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1 Research report

The incidence and prevalence of admissions for melancholia in two cohorts (1875–1924 and 1995–2005)

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ABSTRACT

Background and method: There have been recent proposals to have melancholia reinstated in classification systems as a disorder distinct from major depressive disorder. Data from two epidemiologically complete cohorts of patients presenting to mental health services in North Wales between 1875–1924 and 1995–2005 have been used to map the features of melancholia.
Results: The data point to a decline in the contemporary incidence of hospital admissions for depressive psychosis, and greater heterogeneity among hospitalized severe non-psychotic depressions today. They indicate that historically untreated episodes of "melancholia" had a sudden onset, an average duration of less than 6 months and a lesser likelihood of relapse than severe depressive disorders have today.
Limitations: This is a study of the hospitalized illness rather than the natural illness and the relationship between illness and being hospitalized remains at present poorly understood.
Conclusions: These are the first data on the comparative incidence and natural history of melancholia in historical and contemporary samples. They point to the distinctiveness of the condition and support arguments for its separation from other mood disorders.

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1. Introduction

Melancholia has been in continuous use as a psychiatric diagnosis for centuries. For much of this time it did not refer to a depressive disorder. The restriction to denote a distinctive and generally severe depressive disorder took place in the middle to later years of the 19th century (Healy, 2008).

In 1899, Kraepelin amalgamated melancholic depressions and what would now be called bipolar depression into manic-depressive illness. Episodes of this new disorder were characterized by their acute onset and remission, ordinarily within a period of months (Kraepelin, 1899).

In the second decade of the 20th century Schneider focussed attention on the major psychopathological features of melancholic states, such as diurnal variation of mood, psychomotor retardation, and lack of mood reactivity (Schneider, 1950). These were the hallmarks of what was termed vital depression in contrast to neurotic depression or depressive personality disorders. Schneider's emphasis on clinical features laid the basis for the operational criteria that emerged in the 1980s.

In the inter-war and post-war years, vital depression also termed endogenous depression was widely thought to have a sudden onset, an apparent lack of precipitants and a propensity to remit. It responded to electroconvulsive therapy (ECT) and tricyclic antidepressants when these were introduced.

In 1980, although included as a specifier for depression in DSM III, melancholia (vital depression) vanished as a distinct diagnosis as its operational criteria overlapped so heavily with those for major depressive disorder. There have been proposals

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since to have it reinstated given its distinct phenotype, its linkage to biological markers such as raised cortisol levels and a more specific response to treatments such as ECT and tricyclic antidepressants than is found for major depression disorder (Parker et al., 2010; Schotte et al., 1997).

Many of the claims made for the natural history of depression, including rates of recurrence and periodicity, as well as co-morbidities with physical disorders such as cancer or cardiovascular disease (Simon et al., 2007; Steptoe, 2007), and risks such as suicide stem from studies on melancholia or endogenous depression antedating 1980 and major depressive disorder. At the same time, little has been published on incidence rates of or mortality from melancholia as such epidemiological studies post-date 1980.

This paper seeks to compare a sample of melancholic patients from a century ago with a contemporary sample of severe (putatively melancholic) depressive disorders to map the incidence of the disorder, and its natural history.

2. Method

To address these questions we have used historical and contemporary datasets to look at admission rates for severe unipolar depression in the periods 1875–1924 and 1995–2005 from North West Wales. Geographical and financial constraints ensured there was nowhere else for 19th century patients to go other than the asylum at Denbigh, and no private facilities or alternate public facilities for patients in the 1990s other than the District General Hospital unit in Bangor.

The first dataset consists of all admissions from North West Wales to the North Wales Asylum at Denbigh between 1875 and 1924. The historical records offered five sets of information relevant to diagnosis (Healy et al., 2001). First, all patients were compulsorily detained and their medical and legal certificates outlined the circumstances of detention. Second, the records contain standard demographic data including age, sex, educational, employment and marital status, a family history of mental illness, prior mental or physical illness and possible triggers. Third, there were standard assessments of dangerousness, suicidality, seizure-proneness, along with food refusal and a range of other clinical features. Fourth, there was a description of the patients' mental and physical state on admission. Fifth, there was a set of case notes covering the patient's stay in hospital until discharge or death. We could retrieve the records of prior admissions back to 1865 or subsequent admissions through to 1965.

In 19th century asylum records the term melancholia was applied to any underactive insanity including conditions that would now be diagnosed as schizophrenic. Accordingly a panel of clinicians reviewed records from all admissions for each patient. All retrospective diagnoses were made according to ICD-10 criteria before this study was undertaken. In the case of depressed patients, four diagnoses were given: severe depressive disorder without psychosis (F32.2), severe depressive disorder with psychosis (F32.3), recurrent severe depressive disorder without psychoses (F33.2) or recurrent severe depressive disorder with psychosis (F33.3).

One co-author (SCL) reviewed all affective and non-affective diagnoses covering 8 randomly picked years from the whole sample (including 20% of all F32/33 cases; n = 114).

The agreement concerning the melancholia diagnoses (F32.2/3 and F33.2/3) between the initial rater and SCL was 96.5%. To take into account the number of agreements expected by chance, we used Cohen's k coefficient (Cohen, 1960), a statistical measure of inter-rater agreement for categorical items. The k coefficient (781 cases, two raters, melancholia versus all other diagnoses) was 86.4%.

Patients were diagnosed as psychotic if in addition to the features of melancholia, their records showed delusional beliefs held over months, or hallucinatory phenomena. Severely ill and stuporose patients were not recorded as psychotic in the absence of such indications. Patients with melancholic features but other indications of a bipolar affective disorder were removed and analyzed separately. There were no admissions of depressive personality disorders or mild to moderate depressive disorders.

The admission details in most instances recorded an approximate duration of illness prior to admission. The notes also recorded recovery in patients prior to discharge. These patients often spent several months working in the sewing room or on the farm before going home. These details permitted us to estimate the length of melancholic episodes, and the length of time from admission to recovery, in ways not possible for the contemporary sample.

The second dataset is drawn from an ongoing study of the incidence of service utilisation for non-affective and affective psychoses from North West Wales. From this we have assembled all first admissions to the sole district general hospital (DGH) unit accessible from the area between 01-01-1995 and 31-12-2005. The catchment area for this unit is the same as that for the historical cohort. Patients were included in this study if they were native to or resident in North Wales prior to and following their initial episode.

Our operational definition of modern melancholia was patients with a severe depressive disorder with or without psychosis and with or without recurrences (F32.2, 32.3, 33.2 or 33.3). In the case of all patients with codes for psychotic or severe depression, case records were checked to confirm the presence of clinical details consistent with the diagnosis. We have not included in this study data on a large number (N = 572) of patients admitted between 1994 and 2005 with diagnoses of mild or moderate depressive disorders with or without recurrences (F32.0, 33.0, 32.1, F33.1). We have also not included data from either the historical or contemporary periods for all patients with a diagnosis of bipolar affective disorder.

In order to compare incidence rates in modern and historical samples, we have calculated standardized melancholia and depressive psychosis rates for the periods 1875 to 1924 and compared this with the incidence rates of severe hospitalized depression with and without psychosis for the years 1995 to 2005.

The number of melancholias with and without psychosis for 1875–1924 was tabulated for each sex and age (0–14, 15–24, 25–34, 35–44, 45–54, 55–64, 65+) combination, using available census data. From these figures depressive psychosis and all melancholia rates were calculated, with the number of person years at risk calculated using the closest census year (1881, 1891, 1901, 1911) (ONS, 2006; Southall et al., 2004). Data for the contemporary sample came from the Office of National Statistics.

A standardized melancholia ratio was calculated by dividing the observed number in each year by the expected number and multiplied by 100. Confidence intervals for the SPR were calculated using the exact method detailed in Estève et al. (1994). These psychosis rates were applied to the population in the 2001 census and used to calculate the number of diagnoses of psychosis expected in each year 1995–2005 if the early period rates occurred.

For comparisons between groups on features such as age of admission we have used independent groups *t*-test to establish statistical significance.

3. Results

In the historical sample, there were 3168 patients admitted between 1875 and 1924. Of these patients, 853 had a diagnosis of melancholia. Of the 853 diagnosed with melancholia, 494 were given retrospective diagnoses of severe depressive disorder with or without psychoses. A further 175 were diagnosed retrospectively as having schizophrenia or other non-affective psychosis, 29 as having a bipolar disorder, 25 as having catatonia, 69 as having an organic disorder, 12 as having dementia, 25 as having an anxiety state or personality disorder, 7 as having general paresis of the insane (GPI), 6 as having a primary alcohol problem, 5 as being epileptic, 4 as having a mental handicap and 2 as having insufficient detail to make a contemporary diagnosis.

3.1. Melancholic depression: admission incidence and prevalence

From the historical sample 597 patients were included in the analysis based on retrospective F32.2, 32.3, 33.2 and 33.3 diagnoses. Of these 597 individuals, 494 (83%) had been diagnosed as having melancholia in the original notes; 69 (12%) had a diagnosis of mania (but in fact had a severe depressive disorder with agitated features attracting a diagnosis of mania); 2 with maniacal depression; 13 (2%) a diagnosis of dementia; 8 were undiagnosed; 3 were diagnosed as imbeciles, 2 as delusional insanity, 2 as epileptic insanity, 3 as GPI and 1 as neurasthenia.

These 597 patients had 767 admissions between them over their lifetime. Of the 597 individuals, 32.3% were single, 55.8% were married, 11.4% were widowed, 0.2% were separated or divorced and for 0.2% marital status was unknown. Overall 342 (57%) were female, but from 1875 to 1895 there are more male admissions (52%), after which there was a greater incidence of female admissions (61%) with a peak in 1905–09. This change in gender ratios did not happen for any other diagnoses such as schizophrenia.

Our primary analyses are based on the first admission for all patients. Of this sample, 121 (20%) had recurrent admissions for mood disorders, with one patient having 9 admissions in total. In addition 51 patients had indications of prior episodes managed outside hospital. Adding these episodes gave 172 (29%) patients with evidence for recurrences.

In the historical sample, 31% were admitted for severe depression without psychosis and 69% were admitted for depressive psychoses. A similar pattern was observed for both males and females. There were no admissions for mild or moderate depressive disorders.

The contemporary sample consists of 203 patients who to date have over 800 admissions between them. Of these 203 patients, 115 (57%) were female. No data regarding marital status was available for the contemporary sample. Of these 38% were admitted with depressive psychoses while 62% were admitted with severe depressions without psychosis. The gender ratio was the same for depression with and without psychosis.

The average age of first admission for the historical sample (46.5 +/− 12.5 years) was significantly lower than the contemporary (56.8 +/− 18.6 years) ($t = -8.72$, df = 798, p<0.001). In the historical sample, average age at first admission with depression with psychosis was slightly but significantly higher at 47.2 +/− 12.1 compared with at first admission without psychosis (45.0 +/− 13.4) ($t = -2.03$, df = 595, p<0.05). There was no difference in age at first admission between depressions with and without psychosis in the contemporary sample ($t = -0.684$, df = 201, p = 0.494). Of the contemporary sample 20% were 75 years or older at first admission. Among this older cohort, 38% (16) had depression with psychosis and 62% (26) had severe depression without psychosis.

Standardizing by age for incidence rates gives the rates laid out in Table 1. Within the historical sample, there was a tendency to increased rates of admission from 1875 through to 1924. As noted above, 9% of patients had indications from their records of episodes managed at home or at the workhouse. This was much more common in the period 1875 to 1900 than later, giving rise perhaps to the difference in incidence rates, possibly linked to growing familiarity on the part of both patients and magistrates with the asylum system. Because of this shift we have also provided standardized incidence rates for the subset of patients admitted between 1900 and 1924.

Comparing contemporary and historical samples using the standardized melancholia rate outlined in the methods section shows more detail on changing rates of admission for depressive psychoses in the contemporary period. The difference in rates for the contemporary period, broken out by year, is laid out in Fig. 1.

The incidence rate for all admissions for depression, including mild, moderate and severe depressions, in the contemporary sample was 29/100,000/year, with an incidence rate of 21.6/100,000/year for mild to moderate depressions.

Looking at possible triggers, the historical records portray over 50% of cases as arising endogenously. In 28.5% of cases, no precipitating factor was listed. In 12.4% the current episode

Table 1
Incidence rates for psychotic and non-psychotic depression in historical and contemporary samples.

|	Historical Sample	Contemporary sample
1875–1924		
Complete sample	6.5/100,000/year	7.7/100,000/year
Depressive psychoses	4.6/100,000/year	2.9/100,000/year
Non-psychotic cases	1.9/100,000/year	4.8/100,000/year
1900–1924 sub-sample		
Complete sample	8.2/100,000/year	7.7/100,000/year
Depressive psychoses	5.5/100,000/year	2.9/100,000/year
Non-psychotic cases	2.7/100,000/year	4.8/100,000/year
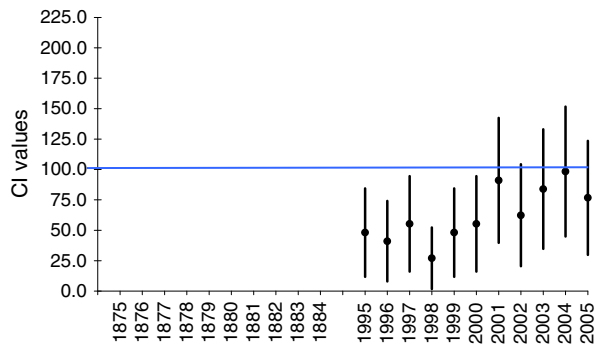
Fig. 1. The incidence of psychotic depressive disorders 1995–2005 compared to a standardized melancholia rate drawn from the historical sample (midpoint and 95% confidence intervals).

Table 3

Length of hospital stay (days) for melancholia in historical and contemporary samples.

	Historical			Contemporary		
	Female	Male	Total	Female	Male	Total
Mean	723	860	782	41	41	41
Median	283	230	252	29	30	30
Mode	128	84	84	15	14	12

was put down to heredity, in 10.4% of cases to ill-health, in 1.2% of cases to previous attacks and in a further 1.2% of cases to old age. In contrast, 16.8% of cases were attributed to worries, 8.9% to bereavement, 3.0% to an accident, 3.0% to family trouble, 2.5% to war, 2.2% to disappointment. As recorded it is unclear if melancholia was linked to ill-health indirectly through worries about the consequences of being unable to work or directly through the physical effects of some disorder, while on the other side of the divide the worries seen as precipitating cases may have been aggravated out of proportion owing to an endogenous process. Without careful life event interviews we cannot be certain, but there appears to be a bias in these records to seeing this disorder as arising endogenously.

In addition to these patients, between 1875 and 1924 there were 135 patients with manic-depressive illness (bipolar disorder) of whom 33 presented with a melancholic episode on first admission, 79% of whom had psychotic features. In the historical records 64% of these bipolar depressions were diagnosed as melancholic (diagnoses of manic-depressive illness do not appear in the records before 1924). Of the bipolar depressions, 23 were female (70%) and 10 male. The mean age at first admission was 37 years (median 39 years).

4. Recovery and length of stay

At 3 years 79% of the historical sample had been discharged or were still in care, while 21% had died; the causes of death are given in a separate paper (Harris et al., submitted for publication). At 5 years 76% had been discharged or were in care. At 10 years 70% had been discharged or were in care (Table 2). In the contemporary sample at 3, 5 and 10 years respectively 87%, 78% and 68% of the patients were alive. It is

difficult to be certain as to how many patients in the historical sample were alive or how many in the contemporary sample had responded. Response rates in the historical sample are clearcut and are presented in Table 2.

As would be expected there has been a significant reduction in the total length of time that patients spend in an acute psychiatric unit compared to 100 years ago (Table 3). However in the historical period it was common for patients to spend several months in hospital after full recovery before their discharge. In contrast contemporary patients were likely to be discharged before they were fully recovered. We have interrogated the records to establish the length of hospital stay to recovery in the historical sample. To do this we excluded patients who died or were transferred to another asylum. Of the 420 patients who lived the length of hospital stay to point of recovery and length of hospital episode is given in Table 4.

In 576 of the 597 first admissions, the historical records also gave figures for the duration of an episode prior to admission. On average patients were ill for 156 days prior to admission but these figures are skewed by a few patients recorded as being ill for a long time. The median length of illness prior to admission was 60 days and the commonest duration of disorder prior to admission was 14 days. We have added these figures to the figures for length of time in hospital to point of recovery to derive figures for the length of a melancholic episode. This gave a sample of 407 patients, for whom the mean length of episode was 420 days, with a median length of 217 days.

In the set of 407 patients there were several clusters of episode duration. The largest group, 268 (66%), had a mean length of episode less than 1 year (mean 154 days, median 135 days). Of these 180 had an episode lasting less than 6 months. A further group of 107 patients (26%) had an episode lasting between 1 and 3 years (mean 571 days, median 507 days). A small group (8%) had a disorder lasting up to 6 years (mean 2149 days, median 1544 days).

The depressive psychoses had a median length of episode of 251 days compared with 172 days for the non-psychotic melancholias.

In general the clinical features of bipolar and melancholic depression appear indistinguishable; 79% of bipolar depressions

Table 2

Outcomes at 3, 5 and 10 years in historical sample.

N = 597	3 years	5 years	10 years
Discharged recovered	321 (54%)	329 (56%)	332 (56%)
Discharged relieved	44 (7%)	44 (7%)	46 (8%)
Discharged unimproved	2 (0.3%)	3 (0.5%)	4 (0.7%)
Still in care	105 (18%)	79 (13%)	38 (6%)
Died	125 (21%)	142 (24%)	177 (30%)

Table 4

Length of hospital stay to point of recovery in historical sample and to point of discharge in the contemporary sample (days).

	Historical sample (N = 420)	Contemporary sample
Mean	302	41
Median	122	30
Mode	120	12

had psychotic features. The mean length of hospital episode for bipolar depressions was 668 days with a median stay of 161 days. Of these patients 68% had an episode that lasted less than 1 year. In total 85% of the patients with bipolar depressions were discharged and had further admissions, with 15% eventually dying in care.

It is not possible to generate figures for mean length of episode for the contemporary sample as many patients were discharged "on the road to recovery". A failure of the index admission to resolve after discharge may have contributed to an increase in readmissions.

Tracking the historical sample over 10 years following their first admission, 87% had their index admission only, 12% had 2 admissions, 1% had 3 admissions, with 2 patients having 4 admissions and 1 patient 5 admissions. In the contemporary sample 102 patients had 10 year outcome data, of whom 42% only had their index admission; 12% had only 2 admissions; 17% had only 3 admissions and 29% had 4 or more admissions. The subgroup of patients in the contemporary sample with 10 years worth of data (N = 102) have a mean of 3.85 admissions, with a mean total length of stay of 114 days ($\pm$ 151 s.d.). These admissions and readmissions give the following total numbers for bed days at 3 and 5 years (Table 5). These figures have likely not been unduly biased by death rates which were comparable in both samples.

The recurrence rate in the historical sample was higher among patients with a depressive psychosis. Ten years from their initial admission 79 of these patients had been admitted more than once of whom 75% had a depressive psychosis diagnosis. In contrast 25% of admissions came from the group of depressions without psychosis. In the historical cohort, only 3 patients were admitted 4 or more times and all had an initial diagnosis of depressive psychosis.

In the contemporary sample this pattern was reversed. From the 102 patients for whom we have 10 year data, 30 had 4 or more admissions and of these 6 (20%) were psychotic depressives, while 24 (80%) were non-psychotic. Of these 30 patients, 16 (53%) received an alternate diagnosis during another admission, most commonly personality disorder (17%) or alcohol abuse (17%). In contrast only 12% of those admitted less than 4 times received an alternate diagnosis. These figures suggest that the contemporary sample of severe depressions without psychosis was more heterogeneous than the historical sample.

5. Discussion

This study is the first to offer incidence rates for admissions for psychotic depression in both historical and contemporary samples, and for the incidence of melancholia in an historical sample. It appears to show a fall in the incidence of depressive psychoses.

This study offers data on the natural history and likely duration of untreated melancholic episodes from 19th and early 20th centuries. These data are consistent with classical clinical perceptions that vital depression was liable to abrupt onset, but ultimately remission after approximately 6 months.

There are a number of drawbacks to the study. Both historical and contemporary samples are based on administrative records. The patients in the contemporary sample were not subject to research interviews. The data accordingly, particularly the modern data, are likely to be noisy.

5.1. The incidence of melancholia

The clinical picture that might now attract a diagnosis of melancholic depression took shape during the 19th century, but even at the end of the century opinions were divided as to whether psychotic features were necessary features of the condition, with some reluctant to make the diagnosis in patients lacking these features (Healy, 2008; Swartz and Shorter, 2007; Taylor and Fink, 2006).

The data for melancholia in the historical and contemporary samples reported here are taken from a database that shows a similar incidence over time of first admissions for schizophrenic and other non-affective psychoses, as well as for bipolar affective disorders (Healy et al., in prep). The **Q3** incidence rates for this contemporary sample for both moderate and severe depressions furthermore maps onto rates of first admissions for affective disorders to London hospitals in 1957 reported by Norris (1959), which were of the order of 20/100,000. Comparable rates had been reported for the inter-war years in America (Dayton, 1940).

Against this background of unchanging incidences, the data in Table 1 show an apparent fall in the incidence of hospitalization for depressive psychoses that cannot be explained by changing diagnostic practices. Indeed if all subjects over the age of 75 were excluded, the differences in incidence between the two cohorts would be even more striking. As outlined in the Results section the mean age at admission in the historical sample was significantly lower than in the contemporary sample. The difference was even more striking using median age at admission which was 55 for the historical sample, but 75 for the contemporary sample. These data are consistent with a slow disappearance of a cohort of patients prone to this illness.

The historical records point to a degree of homogeneity among the patients admitted with a diagnosis of melancholia

Table 5

Number of bed days and admissions for melancholia at 3 and 5 years in historical and contemporary samples.

	Historical sample		Contemporary sample	
	3 years	5 years	3 years	5 years
N	597	597	203	203
Total admissions	641	657	443	587
Average no. admissions	1.07	1.10	2.18	2.89
Length of stay (mean days)	431 (+/−369)	546 (+/−576)	78 (+/−99)	91 (+/−119)
Length of stay (median days)	274	290	46	51

without psychosis, but this seems less likely to hold for the contemporary sample. It is clear in the contemporary period that there are many more admissions for non-psychotic depressions than there once were, and that this group is more likely to have a recurrent disorder and receive a number of co-morbid diagnoses than patients with a depressive psychosis diagnosis. It is possible that all cases coded today as severe depression and even some with moderate depression would have been admitted 100 years ago. This however seems unlikely in that admissions a century ago were involuntary, whereas most are now voluntary and the patients with non-psychotic depression in the historical sample show a range of features such as stupor not commonly found now. Based on the clinical features of the two samples it seems more likely that admission rates for both severe but non-psychotic melancholia and psychotic melancholia may have fallen; in the absence of criteria and diagnostic codes for melancholia today no one is in a position to establish this.

There are very few other datasets on the incidence of depressive psychosis. One study in Finland reported a prevalence of depressive psychosis of 3 per 1000 in a community sample (Perala et al., 2007). There is a greater than 100% difference between these prevalence figures and the incidence rates reported in Table 1. While this divide can be bridged to some extent by multiplying our incidence figures by years at risk, it suggests a higher incidence rate for the condition than found here that may stem from a detection of never admitted cases.

A fall in the incidence of admissions for psychotic depression and melancholia raises questions as to mechanisms. One possibility is that earlier detection and treatment of depression in primary care or with antidepressants means that depressive disorders do not evolve into syndromes as severe as were seen a century ago. This seems unlikely in that far from there being a fall in admissions for depression, there is a large increase in rates of admission. The fall in admissions is specifically for depressive psychoses and possibly for severe melancholia.

An increased rate of admissions for bipolar affective disorder also makes implausible arguments that early treatment or a disinclination to admit are likely to account for a drop in the incidence of depressive psychoses. In the historical sample 76% of admissions for bipolar affective disorder were for manic episodes, whereas 50% of contemporary admissions for bipolar disorders are now for depressive episodes. The greater rate of depressive admissions is possibly based on perceptions of suicide risk. Against this background it is difficult to see what basis there might be for a selective bias against admissions for unipolar depressions with psychotic features.

There is a slightly greater drop in incidence in depressive psychoses in women compared with men. It is worth noting that using this assay system we have reported a virtual disappearance in de novo onset post-partum psychoses in a contemporary set of admissions in North Wales compared to historical admissions to the North Wales Asylum (Tschinkel et al., 2007).

Contemporary benzodiazepine usage might also lead to reduced admission rates for melancholia in both sexes and for post-partum psychoses. A significant proportion of patients with melancholia and post-partum psychoses in the historical sample showed stupor, and other catatonic features. It is now known that many catatonic syndromes respond to benzodi-azepines, especially in the early phase of the disorder, potentially minimizing the need for admission if inadvertently given in primary care.

We have previously reported a disappearance of catatonic admissions in North Wales (Chalassani et al., 2005). This disappearance was more apparent than real, in that use of a rating scale made it clear that catatonic features were present more often than they were detected. The likeliest explanation of the finding was that a co-incident usage of benzodiazepines masked these features or stalled their evolution. This example raises the possibility that depressive psychoses may in fact be as common as before but not as readily detected, although it is not clear just how this might arise.

5.2. Natural history of melancholia

Among the features of greatest interest in the historical data are the indications it offers as to natural history of melancholia. The data confirm that in many cases the disorder appeared to start without a clear precipitant, and that almost half of patients had an illness episode lasting less than 6 months, while two-thirds had recovered within a year.

This fits well with standard clinical wisdom and Norris' estimate from 1957 that average hospital stays were just under 1 year (Norris, 1959). In the late 1950s, 50% of patients could expect to stay more than 16 weeks in hospital, despite the availability of treatments like ECT, suggesting that there was still some premium on ensuring that patients were fully recovered before discharge.

Norris reporting on a cohort of first admissions to London hospitals in 1957 noted that 40% had at least one readmission within 4 years of discharge and 20% had 2 readmissions. In the contemporary sample 47% had at least 1 readmission within 3 years of discharge and 26% had 2 or more. In contrast in the historical sample, only 7% had been readmitted within 3 years of discharge. It is possible that some of the agents used today make recurrence more likely. Alternately the apparent recoveries seen today may involve symptomatic improvements rather than a resolution of the underlying disorder, leaving the patient vulnerable to subsequent deterioration, until such time as the underlying episode clears.

There are implications for both clinical practice and research from these findings. If episodes last several months but commonly resolve within 6–9 months whether treated or not, then suggestions regarding the pathophysiology of melancholic disorders need to incorporate a mechanism that leads to recovery. The older monoamine theories that all but saw affective disorders as inborn errors of metabolism never incorporated proposals regarding the natural mechanisms that might lead to recovery.

5.3. Melancholia: a distinct disorder?

A great number of the statements made about depression such as the increased mortality rates and endocrine changes linked to the condition are drawn from research on melancholia (Shorter and Fink, 2010). In the absence of specific criteria for melancholia however there has been very little research done on the epidemiology of this condition or of depressive psychosis.

For more than 20 years from the late 1950s to the early 1980s, one of the underpinnings of a melancholia or vital depression diagnosis was treatment responsiveness. Melancholia predicted a response to ECT (Swartz and Shorter, 2007; Taylor and Fink, 2006). It was the clinical syndrome that led to the discovery of the tricyclic antidepressants (Healy, 1997).

While treatment responsiveness plays a part in supporting a diagnosis, our data may point to an indirect indicator of treatment specificity. In recent years there has been a decline in usage of ECT. This is commonly put down to political difficulties surrounding the administration of ECT (Shorter and Healy, 2007). But another possibility that this fall is linked to a fall in the incidence of the primary condition for which ECT is indicated.

In the 1980s the specificity of antidepressant treatment to melancholia did not seem compelling to some (Zimmerman and Spitzer, 1989). The apparent lack of specificity stems from two sources. One was a growing appreciation that tricyclic antidepressants could be of benefit in a range of anxiety states from panic disorder to obsessive compulsive disorder. A second was the lack of efficacy of selective serotonin reuptake inhibitors (SSRIs) for melancholic disorders (Gram, 1994; Stage et al., 1998). In contrast, now, the specific inefficacy of SSRIs in melancholia or disorders with DST non-suppression might be adduced as an argument in favor of the validity of distinctions between melancholic and non-melancholic disorders, and the responses of anxiety states to tricyclic antidepressants are explicable in terms of the serotonin reuptake inhibiting properties of these drugs.

The data from this study broadly support arguments for distinguishing melancholia (or vital depression) from other depressive disorders. If there are distinctions between melancholia and other depressive disorders, then lumping them together is liable to obscure associations that any of these conditions might have with cancer, cardiovascular and other physical disorders and cloud any research on outcomes.

If ultimately melancholia is resurrected as some have proposed it should be (Parker et al., 2010), the data from this study may offer a benchmark for its incidence, duration and risk of recurrences.

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