

# Adjustment disorders: the state of the art

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*Adjustment disorders are common, yet under-researched mental disorders. The present classifications fail to provide specific diagnostic criteria and relegate them to sub-syndromal status. They also fail to provide guidance on distinguishing them from normal adaptive reactions to stress or from recognized mental disorders such as depressive episode or post-traumatic stress disorder. These gaps run the risk of pathologizing normal emotional reactions to stressful events on the one hand and on the other of overdiagnosing depressive disorder with the consequent unnecessary prescription of antidepressant treatments. Few of the structured interview schedules used in epidemiological studies incorporate adjustment disorders. They are generally regarded as mild, notwithstanding their prominence as a diagnosis in those dying by suicide and their poor prognosis when diagnosed in adolescents. There are very few intervention studies.*

**Key words:** Adjustment disorders, sub-threshold diagnosis, suicide, normal adaptive stress reactions, depressive disorder, classification

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The diagnostic category of adjustment disorder was introduced in the DSM-III-R (1). Prior to that, it was called transient situational disturbance. The DSM-IV (2) and ICD-10 (3) descriptions of adjustment disorder are broadly similar. The main features are the following: a) the symptoms arise in response to a stressful event; b) the onset of symptoms is within 3 months (DSM-IV) or 1 month (ICD-10) of exposure to the stressor; c) the symptoms must be clinically significant, in that they are distressing and in excess of what would be expected by exposure to the stressor and/or there is significant impairment in social or occupational functioning (the latter is mandatory in ICD-10); d) the symptoms are not due to another axis I disorder (or bereavement in DSM-IV); e) the symptoms resolve within 6 months once the stressor or its consequences are removed. Adjustment disorders are divided into subgroups based on the dominant symptoms of anxiety, depression or behaviour.

Since its introduction, the category of adjustment disorder has been the subject of criticism on three fronts. The first was that it constituted an attempt to medicalize problems of living and did not conform to the criteria for traditional disorders such as having a specific symptom profile (4). The second was that it was a “wastebasket diagnosis” which was assigned to those who failed to meet the criteria for other disorders (5). The third was on its diagnostic instability (6) and that its main utility was to serve as a “justification” for diagnosis-based reimbursement operating in the healthcare system of the US. Despite this, the category has been retained in the further classifications, in large measure due to its clinical utility.

## PREVALENCE OF ADJUSTMENT DISORDER IN VARIOUS CLINICAL SETTINGS

Adjustment disorder continues to be diagnosed in a range of clinical settings. Consultation-liaison psychiatry is the context in which the diagnosis is most likely to be made. Around 12% of referrals are so diagnosed in university hospitals in the US (7), a figure that resembles that in European

hospitals (8). Nevertheless, the frequency with which adjustment disorder is now diagnosed seems to be declining, in parallel with an increase in the diagnosis of major depression (9), possibly due to the availability of psychotropic drugs, especially selective serotonin reuptake inhibitors (SSRIs), that are safer in those who are medically ill than the older agents. So, changes in the prevalence of adjustment disorders may reflect a change in the “culture of prescribing”, stimulating changes in the “culture of diagnosis” (10).

Adjustment disorder has been reported to be almost three times as common as major depression (13.7 vs. 5.1%) in acutely ill medical in-patients (11) and to be diagnosed in up to one third of cancer patients experiencing a recurrence (12). In obstetric/gynaecology consultation-liaison (13), adjustment disorders predominated over other mood disorders. Among those assessed in an emergency department following self harm, a diagnosis of adjustment disorder was made in 31.8% of those interviewed, while a diagnosis of major depression was made in 19.5% of cases (14).

None of the major epidemiological studies carried out in the community, such as the Epidemiological Catchment Area Study (15), the National Comorbidity Survey Replication (16) or the National Psychiatric Morbidity Surveys (17) included adjustment disorder among the conditions examined. An exception was the Outcome of Depression International Network (ODIN) study (18), which found a prevalence of only 1% for adjustment disorder in five European countries. A possible reason for this was that mild depression was included in the depressive episode category, inflating that category at the expense of adjustment disorder. By contrast, a study of elderly people from the general population (19) found the prevalence of adjustment disorder to be 2.3%, similar to that of major depression.

Adjustment disorder is reported to be very common in primary care, but relevant epidemiological studies in this setting are rare and report rates of the disorder range from 1 to 18% (20,21) among consulters with mental health problems.

Concerning psychiatric settings, a study of intake diagnoses into outpatient clinics (22), combining clinical evalua-

tion and the use of the Structured Clinical Interview for DSM-IV (SCID, 23), found that adjustment disorder was the most common clinical diagnosis, made in 36% of patients, whereas the diagnosis was made in about 11% of cases using SCID. Among psychiatric inpatients, 9% of consecutive admissions to an acute public sector unit were diagnosed with adjustment disorder (24).

Quantifying the prevalence of adjustment disorder in child and adolescent populations is difficult, due to changes in the diagnostic criteria over time (25). In the younger age groups, unlike adults, adjustment disorder carries with it significant morbidity and a poor outcome, frequently developing into major psychiatric illness (25,26). A general population study in Puerto Rico (27) found a rate of 4.2% among 14-16 year old people, while the total psychiatric morbidity was 17.8%. A similar rate was found in children aged 8-9 in Finland (28). Among outpatients, figures of 5.9-7% have been reported (29,30). In child liaison psychiatry, over one third of those with recent onset diabetes were so diagnosed (31), making it the most common psychiatric disorder to follow this well defined stressor.

## PROBLEMS WITH THE CURRENT CLASSIFICATION OF ADJUSTMENT DISORDER

The current diagnosis of adjustment disorder assumes that there is a stressor which acts as a trigger and that the condition is self-limiting. So, adjustment disorder is closer to the definition of a discrete disorder as proposed by Kendell (32) than most other disorders in psychiatry, since its etiology and course are encapsulated within the diagnosis, while the definition of many other mental disorders is cross-sectional and based on symptoms alone. Yet, the current classifications impose a hierarchical model that assumes equivalence in how adjustment disorder and other diagnoses are construed.

As currently classified, adjustment disorder is a sub-threshold diagnosis, that is trumped once the symptom threshold for another diagnosis is met. There is an inherent belief that a sub-threshold condition is less severe than a full-blown disorder such as major depression, the diagnosis by which adjustment disorder is most often superseded. Yet, the evidence for this is lacking, and there is empirical data (33) that, when measures of symptom severity or social functioning are examined, there is no difference between those with mood disorders and adjustment disorder.

Furthermore, up to 25% of adolescents with a diagnosis of adjustment disorder engage in suicidal behaviour (34), while among adults with this disorder the figure is 60% (35). Adjustment disorder is the diagnosis in up to one third of young people who die by suicide (36), while among all suicide deaths in the developing world it is the most common diagnosis (37). These data show that, far from being a mild condition, adjustment disorder has a significant impact on behaviour.

On the other hand, the current classifications fail to distinguish between adaptive and maladaptive reactions to

stress. The DSM-IV tries to address this problem by stating that a diagnosis of adjustment disorder is only made when the distress is of clinical significance (38). There are two components to this: the distress must be in excess of what would normally be expected and/or there is an impairment in social or occupational function. In relation to the first of these, one of the most insightful critics of the DSM-IV, J. Wakefield (39), points out that it would allow the top third in the normal distribution of mood reactivity to be classified as disordered, and that it does not take into account the contextual factors that might cause this excess in distress. For example, the loss of a job for one person might be manageable while for another it could heap poverty on a family resulting in distress that might not be inappropriate under the circumstances.

Cultural differences in the expression of emotion also need to be considered. In liaison psychiatry, where the diagnosis of adjustment disorder is most frequently made, a knowledge of "normal" coping with illness in that specific culture is essential and the diagnostic process will be guided by the extent to which an individual's symptoms are in excess of this. Some might argue that the fact of visiting a doctor indicates abnormal distress, yet the tendency to consult is also determined by factors additional to illness, including cultural and personal attitudes to symptoms. So, the mere fact of a consultation should not of itself be taken as a proxy measure of excessive distress. Neither should the decision to refer to psychiatric services, since this too is governed by factors that are not always related to symptom severity (e.g., a wish "to do something" under pressure from a patient in the face of continuing distress).

Because adjustment disorder is a diagnosis made in the context of a stressor, there is a danger that any distress following such an event might be labelled as a disorder (40). Clinical judgement, therefore, plays a large part in making the diagnosis of adjustment disorder in the current criterion vacuum and future classifications should accord weight to culture, context and personal circumstances in differentiating normal from pathological distress.

The second criterion, requiring impairment in functioning, is arguably a more robust indicator of disorder, since it is this which leads to treatment seeking. For example, the inability to work is potentially a significant indicator of impairment. However, there may be situations where functioning is reduced in the presence of non-pathological reactions. For instance, if the circumstances are especially traumatic, such as the loss of a child, the period of impaired function may be longer than anticipated in those with non-pathological responses.

The evaluation of functioning in children places special demands on the assessor, since it has to be set against the demands of the developmental stage, and the degree of dependency and autonomy in key relationships. The presence of pre-existing impairment and extant vulnerabilities, such as learning disability and developmental disorders, must also be considered when making the evaluation.

The ICD-10, contrary to the DSM-IV, requires the pres-

ence of both excessive symptoms and functional impairment for the diagnosis of adjustment disorder, thus narrowing the application of this category.

Because of the hierarchical nature of ICD-10 and DSM-IV, adjustment disorder cannot be diagnosed once the criteria for another condition are met. The condition that most frequently trumps adjustment disorder is major depression/depressive episode. This is evident from studies that compare the clinical with the research approach. For example, in a study of those presenting because of self-harm, a clinical diagnosis of adjustment disorder was made in 31.8% and one of major depression in 19.5% of cases, but using SCID the proportions changed to 7.8% and 36.4% respectively (14).

However, there is a point of departure between the two conditions when other variables are considered. Suicidal behaviour occurs earlier in the course of adjustment disorder as compared to major depression (41) and the interval from suicidal communication to completion of suicide is shorter (42). The socio-demographic profile and childhood risk variables differ between the two groups (41). Among adolescents dying by suicide, there is much less evidence of prior emotional or behavioural problems (42). In addition, the readmission rates for those with adjustment disorder are significantly lower than for those with major depression, generalized anxiety or dysthymia (43) and hospitalization is also shorter (6). This highlights the need for the clearer operationalization of adjustment disorder in future classifications.

A further but lesser area of potential overlap is with post-traumatic stress disorder (PTSD). The conflation is not so much related to the symptoms of these disorders but to the stressors themselves. There has been an expansion in the stressors that are deemed to trigger PTSD, from those that are potentially life threatening, as originally described, to events that are less traumatic, such as financial problems or watching distressing images on television – a phenomenon called “criterion creep” (44). In clinical practice, a diagnosis of PTSD is often made reflexively (45) once such an event is identified, although adjustment disorder might be a more appropriate diagnosis.

Overall, it is clear from the data available that adjustment disorder is sufficiently severe and distinct from other disorders, especially major depression, to warrant upgrading from its sub-syndromal status to that of a full-blown and independent mental disorder. Criteria for the DSM-IV revision have already been suggested (46).

## STRUCTURED INTERVIEWS, SCREENING INSTRUMENTS AND ADJUSTMENT DISORDER

The Clinical Interview Schedule (CIS, 47) and the Composite International Diagnostic Interview (CIDI, 48) do not incorporate adjustment disorder at all. The Schedules for Clinical Assessment in Neuropsychiatry (SCAN, 49) do include adjustment disorder, but only at the end of the interview, in section 13, which deals with “inferences and attribu-

tions”. This comes after the criteria for all other disorders have been completed, and there are no specific questions with regard to adjustment disorder to assist the interviewer, relying instead on clinical judgement.

The SCID (23) also includes a section dealing with adjustment disorder, but the instructions to interviewers specify that this diagnosis is not made if the criteria for any other mental disorder are met, with the *de facto* effect of relegating it to a sub-syndromal status. In light of the very low threshold for diagnosing major depression, even in studies using SCID and purporting to be inclusive of adjustment disorder, major depression will often supersede adjustment disorder, irrespective of the context in which the symptoms have arisen.

The Mini International Neuropsychiatric Interview (MINI, 50) also incorporates a section on adjustment disorder but, as in SCID, that disorder is trumped when any other diagnosis is made.

So, while structured interviews have greatly facilitated epidemiological research in psychiatry, the possibility that they are overly rigid, having been designed for use by lay interviewers, cannot be excluded. This is especially pertinent for a diagnosis such as adjustment disorder, which relies heavily on clinical judgement, context and presumptive longitudinal course rather than symptoms alone. As a result of the problems with the current crop of structured diagnostic instruments, attempts have been made to identify suitable screening instruments for adjustment disorder.

Because there is symptom overlap with major depression, there is a possibility that instruments which screen for depression might identify people with adjustment disorder. A number of scales have been used for this purpose, including the Zung Depression Scale (51), which has been shown to be an adequate screen for adjustment disorder and major depression combined (52), but when compared to SCID has inadequate sensitivity and specificity (53). A study of health care workers with “reactive depression”, an old-fashioned diagnosis but one which encapsulates the concept of adjustment disorder most closely, found little correlation with the Zung scale score (54).

Efforts to develop a screening instrument using a coping measure have also been unsuccessful (55). The Hospital Anxiety and Depression Scale (HADS, 56) has been used for screening purposes in cancer patients, but it does not distinguish between major depression and adjustment disorder (57). Similar problems arose when the 1-Question Interview and the Impact Thermometer (58) were tested for their ability to screen for adjustment disorder.

The Inventory of Depressive Symptomatology (59) might have a role in distinguishing adjustment disorder from major depression and has been used in one study reporting that non-environmentally induced disorder had more melancholic symptoms and a different quality to the mood changes compared to environmentally triggered disorder (59). Further investigation of this is clearly required.

## MAKING THE DIAGNOSIS OF ADJUSTMENT DISORDER IN CLINICAL PRACTICE

### The stressor

Adjustment disorder cannot be diagnosed in the absence of a stressor. The event must be external and occur in close time proximity to the onset of symptoms. The longer the time period between the triggering event and the onset of symptoms, the less likely is the diagnosis to be adjustment disorder. For this reason, a period between the event and symptom onset of 3 months in DSM-IV and 1 month in ICD-10 is required. Caution must be exercised when this gap is relatively long, for two reasons: firstly, those who are depressed often attach significance to particular events, that in themselves were neutral in effect at the time, in an “effort at meaning”; secondly, recall bias may lead to an unreliable date of the event. The 3 month upper limit may prove to be excessively long and it is difficult to ascertain the empirical data on which this is based.

Concerning the type of event, there is little to assist the clinician in distinguishing adjustment disorder from major depression. While 100% of those with a diagnosis of adjustment disorder have recent life events, 83% of those with major depression also report such events, with more related to marital problems and fewer to occupational or family stressors in the adjustment disorder group (60). Such differences, while statistically significant, are unlikely to be clinically meaningful in an individual patient, since they are not exclusive as precipitants to either major depression or adjustment disorder. And the events can range in severity from those that are generally regarded as mild, such as a row with a boyfriend, to those that are more serious. This will be mediated by individual vulnerability.

### Vulnerability

In the preamble to the section on adjustment disorder, the ICD-10 states that “individual vulnerability and risk plays a greater role than in other disorders” such as PTSD or acute stress reactions. However, it is unclear on what evidence this is based. By contrast, the DSM-IV is silent on this issue. The possibility that a diathesis-stress model operates is worthy of consideration and personality is arguably the most obvious predisposing factor. There have been few studies directly comparing adjustment disorder against other disorders to allow definitive claims about the role of personality, and caution is advisable in the current state of knowledge. The relevant studies can be classified in two broad groups: those directly examining adjustment disorder and those examining diagnoses akin to adjustment disorder.

The prevalence of personality disorder among those with adjustment disorder in comparison to those with other depressive disorders seems to be not different (20), although studies are few and numbers small. Among personality di-

mensions, neuroticism emerged as a factor predisposing to adjustment disorder in a military sample (61). Attachment style has also been examined, and maternal overprotection was found to be a risk factor for later adjustment disorder (62,63), while paternal abuse was associated with the severity of the disorder (63).

Studies using terminologies that imply a diagnosis of adjustment disorder, such as “reactive”, “non-endogenous” or “situational” depression, are also of interest, although there is a caveat that these conditions may not be identical to adjustment disorder due to differences in the definitions in the earlier classifications. One such study (64) found that the strongest relationship was between premorbid neuroticism and a non-endogenous symptom pattern and evidence of “oral dependent” personality. The findings in relation to neuroticism and a non-endogenous pattern of symptoms were replicated by others (65) in studies of subjects and their relatives (66).

### Symptoms

The absence of clear symptomatological criteria for adjustment disorder in either DSM-IV or ICD-10 means that greater weight is attached to clinical judgement than in most other current conditions. Symptoms of low mood, sadness, worry, anxiety, insomnia, poor concentration, having their onset following a recent stressful event are likely indicators of a diagnosis of adjustment disorder, although it must be borne in mind that major depression can also present similarly. Mood disturbance is often more noticeable when the person is cognitively engaged with the event, such as when speaking about it, while at other times mood is normal and reactive. The removal of the person from the stressful situation is associated with a general improvement in symptoms. In the case of those who develop adjustment disorder in response to serious illness, changes in mood are related to changes in the illness itself.

The more typically “melancholic” the symptoms are – e.g., diurnal change, early morning waking, loss of mood reactivity – the less likely is the diagnosis of adjustment disorder. A family history of depression might also suggest a depressive episode.

Due to the low symptom threshold for diagnosing major depression, it is easy to make a diagnosis of this condition rather than adjustment disorder. While the National Institute for Clinical Excellence (NICE) guidelines on depression recommend a period of “watchful waiting” (67), so as to allow for the possibility of spontaneous resolution, under pressure from the patient and his/her family, or the doctor’s own desire “to do something”, a diagnosis of major depression (or generalized anxiety) may be made and antidepressants prescribed.

Difficulties also arise when the stressor, and hence the symptoms, is persistent and has little likelihood of resolving. Antidepressants may be prescribed on pragmatic grounds, as there is no way of establishing if the symptoms are likely to spontaneously remit or if they are now independent of the



initial trigger and constitute major depression. The absence of a response to antidepressants should raise the possibility that this is an adjustment disorder, so that psychological therapies are offered rather than engaging in protracted trails of multiple medications.

A further consideration is that what appears to be a single stressor (e.g., a diagnosis of a serious physical illness) may be associated with ongoing symptoms as different facets of the diagnosis impinge upon the patient (e.g., the initiation of painful treatments, treatment failures, etc.). Failure to appreciate that rolling stressors prolong symptoms might lead to an erroneous diagnosis of major depression. The role of the consequences of the initial stressor in prolonging symptoms is recognized in the DSM-IV definition of adjustment disorder.

Based on the predominant symptoms, several subtypes of adjustment disorder are recognised by DSM-IV and ICD-10 (Table 1).

The subtypes are broadly similar in the two classifications but, apart from adjustment disorder with depressed mood, they have received little attention. The depressed subtype is the most common in adults, while the subtypes with predominant disturbance of conduct or of conduct and emotions are more commonly diagnosed among children and adolescents.

### Differential diagnosis

The distinction between adjustment disorder and a normal stress response is based on the severity of symptoms and their duration; the impact on functioning taking into account the nature of the stressor; the personal and interpersonal context in which it has occurred; cultural norms with regard to such responses.

PTSD and acute stress disorder require the presence of a stressor of a magnitude that would be traumatic for almost everybody and the symptom constellation is also specific, although both of these have recently been challenged (40). Moreover, not everybody exposed to such traumatic events responds by developing PTSD and the possibility that other disorders can follow instead needs to be considered. For those not meeting the PTSD diagnostic criteria, but with significant symptoms and/or functional impairment, adjustment disorder should be considered a possible alternative.

What may appear to be an adjustment disorder, because

of the sub-threshold level of the symptoms or the lack of functional impairment, might be an axis I disorder in evolution that only emerges as a recognizable syndrome after a period of watchful waiting. Thus, the revision of an index diagnosis of adjustment disorder may be necessary at times, especially if there are persisting symptoms in spite of termination of the stressor.

### Comorbidity

Few studies have examined the disorders that are comorbid with adjustment disorder, an exercise that is hampered by the fact that the criteria for this disorder preclude axis I comorbidity. Yet, a recent study (19) found that almost half of patients exhibited comorbidity with major depression or PTSD. Surprisingly, complicated grief and adjustment disorder were not significantly comorbid.

The relationship between substance abuse and adjustment disorder is also deserving of mention, since it may explain the seeming instability of the adjustment disorder diagnosis. Firstly, substances may be misused for relief of symptoms such as anxiety and depression, which are prominent in adjustment disorder. Substances such as alcohol are themselves depressogenic and may present with mood changes leading to misdiagnosis. This may explain why in one study (6) several patients with an admission diagnosis of adjustment disorder were relabelled on discharge as having a primary diagnosis of substance misuse.

### MANAGEMENT OF ADJUSTMENT DISORDER

The evidence base for the treatment of adjustment disorder is limited, due to the paucity of studies. A further problem is that these are self-remitting conditions, so that trials of interventions may fail to identify any benefits due to spontaneous resolution.

In general, brief therapies are regarded as being the most appropriate, with the exception that, when stressors are ongoing, prolonged supportive measures may be necessary. However, there is a caveat for children and adolescents diagnosed with adjustment disorder, since there is evidence (26) that a majority of adolescents eventually develop major mental disorders.

**Table 1** Subtypes of adjustment disorder in DSM-IV and ICD-10

DSM-IV	ICD-10
With depressed mood (309.0)	With brief depressive reaction (F43.20)
With anxiety (309.24)	With prolonged depressive reaction (F43.21)
With depression and anxiety (309.28)	With mixed anxiety and depressive reaction (F43.22)
With disturbance of conduct (309.3)	With predominant disturbance of other emotions (F43.23)
With disturbance of emotion and conduct (309.4)	With predominant disturbance of conduct (F43.24)
Non-specified (309.9)	With mixed disturbance of emotions and conduct (F43.25)
	With other specified predominant symptoms (F43.26)

Practical measures may be useful to assist the person in managing the stressful situation. A person being bullied at work might decide to invoke an internal redress system or may seek the support of the trade union. A person in an abusive relationship might seek a barring order. A vulnerable person taking on too much work may benefit from simple, directive advice. Harnessing family members' input, involving supportive agencies such as social services or encouraging involvement in a support or self-help group may alleviate distress.

Psychological therapies, delivered individually or in groups, span the range including supportive, psychoeducational, cognitive and psychodynamic approaches. Relaxation techniques can reduce symptoms of anxiety. Facilitating the verbalization of fears and emotions and exploring the meaning that the stressor has for the individual might also ameliorate symptoms. In persons who engage in deliberate self-harm, assistance in finding alternative responses that do not involve self-destruction may be of benefit and to date dialectical behaviour therapy (DBT) has the best evidence base (68). Ego enhancing therapy was found to be useful during periods of transition in older patients (69). "Mirror therapy", a therapy including psychocorporeal, cognitive, and neurolinguistic components, was effective in patients with adjustment disorder secondary to myocardial infarction (70). Cognitive therapy was helpful when administered to patients with adjustment disorder who experienced work-related stress (71) and among army conscripts with adjustment disorder (72). In a study of terminally cancer patients (73), similar improvements were found in those with adjustment disorder and other psychiatric diagnoses.

Some of these psychological interventions have been tested in specific medically ill groups, such as those with cancer, heart disease or HIV. While improvements in coping have been demonstrated, it is unclear if subjects had adjustment disorder, some were open pilot studies (e.g., 74) and survival and quality of life rather than symptoms were the outcome measures in others (e.g., 75).

The basic pharmacological management of adjustment disorder consists of symptomatic treatment of insomnia, anxiety and panic attacks. The use of benzodiazepines to relieve these is common (76). While antidepressants are advocated by some (77), especially if there has been no benefit from psychotherapy, there is little solid evidence to support their use. Nevertheless, those with sedative properties targeting sleep and anxiety may have a role when benzodiazepines are contraindicated (78), such as in those with a history of substance dependence.

There are few trials specifically directed to the pharmacological treatment of adjustment disorder and these are mainly on subjects with the anxiety subtype (79-85). A study (79) comparing a benzodiazepine with a non-benzodiazepine found that the anxiolytic effects of each were similar, although more responded to the non-benzodiazepine. Two randomized placebo-controlled trials examined herbal remedies, including extracts from kava-kava (80) and valerian

plus other extracts (81), and demonstrated a positive effect on symptoms. A study found that tianeptine, alprazolam and mianserine were equally effective (82), while a pilot study of cancer patients with anxious and depressed mood found trazodone superior to a benzodiazepine (83). One study in primary care (84) examined the response of patients with major depression and with adjustment disorder to antidepressants, using reported changes in functional disability based on case note information. Overall, the adjustment disorder group was twice as likely to respond to antidepressants. However, as this was a retrospective case note study, the relevance of the findings is questionable. One study compared pharmacological and psychological interventions in subjects with adjustment disorder randomly assigned to supportive psychotherapy, an antidepressant, a benzodiazepine or placebo, and found that all improved significantly (85). Overall, these studies lend little support for the superiority of antidepressants, and arguably for any specific treatment, in the management of adjustment disorder, but further studies are clearly required.

## CONCLUSIONS

Adjustment disorders are common mental disorders, especially in consultation-liaison psychiatry. Their prevalence seems to be higher in children and adolescents, in whom they are associated with significant morbidity and a poorer outcome than in adults. Suicidal behaviour is common in both adolescents and adults with these disorders, and adjustment disorder is the diagnosis in up to one third of young people who die by suicide.

There are major problems with the diagnostic criteria for adjustment disorder in both ICD-10 and DSM-IV. The most prominent of these is the status as sub-syndromal conditions. This has resulted in their being the subject of little research. Furthermore, current classifications fail to provide guidance on distinguishing these disorders from normal adaptive reactions to stress, and encourage the diagnosis of major depression in people with self-limiting reactions to stressors.

Treatments for adjustment disorders are underinvestigated, although brief psychological interventions are likely to be the preferred option.

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