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WAS CIPRIANI RIGHT?
Audits to compare discharge rates and suicidality between antidepressant Monotherapies used in a British Community Mental Health Team

Mark Agius[1,3], Jenny Gardner[2], Kathy Liu[2] & Rashid Zaman[1,3]

[1]South Essex Partnership University Foundation NHS Trust, UK
[2]Clinical School, Cambridge University, UK
[3]Department of Psychiatry, University of Cambridge, UK

SUMMARY

Introduction: *A Metanalysis by Cipriani recently showed that certain antidepressants were more effective and better tolerated than others. We wished to see whether these findings were reflected in the outcomes of depression treatment in our Community Mental Health Team (CMHT).*

Subjects and Methods: *We related medication choice and dosage range to outcomes of treatment as reflected by discharge rates and suicidality.*

Results: *In this paper we emphasize the relationship of Dose Range to outcome.*

Discussion: *Our results are in accord with those of Cipriani. We note that Prescription of 'the four' was associated with a greater percentage of patients discharged from the clinic than 'the others'. Sertraline was the antidepressant most likely to reduce suicidality in our sample. For patients with unipolar depression, discharge rates were higher when they were prescribed one of the four medications indicated by Cipriani and highest when prescribed escitalopram. For patients who also had other indications, discharge rates were higher for the group other than the four antidepressants identified by Cipriani and highest for fluoxetine. Regarding Dose Ranges, we note that wheras many patients had their dosage titrated upwards from the starting dose, most did not have the dosage titrated to the highest dose of the relevant medication.*

Conclusion: *It does appear that the antidepressants identified by Cipriani are effective compared with other monotherapies. Medication doses need to be optimised in order to achieve optimal treatment in Depression. Our results suggest that co-morbid undiagnosed other mental illness may often be a cause of 'resistant depression'. We recommend that all CMHTs should carry out audits of their prescribing practice in order to optimise treatment outcomes.*

Key words: *anti-depressants – prescribing – audit – suicidality - discharge rates*

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Introduction

Recently, Cipriani has demonstrated that there are differences in the efficacy and acceptability of commonly prescribed antidepressants (Cipriani et al. 2009). This meta-analysis showed that escitalopram, sertraline, venlafaxine and mirtazapine were the most effective in the acute treatment of unipolar depression in adults.

We aimed to analyse prescribing patterns of anti-depressant monotherapies in Bedford East Community Mental Health Team,which is a typical British Community Mental Health Team, using data which had been gathered before the publication of the Cipriani Metanalysis. Thus we wished to find out whether in practice our choices of antidepressants through our experience accorded with Cipriani's mata-analytic findings.We also aimed to compare the efficacy of antidepressant monotherapies in patients with unipolar depression or patients with depressed mood and also other psychiatric indications within Bedford East Community Mental Health Team, using discharge rates from the out-patient clinic as the outcome measure.

In this audit, these most effective antidepressants will be referred to as 'the four', whilst other antidepressants will be referred to as 'the others'.

Subjects and Methods

We included all patients on an antidepressant monotherapy in Bedford East Community Mental Health Team in our analysis (206 patients in total). We examined the clinical notes for each patient to assess whether they were diagnosed with unipolar depression or another psychiatric condition, and whether they had been discharged from the out-patient clinic after being prescribed the antidepressant. This allowed us to calculate discharge rates for each antidepressant monotherapy. We also identified patients who were suicidal before treatment, and after treatment. Thus we used both changes in suicidality and discharge rates as outcome measures for antidepressant treatment.

Results

Our results have in the main been published elsewhere (Agius et al. 2010, Agius et al. 2010)**.** We found that The most frequently prescribed antidepressant monotherapy was citalopram. Prescription of 'the four' was associated with a greater percentage of patients discharged from the clinic than 'the others'. Sertraline was the antidepressant most likely to reduce suicidality in our sample. For patients with unipolar depression,

Table 1. Dose ranges of anti-depressants described in our study

Dose ranges for patients Suffering from Depression	
Mirtazepine	
not known	1
15mg	2
30mg	14
45mg	5
Sertraline	
50mg	8
100mg	10
150mg	3
200mg	1
Ecitalopram	
not known	1
5mg	1
10mg	1
15mg	1
20mg	4
30mg	1
Venlafaxine XL	
not known	1
37.5mg	1
75mg	6
150mg	10
225mg	5
300mg	1
Fluoxetine	
20mg	2
40mg	7
60mg	2
Paroxetine	
20mg	3
30mg	0
40mg	0
60mg	1
Citalopram	
10mg	1
20mg	14
30mg	2
40mg	9
60mg	8
Trazodone 100mg daily	1
Lofepramine 140mg daily	2
Amitriptyline ? dose	1
Amitriptyline 75mg daily	2
Amitriptyline 150mg daily	2
Amitriptyline 175mg daily	1
Amitriptyline 200mg daily	1
Imipramine 150mg daily	1
Dosulepine 50mg daily	1
Dosulepine 100mg daily	1
Dose ranges for patients With Other Diagnoses	
Mirtazepine	
not known	0
15mg	3
30mg	2
45mg	2
Sertraline	
50mg	6
100mg	2
150mg	1
200mg	1
Ecitalopram	
20mg	2
Venlafaxine XL	
75mg	3
150mg	2
225mg	1
Fluoxetine	
10mg	1
20mg	2
40mg	1
60mg	1
Paroxetine	
20mg	2
30mg	2
40mg	2
60mg	2
Citalopram	
Dose Unknown	1
10mg	2
20mg	3
30mg	1
40mg	1
60mg	1
Trazodone 50mg daily	1
Trazodone 150mg daily	1
Trazodone 225mg daily	1
Lofepramine 250mg daily	1
Amitriptyline 25mg daily	1

discharge rates were higher when they were prescribed one of 'the four' and highest when prescribed escitalopram. For patients with other indications, discharge rates were higher for 'the others' and highest for fluoxetine. The other indications to which we refer included patients with Bipolar II Disorder, Post Traumatic Stress Disorder, and Borderline Personality Disorder, although Depression was always an important feature in each patient.

One aspect of our study which we have as yet not published are the dose ranges used of the different antidepressants.

This aspect is important because it is important to establish that not only have we tried to use different antidepressants in our work, but that we have, where necessary titrated the dose upwards in order to achieve an optimum response rather than simply settling for the starting effective dose of the medication. One would expect that in a secondary care sample, doses would be titrated upwards for many, indeed most patients.

Below then are the dose ranges tabulated, first for patients who were simply suffering from depression, and then for the patients who are suffering also from another diagnosis and also have depressed mood.

Discussion

A greater percentage of patients with unipolar depression were discharged from clinic compared with patients treated with antidepressant monotherapy for depressed mood and also other psychiatric indications.

This audit in a small group of patients suggests that prescription of 'the four' leads to a higher discharge rate than 'the others'. Regarding suicidality, this audit in a small group of patients suggests that sertraline is the most effective antidepressant monotherapy in reducing suicidality in patients with unipolar depression. It is important to note that there is one important difference between our audit and the Metanalysis of Cipriani. In Cipriani only 12 'newer' antidepressants were compared, thus his work did not study older tricyclics and Monoamine Oxidase inhibitors. Our 'Others ' group included all antidepressant monotherapies except 'the four' identified as superior by Cipriani, thus including the older antidepressants mentioned above. This fact may have influenced our results, but there were in fact very few patients in any group who were on older tricyclics.

As far as dose ranges were concerned, certainly in many patients the dose was titrated upwards from the starting effective dose in many patients, but it is a surprise that in relatively few patients on monotherapies for depression was the dose titrated to the highest accepted dose for the appropriate antidepressant. Arguably, for some patients, doses could be further optimised if appropriate before other treatments such as augmentation strategies need to be considered. What this study does not address is how many patients are also being offered psychological treatments such as CBT in conjunction with pharmacological antidepressant therapies. Furthermore, in these studies we have not taken into account the presence of risk factors, such as the use of alcohol and illicit drugs which may have an impact on the efficacy of anti-depressant medication. It is also noteworthy that relatively few patients are now being prescribed tricyclic antidepressants.

Conclusion

It does appear that the antidepressants identified by Cipriani are effective compared with other monotherapies. The Dose of Antidepressant monotherapies needs to be optimised before other treatment strategies including augmentation strategies and the use of CBTare implemented, but we have not assessed the impact of Psychological Interventions in these audits; this point will be the subject of future studies. We also intend in future to study the impact of the presence of risk factors, such as the use of alcohol and illicit drugs on the effectiveness of anti-depressant medication. Our results suggest that co-morbid undiagnosed other mental illness may often be a cause of 'resistant depression'. We recommend that all CMHTs should carry out audits of their prescribing practice in order to optimise treatment outcomes.

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Correspondence:
Mark Agius, MD
SEPT at Weller Wing, Bedford Hospital
Bedford, Bedfordshire, MK42 9DJ, UK
E-mail: ma393@cam.ac.uk