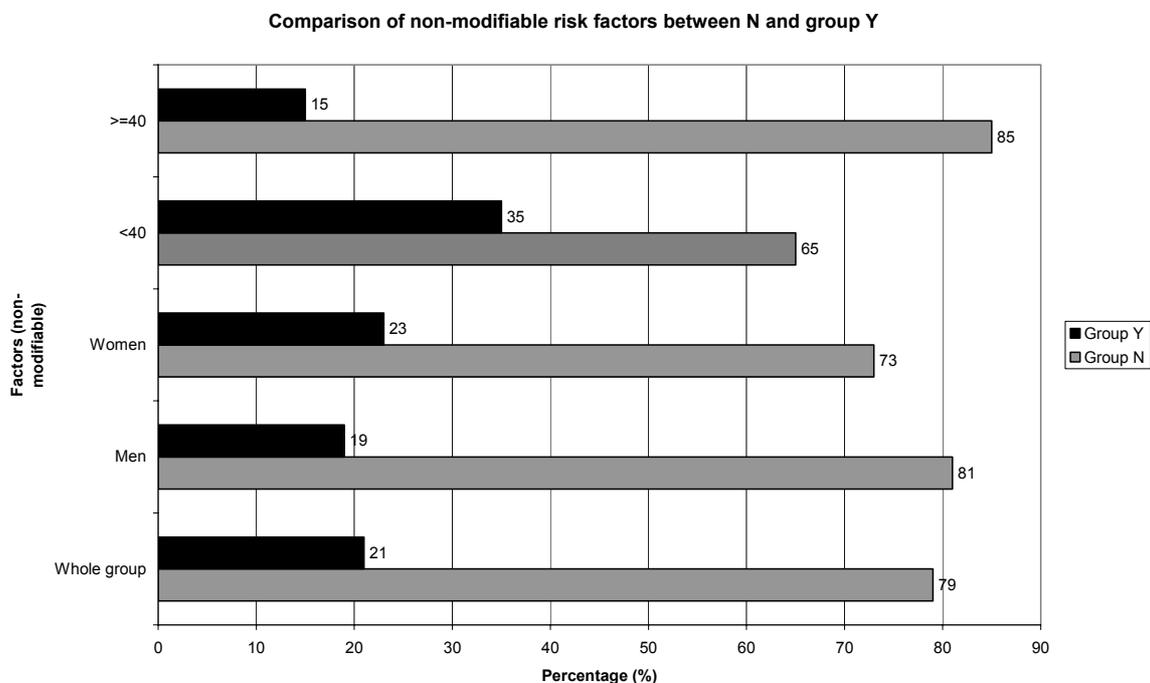
Having examined the clinical notes, we discounted 2 patients from the F32 diagnostic category because no

information about their current suicidality status was available. Therefore, the final number of patients included in the audit was 56 (with 27, not 29, patients in the F32 group).

## Results

According to the most recent clinic letter, 44 out of the 56 patients (79%) were no longer reporting suicidality, while suicidality was still present in the remaining 12 patients (21%).

As Fig. 1 shows, comparison of group N and group Y revealed that, the percentage of alcohol problems was slightly higher among patients still reporting suicidality (25% vs. 20%), as were 'other' risk factors (33% vs. 27%). Similarly, we found that drug problems were proportionally more frequent in group Y (17% vs. 7%).



**Figure 1.** Comparison of group N and group Y revealed that, the percentage of alcohol problems was slightly higher among patients still reporting suicidality

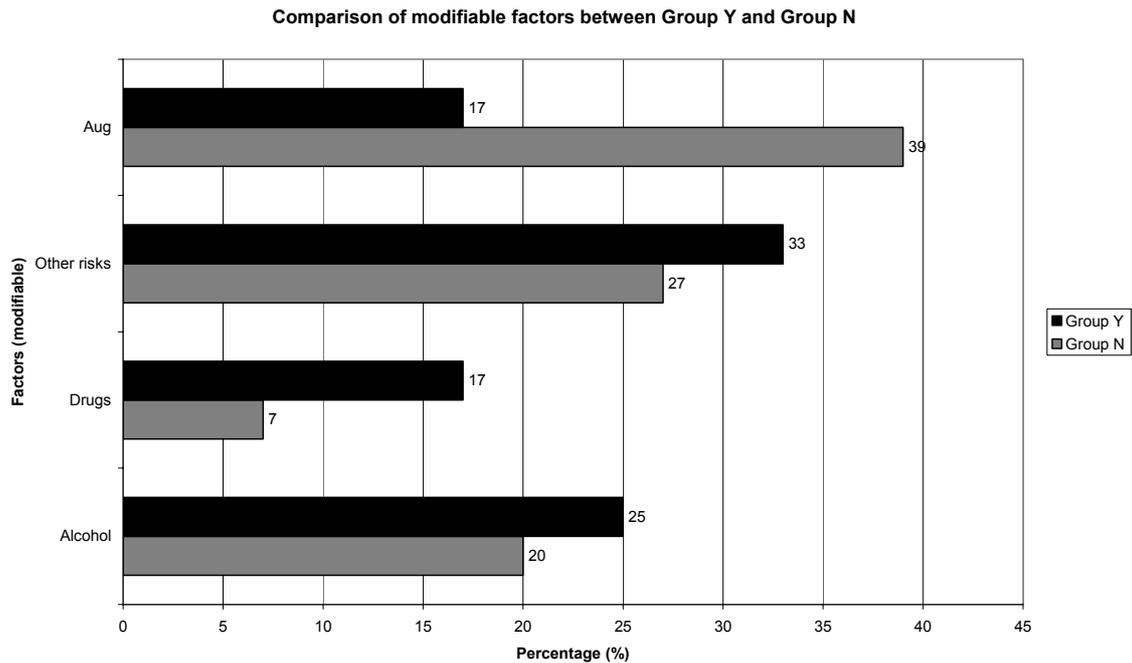
By contrast, a greater proportion of patients in group N were taking augmentation therapy (39% vs. 17%). In both groups, a considerable number of patients were taking combinations of drugs not included in either the NICE guidelines or in the STAR\*D study (65% in group N; 50% in group Y).

In terms of non-modifiable risk factors – see Fig. 2 – a slightly higher percentage of women than men were still reporting suicidality (23% vs. 19%). Also, the persistence of suicidality was proportionally more common among younger patients (<40 years) compared to patients in the older age group (35% vs. 15%).

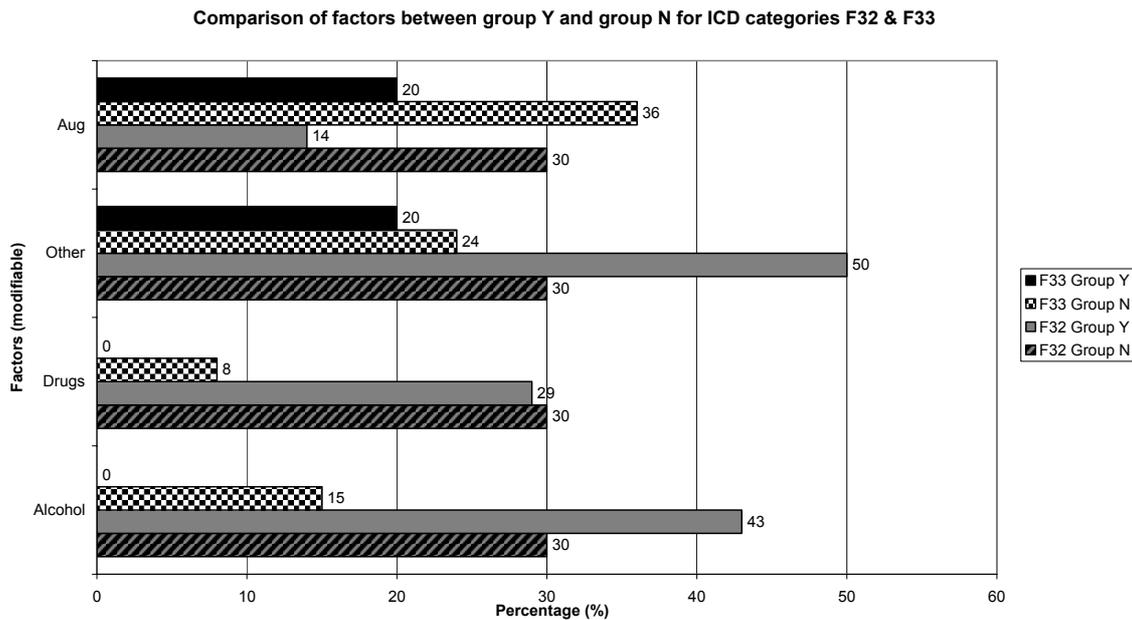
As summarised in Fig. 3, we also compared group N

and group Y within the two largest ICD diagnostic categories (F32 and F33). In the F32 category, group N consisted of 20 patients (74%), while group Y contained only 7 patients (25%). In the F33 category, there were 19 patients (76%) in group N and 6 patients (24%) in group Y.

In the F32 category, alcohol problems were present in a higher proportion of patients in group Y compared to group N (30% vs. 43%). This was also the case for 'other' risk factors (30% vs. 50%). While the percentage of drug problems was similar in both groups (29% vs. 30%), augmentation therapy featured more highly among patients in group N (30% vs. 14%).



**Figure 2.** Non-modifiable risk factors



**Figure 3.** Comparison of group N and group Y within the two largest ICD diagnostic categories (F32 and F33)

Thus, the trends seen in patients within the F32 diagnostic category were overall very similar to the trends previously described for the sample as a whole. This was not the case for the F33 category, where the percentage of alcohol problems, drug problems and ‘other risk’ factors was actually higher in group N (15% vs. 0%; 8% vs. 0%; and 24% vs. 20% respectively). Having said this, augmentation therapy was – once again – more prevalent among patients no longer reporting suicidality.

### Discussion

BECHMT should be pleased that overall patients seem to be responding to treatment, at least in terms of a reduction of suicidal thoughts or attempts. Of the 56 patients with previously documented suicidality, only a very small number (12 or 21%) were placed in group Y.

Factors like alcohol problems, drug problems and ‘other’ risk factors were proportionally higher among group Y than group N, although sometimes the

differences were marginal. This suggests that such factors may negatively affect response to treatment among patients with a history of suicidal thoughts or attempts.

In the F32 diagnostic category, the difference between group Y and group N with respect to both alcohol problems and ‘other’ risk factors was more pronounced than in the sample as a whole. Thus, it is possible that these factors may be particularly important in influencing outcomes in this diagnostic category of patients.

By contrast, in the F33 diagnostic category, none of alcohol problems, drug problems or ‘other’ risk factors was proportionally increased among group Y. While this could indicate that such factors are less important in determining outcomes among this diagnostic category, it could also relate to the weaknesses in the study that will be discussed below.

In addition, non-modifiable risk factors such as age and sex appear to have some influence on patient outcomes. According to our data, being female slightly increases the likelihood of continued suicidality as does being under the age of 40 years. Although the risk factors themselves cannot be altered, such findings are useful because they indicate groups of patients that may require particular attention when it comes to treating mental health problems.

The percentage of patients taking augmentation therapy was consistently higher among group N than group Y. This was the case both when looking at the whole sample and when looking at specific diagnostic categories of patients. A possible explanation is that patients on augmentation therapy are ‘better’ treated for their depression and are therefore less likely to report suicidality.

Interestingly, a high proportion of the patients on augmentation therapy were taking regimens not included in the NICE guidelines or in the STAR\*D trial. Again this was true not only for the sample as a whole, but also for the F32 and F33 diagnostic categories. This result, relating to the specific nature of augmentation therapies, is perhaps not so surprising given the findings of an earlier audit conducted in the BECMHT (Butler et al, 2010). In this audit, the drug regimens – ranging from no medication to 4 drug augmentation therapy – of 299 depressed patients were noted. Of these patients, 95 were found to be on augmentation therapy not consistent with NICE guidelines or the STAR\*D trial.

It is possible that some patients might be on alternative, yet still evidence-based, therapies. For instance, 4 patients in the sample were taking the atypical antipsychotic olanzapine as augmentation therapy. According to the RCT conducted by Shelton et al. (2001), augmentation with olanzapine provides significant improvement in the relief of depression, at least when used in combination with the SSRI fluoxetine.

As indicated previously, the audit has some limitations. For instance, the sample size, particularly of group Y, is small. As a result, it is not possible to draw firm conclusions about patient outcomes on the basis of this data. However, given that the audit considers patients being treated by a single CMHT, a small sample is almost inevitable. Even so, the audit provides a starting point in thinking about the sorts of factors that might influence response to treatment among depressed patients.

In addition, there is no fixed follow-up period. This means that patients in group Y may have been under the care of BECMHT for less time than patients in group N, providing a possible explanation for their continued suicidality. Thus, the audit is simply snapshot of our sample at a particular point in time. While our comparisons of group Y and group N are suggestive, the lack of a standardised follow-up period clearly lessens the power of our results.

## Conclusions

The audit clearly shows that the overriding trend among patients treated by BECMHT is a reduction in reported suicidal thoughts or attempts. The audit also indicates that factors such as alcohol problems, drug problems and ‘other’ risk factors may have a negative effect on patient outcomes, whereas augmentation therapy may have a positive one. Non-modifiable risk factors such as being female or being younger may also serve as a barrier to successful treatment.

However, given the previously described limitations in the audit, it is not possible to make solid conclusions about the factors influencing patients’ response to treatment on the basis of this data. In the future it would be useful to substantiate the results of this audit with a further study conducted in a larger group of patients over a given period of time.

The audit also revealed interesting details about the prescribing practices within BECMHT – specifically the high number of patients on augmentation therapies not described in the NICE guidelines or in the Star\*D trial. Further investigation into the rationale for such alternative therapies could form the basis for future research.

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