

AUDIT TO IDENTIFY THE NUMBER OF PATIENTS WITH MULTIPLE DIAGNOSES IN A COMMUNITY MENTAL HEALTH TEAM IN BEDFORD, ENGLAND

Eva Nora Bongards^{1,2}, Rashid Zaman^{3,4} & Mark Agius^{3,4,5}

¹School of Clinical Medicine, University of Cambridge, United Kingdom

²Christ's College, University of Cambridge, United Kingdom

³South Essex University Partnership Foundation Trust, United Kingdom

⁴Department of Psychiatry, University of Cambridge, United Kingdom

⁵Clare College, University of Cambridge, United Kingdom

SUMMARY

Background: Patients with 'simple' mental health problems should be able to be managed exclusively in primary care. It is therefore anticipated that only the more complex cases would be referred to secondary care. In order to test this hypothesis, the number of patients registered with a community mental health team (CMHT) in Bedford, United Kingdom, who had received multiple psychiatric diagnoses in 2010, 2011 and 2013, was determined and analysed.

Method: Using a secure and anonymised Microsoft Excel[®] database that contains all patient data, the proportions of patients with more than one diagnosis were audited and thus determined for the months of August 2010, June 2011 and February 2013. The total number of patients registered was also determined for comprehensiveness. We had established the basic audit standard that every patient should have only one mental health diagnosis if this was possible.

Results: Many patients were indeed found to have received multiple diagnoses. Furthermore, an increase in the proportion of patients with multiple diagnoses was observed; from 23.2% in 2010 to 25.2% in 2011 to 34.3% in 2013.

Discussion: Several psychiatric conditions have been shown to be associated with particular psychiatric co-morbidities, which may be one reason why many of the Bedford CMHT's patients receive multiple diagnoses. Furthermore, the trend observed may reflect improving mental healthcare in primary care and therefore fewer referrals of patients with 'simple' mental health conditions to secondary care, thus causing the CMHT's caseload to become increasingly complex. It may also reflect improving communication between primary and secondary care, which may also lead to fewer referrals. Finally, the trend may merely reflect better use of the available database.

Conclusion: We have found that numerous patients received multiple diagnoses. We have also observed an increase in the proportion of such patients over three years, which may reflect improved management of mental health problems in primary care. Our results may therefore provide an incentive to establish formal shared care of psychiatric patients between primary and secondary care to improve patient management even further. Furthermore, our results reflect the complexity of the cases referred to secondary care, which are far more difficult to treat than those exclusively managed in primary care.

Key words: CMHT - multiple psychiatric diagnoses - shared care

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INTRODUCTION

Patients with mental health problems are treated both in primary and secondary care. We, the authors, believe that the discriminating factor in determining who will be referred from primary to secondary care is the complexity of a particular case. Therefore, we assume that patients referred to community mental health teams (CMHTs) suffer from mental illness that is too complex, complicated and/or difficult to be exclusively managed in primary care. We believe that this includes patients whose conditions are resistant to initial treatment, as well as (and possibly due to) patients suffering from multiple mental health problems.

In order to test this hypothesis, we have carried out an audit examining the numbers of diagnoses patients registered with a CMHT in Bedford, United Kingdom, have been receiving over several years.

MATERIALS AND METHODS

The data of all patients registered with the Bedford CMHT is kept in a secure and anonymised Microsoft Excel[®] database. Data specific to the caseload in the particular month (i.e. excluding patients who had been discharged from the CMHT, referred on or passed away between analyses) in August 2010, June 2011 and February 2013 was analysed for the number of psychiatric diagnoses per patient. The proportions of patients who have more than one diagnosis are presented below. We had established the basic audit standard that every patient should have only one mental health diagnosis if this was possible.

RESULTS

Many of the patients registered with the Bedford CMHT have indeed received multiple diagnoses.

Furthermore, we observed an increase in the proportion of patients with multiple diagnoses from 2010 to 2013. Our data is presented in Table 1 and Figure 1 below.

Table 1. The percentage of patients registered with the Bedford CMHT in August 2010, June 2011 and February 2013 who have more than one diagnosis

Month and year	Percentage of patients with >1 diagnosis
August 2010	23.2
June 2011	25.2
February 2013	34.3

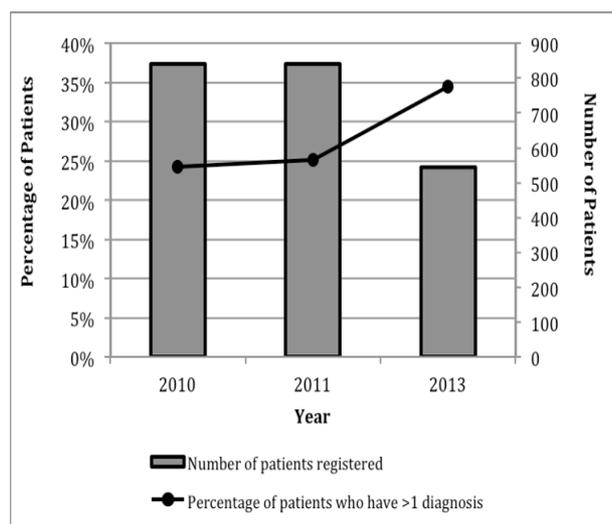


Figure 1. The percentage of patients registered with the Bedford CMHT in August 2010, June 2011 and February 2013 who have more than one diagnosis. The total numbers of patients registered decreases overall and, though not strictly relevant to the present enquiry, is shown to c

DISCUSSION

Our data shows that 34.6% of patients registered with the Bedford CMHT in 2013 have multiple diagnoses. This result is consistent with several studies that have shown that various psychiatric conditions are associated with a number of co-morbidities (Keller 2006, Simon 2004), therefore giving rise to patients receiving multiple diagnoses. For example, bipolar affective disorder has been shown to be frequently associated with anxiety disorders (Keller 2006, Simon 2004). Furthermore, many patients with borderline personality disorder have been found to also experience psychotic episodes (Schroeder 2013), again leading to the patient receiving more than one diagnosis.

As mentioned above, it is likely that patients who have multiple diagnoses, including the ones we have identified in this study, are particularly difficult to treat. Again, this is in line with studies that have shown that, for example, bipolar affective disorder with anxiety is more difficult to treat than bipolar affective disorder alone (Keller 2006, Simon 2004).

By showing that so many of the Bedford CMHT's patients have multiple diagnoses, we confirm our suspicion that patients treated in secondary care represent rather complex cases. However, in order to determine whether they are more complex than cases treated exclusively in primary care, a similar audit should be carried out in a primary care setting.

There are several possible (neurobiological) reasons for multiple mental health problems co-existing in the same patient. One of them is that certain genes and gene polymorphisms have been implicated in multiple psychiatric conditions. An example of this is calcium channel signalling, which was recently implicated in several psychiatric conditions, such as bipolar disorder, autism spectrum disorder, attention deficit-hyperactivity disorder, schizophrenia and major depressive disorder (Smoller 2013). It would therefore not be surprising to see these conditions manifest co-morbidly with each other.

In addition to the 'simple' finding that many of the assessed patients have more than one diagnosis, we also observed a steady increase from 2010 to 2013 in the proportion of these patients with multiple diagnoses. Judging by this trend in only three years, it is possible that, relatively, very few patients were given multiple diagnoses in CMHTs in the more distant past.

There are several possible explanations for the observed increase.

- The management of mental health problems in primary care may be improving. This means that only the most complicated and complex cases would be referred to CMHTs; those patients who have many psychiatric co-morbidities. In the past, however, the referral threshold may have been a lot lower, so that more patients with fewer co-morbidities were seen in secondary care. Even though the total numbers of patients are shown only for a comprehensive view, the large drop from 2011 to 2013 may be another indication for this hypothesis; i.e. that the number of patients discharged from the CMHT stayed constant, but that fewer patients than previously were referred to it.
- There may be more and better communication between primary and secondary care now than in the past, almost to the point of a shared care system. This would allow general practitioners (GPs) to discuss some of the patients they would otherwise refer with a psychiatrist, and to then continue to treat them in primary care alone.
- Diagnostic criteria now may be applied more sensitively, or may be used more strictly, such that more conditions are being identified, which were previously missed.
- The increasing trend may be misleading, since doctors in the CMHT may simply be using the Microsoft Excel® database more stringently now than in the past when it was new. They may merely be recording more diagnoses than previously, rather

than actually making more. The other diagnoses may formerly have been recorded in clinic letters.

- Finally, the observed trend may be an artefact due to normal variation in caseloads, meaning that it may decrease again with further monitoring.

The authors suggest the trend should be further monitored in coming years. Furthermore, in order to test the first two hypotheses, a formalised shared care system between a CMHT and one or a few pilot primary care practices could be trialled. Participating psychiatrists could offer availability by telephone to give GPs the opportunity to discuss patients about whose management they are not entirely clear. If this a) reduces the number of referrals to secondary care and b) leads to a larger increase than expected in the proportions of patients registered with the CMHT who have multiple diagnoses, the first two hypotheses may be verified. Shared care has been shown to have clear benefits, particularly in the treatment of patients with depression (Agius 2010). It would be interesting to see whether this is true also for slightly more complex mental health problems, including bipolar disorder, and whether this would then lead to fewer referrals to secondary care.

CONCLUSION

Not only have we found that a large proportion of patients receives multiple psychiatric diagnoses, but we have also observed an increase in the proportion of these patients between the years 2010 and 2013. This may reflect improved management of mental health problems in primary care, and may provide an incentive

to establish formal shared care of psychiatric patients between primary and secondary care to improve patient management even further. Our findings reflect the complexity of cases referred to secondary care, which are far more difficult to treat than those exclusively managed in primary care.

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Conflict of interest: None to declare.

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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