Adjustment Disorder
Epidemiology, Diagnosis and Treatment

Patricia Casey

University Department of Psychiatry, Mater Misericordiae University Hospital, Dublin, Ireland

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Abstract

Adjustment disorder was introduced into the psychiatric classification systems almost 30 years ago, although the concept was recognized for many years before that. In DSM-IV, six subtypes are described based on the predominant symptoms, but no further diagnostic criteria are offered to assist the clinician. These are common conditions, especially in primary care and in consultation liaison psychiatry, where the prevalence ranges from 11% to 18% and from 10% to 35%, respectively. Yet they are under-researched, possibly due to the failure of some of the common diagnostic tools to allow for the diagnosis of adjustment disorder. Among the tools that incorporate adjustment disorder, the concordance between the clinical and interview
diagnosis is very poor, with the diagnosis being made more commonly in clinical practice than the diagnostic tools allow for. Adjustment disorder is found in all cultures and in all age groups.

The presence of a causal stressor is essential before a diagnosis of adjustment disorder can be made, while the symptoms vary and include those that are found in other common psychiatric disorders. It is also important to distinguish adjustment disorder from normal reactions to stressful events.

Adjustment disorders are difficult to distinguish from normal responses to life's stressors, while the distinction from major depression also poses a classificatory conundrum since both are conceptually different. Adjustment disorder is a diagnosis based on the longitudinal course of symptoms in the context of a stressor, while a diagnosis of major depression is a cross-sectional one based on symptom numbers. Treatments consist mainly of brief interventions, while pharmacotherapy is limited to the symptomatic management of anxiety or insomnia. There are no robust studies demonstrating benefits from antidepressants. However, the number of studies of either type of intervention is very limited.

This article examines the diagnostic criteria for adjustment disorder and outlines the diagnostic process, both clinically and using structured interviews. It also discusses the differential and comorbid diagnoses, while the controversy surrounding the diagnosis itself is briefly considered. Various approaches to management conclude the article. Throughout, the lacunae in our knowledge regarding adjustment disorder are highlighted.

1. Diagnostic Criteria

Adjustment disorder has been recognized since the DSM-I\textsuperscript{[1]} was introduced in 1952, although at this time it was called transient situational personality disorder, finally changing to adjustment disorder in DSM-III (1980).\textsuperscript{[2]} Adjustment disorder has been incorporated into the International Classification of Diseases (ICD) since the ninth revision in 1978.\textsuperscript{[3]}

Despite its long history, the criteria for adjustment disorder in DSM-IV-TR\textsuperscript{[4]} continue to be vague and largely unhelpful. The core criterion is that the person must not meet the criteria for any other psychiatric condition, a bar that is set very low indeed, especially for major depression, which requires only five symptoms to be present for 2 weeks. Notwithstanding this criticism, DSM-IV-TR does specify that adjustment disorder occurs:

- In response to a stressful event.
- When the onset of symptoms is within 3 months of exposure to the stressor.
- When the symptoms are distressing and in excess of what would be expected by exposure to the stressor.
- When there is significant impairment in social or occupational functioning.
- When the symptoms are not due to another axis I disorder or bereavement.
- When, once the stressor or its consequences is removed, the symptoms resolve within 6 months.

Moreover, DSM-IV-TR recognizes that adjustment disorder may be acute, if lasting less than 6 months, or chronic, if lasting longer. Six subtypes are described based on the predominant symptom pattern and these include: with depressed mood; with anxiety; with mixed depression and anxiety; with disturbance of conduct; with mixed disturbance of emotions and conduct; and unspecified. The criteria for these are not specified in greater detail.

The ICD-10 has similar criteria\textsuperscript{[5]} but specifies that the onset is within 1 month of exposure to the stressor and it specifically excludes psychosocial stressors of an unusual or catastrophic nature. Seven subtypes broadly similar to those in DSM-IV-TR are identified in ICD-10 but the depressive reactions are divided into brief (<1 month) and prolonged (<2 years).
2. Epidemiology in Various Populations

DSM-IV-TR states that adjustment disorder is a common diagnosis yet the evidence for this is unclear since it is seldom measured in epidemiological studies.

2.1 General Population and Primary Care Studies

None of the major international studies such as the ECA (Epidemiological Catchment Area) study,[6] the National Co-morbidity Survey[7] or the National Psychiatric Morbidity Survey[8] included adjustment disorder among the conditions examined. An exception to this was the ODIN (European Outcome of Depression International Network) study of depressive disorders in five countries in Europe.[9] Using a two-stage screening method that included the Schedules for Clinical Assessment in Neuropsychiatry (SCAN)[10] only 1% of those with depressive disorders were given the diagnosis of adjustment disorder. However, a recent study of elderly people selected from the general population identified adjustment disorders as occurring with a prevalence of 2.3%, similar to that of major depression.[11]

Adjustment disorders are said to be very common in primary care, where family practitioners deal with the long-term impact of physical illness as well as the consequences of social and interpersonal problems, all of which are associated with adjustment disorder. Prevalence rates from 11% to 18%[12,13] have been described among consulters with mental health problems, although these studies were conducted over 20 years ago, and more recent studies are conspicuously absent.

2.2 Psychiatric Out- and Inpatient Clinics

There are few studies of adjustment disorder among psychiatric in- or outpatients. One study[14] of nonpsychotic patients presenting at rural and urban clinics found that adjustment disorder was the most common clinical diagnosis, made in 36% of patients, but this dropped to just over 11% using the Structured Clinical Interview for DSM-IV (SCID). Concordance between clinical and SCID diagnoses was lower for adjustment disorder than for any other diagnosis. Among adolescents attending an outpatient clinic,[15] almost 30% were diagnosed with adjustment disorder. As a diagnosis among inpatients, one study[16] identified adjustment disorder in 9% of consecutive admissions to an acute public sector unit.

Among those presenting to a psychiatric emergency care team,[17] adjustment disorder was diagnosed in 19.2% of women (second only to mood disorders) and in 14.5% of men (fourth after 'other disorders', psychoactive substance abuse and mood disorders).

In summary, these studies show that even in the secondary care psychiatric services, adjustment disorders are commonly diagnosed.

2.3 Consultation Liaison Psychiatry

A diagnosis of adjustment disorder is most likely to be made in liaison psychiatry. Up to 12% of referrals to the consultation liaison psychiatry service in several university hospitals[18] were given a diagnosis of adjustment disorder and it was considered a rule-out diagnosis in a further 10.6%, figures that resemble those of a large European study, which identified adjustment disorder as the primary diagnosis from 56 centres across 11 European countries.[19] However, the frequency with which adjustment disorder is diagnosed in this setting seems to be declining in tandem with an increase in the diagnosis of major depression.[20] This may not so much reflect a change in the prevalence of these disorders as a change in the 'culture of diagnosis'[21] with the availability of newer antidepressants.

Among specific medical groups, studies have demonstrated that adjustment disorder was almost 3-fold more common than major depression (13.7% vs 5.1%) in acutely ill, medical inpatients[22] and was diagnosed in 35% of cancer patients experiencing a recurrence.[23] In obstetric/gynaecology consultation liaison psychiatry,[24] adjustment disorders predominated over mood disorders.

2.4 Deliberate Self-Harm

Turning to those who engage in deliberate self-harm, a clinical diagnosis of adjustment disorder
is commonly made, and this was confirmed in an
emergency department study where adjustment
disorder was diagnosed in 31.8% of those inter-
viewed, while major depression was less common
at 19.5%. These proportions changed to 7.8%
and 36.4%, respectively, when a structured inter-
view (SCID) was used. One explanation for this
discrepancy is that structured interviews may be
overly rigid, having been designed for use by lay
interviewers who might apply the criteria in a
cook-book fashion. This is especially pertinent
for a diagnosis such as adjustment disorder,
which relies heavily on clinical judgement, con-
text and a longitudinal course.

What about patients with a diagnosis of ad-
justment disorder – is there an association with
self-harm? The studies to date suggest that there
is. A study of adolescents and young adults with
a diagnosis of adjustment disorder who were at-
tending an outpatient clinic[19] found that 25%
had engaged in a suicide attempt and, compared
with the non-suicidal adjustment disorder pa-
tients, the suicidal patients had a significantly
greater history of prior psychiatric treatment,
poorer psychosocial functioning, dysphoric
mood, suicide in a significant other and psycho-
motor restlessness. A history of self-harm is even
more common in adults with a diagnosis of ad-
justment disorder,[26] with over 60% having such
a history and over two-thirds having a diagnosis
of either antisocial or borderline personality dis-
order, both associated with self-harm repetition.
In short, adjustment disorder carries with it the
same risk factors for self-harm as do other psy-
chiatric diagnoses, so the belief that it is less
serious than other axis I diagnoses is belied by
these findings.

The profile of suicide attempters among those
with adjustment disorder as compared with those
with major depression includes a greater like-
lihood of childhood deprivation, orphanhood
and parental instability. The act is more likely to
be carried out under the influence of alcohol and
to be unplanned, and the interval from the onset
of the disorder until the attempt is significantly
shorter in the adjustment disorder group.[27]
Therefore, this is a group with long-standing
vulnerability and a tendency to impulsivity that is
even greater than in those with major depression.
These studies all point to the role of personality
disorder as a prominent feature of those with
adjustment disorder who engage in self-harm.

3. Issues in the Classification of
Adjustment Disorder

There are a number of debates taking place
with regard to the classification of adjust-
ment disorder. These are complex and beyond
the scope of this review, which is focused on
the clinical aspects of adjustment disorder, but
for completeness they will be briefly outlined
here.

Adjustment disorder is a diagnostic category
that is ring-fenced in a particular way. On one
side is the differentiation from other psychiatric
disorders such as major depression,[28] somatiza-
tion[29] or minor depression, although there have
been no studies comparing the latter with ad-
justment disorder. The terms minor depression
and adjustment disorder may be used inter-
changeably since both are characterized by
cognitive and mood-related symptoms[30] rather
than vegetative symptoms, and both are also
viewed as sub-syndromes on the trajectory to
other disorders.

A debate within the broader debate relates to
adjustment disorder as a sub-syndrome since this
excludes the possibility of it being diagnosed
when the criteria for another disorder are met;
hence, major depression will always trump a
diagnosis of adjustment disorder, notwithstanding
the low threshold for arriving at a diagnosis of
major depression. Some argue that the current
sub-syndromal position should continue,[21]
while others contend that it should be accorded
full syndromal status with its own diagnostic
criteria, a position that is supported by this
author.[31]

With regard to distinguishing adjustment dis-
order from major depression, somatization dis-
order and others, there are conceptual difficulties
since a diagnosis of adjustment disorder is based
on the longitudinal pattern of symptoms trig-
gered by a stressor that ultimately resolves, while
a diagnosis of major depression or somatization
disorder is made cross-sectionally based on symptom numbers and severity. So different dimensions, one longitudinal and one cross-sectional, exert themselves in the diagnostic process. This is likely to render attempts at comparison problematic, although to date no differences in symptoms between adjustment disorder and major depression have been identified.

On the other side of the adjustment disorder fence lie the adaptive homeostatic reactions to stressful events from which adjustment disorder must also be distinguished. A system of diagnosis based simply on the presence of symptoms alone is likely to be over-inclusive, capturing in its net a variety of appropriate responses to stressors. A warning note was sounded in a recent editorial:[32] “[T]here may well be a latent genius in these labels, for professionals, for laypersons and for society, because they represent psychiatry’s recognition of the existential limits and uncertainties of living. Beware a Trojan horse, however; these categories, if widely used, could medicalise most of life.” Surmounting this requires clinical skills that consider various domains within the symptom complex such as context, cultural norms, etc. These will be considered further below (see differential diagnosis in section 4.3).

4. Diagnosis

4.1 Diagnosis Using Structured Interviews

Few of the structured diagnostic interviews incorporate adjustment disorder. Neither the Clinical Interview Schedule (CIS)[33] nor the Composite International Diagnostic Interview (CIDI)[34] include adjustment disorder. The SCAN[10] does include adjustment disorder in section 13, which deals with inferences and attributions. This comes after the criteria for all other disorders have been completed and there are no specific questions to assist the interviewer in making the diagnosis. The SCID[35] 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 psychiatric disorders are met. The Mini Interna-

4.2 Diagnosis in Clinical Practice

Diagnosing adjustment disorder in clinical practice can be difficult since there is symptom overlap between the various subcategories of adjustment disorder and other psychiatric syndromes such as generalized anxiety, major depression, etc. Most research in distinguishing adjustment disorder subtypes from other disorders has focused on adjustment disorder with depressed mood and major depression.[28]

4.2.1 Stressors

The essential requirement for diagnosing adjustment disorder is that the symptoms must be triggered by a stressful event and the maximum time lag specified in ICD-10 is 1 month and in DSM-IV-TR is 3 months. In this regard it is similar to post-traumatic stress disorder. For all other psychiatric disorders, a Stressor is not a requirement, although there is evidence[37] that over 80% of those with major depression have experienced a recent life event.

Concerning the type of events, there is little to assist the clinician in distinguishing adjustment disorder from other diagnoses and even events of the magnitude that are typically associated with a diagnosis of post-traumatic stress disorder can also trigger adjustment disorder. A study comparing those with major depression to those with adjustment disorder identified a higher proportion of events related to marital problems and fewer to occupational or family stressors in the adjustment disorder group.[37] Although statistically significant, these differences are unlikely to be helpful in making the diagnosis since they are not specific to either diagnosis.

4.2.2 Symptoms

In both ICD-10 and DSM-IV-TR, the criteria for diagnosing adjustment disorder are silent with respect to specific symptoms. Nevertheless, there are some symptoms that may be of diagnostic assistance. The loss of mood reactivity, the
presence of diurnal mood change, a distinct quality to the mood change and a family history of depression might suggest a depressive episode rather than adjustment disorder. This was partially supported in a study comparing patients with major depression, with and without physical co-morbidity. Using an instrument designed to distinguish typical melancholic features from other symptoms of depression, those with physical illness were less likely to experience the former, raising the possibility that the greater the environmental triggers the less likely that typical melancholic symptoms of depression will be present. Since adjustment disorder represents, *par excellence*, a disorder in which environmental factors are prominent, it is possible that these symptoms will distinguish those with adjustment disorder from those with more biologically determined depression. Only further studies will demonstrate if these symptoms have sufficient specificity.

With regard to the symptom of low mood itself, the mood state of those with adjustment disorder often depends more on the cognitive presence of the stressor, so that immediate impairment of mood is observed when the stressor is mentioned, followed by a more pronounced mood recovery when the patient is distracted.

Ultimately, due to the limitations in the criteria for diagnosing adjustment disorder, the diagnosis is based on the presence of a precipitating stressor and on a clinical evaluation of the likelihood of symptom resolution on removal of the stressor.

### 4.3 Differential Diagnosis

#### 4.3.1 Distinction from Normal Responses

Adjustment disorder is different from other psychiatric disorders since one element of the diagnosis is whether the response to the stressor is a manifestation of appropriate distress.

The failure to differentiate appropriate, non-pathological reactions to stressful events from those that are pathological could lead to normal sadness being misdiagnosed as adjustment disorder or depression simply by the presence of symptoms. In the absence of criteria distinguishing normal from abnormal responses, clinical judgement will play a prominent part in deciding whether the responses are proportionate or excessive (table 1).

This will have to take into account the personal circumstances of the individual and the expression of symptoms within the person's culture. For example, the loss of a job might be acceptable for one person while for another it could heap poverty on a family. Cultural differences in the expression of emotion will also need to be considered since some individuals are more expressive than others; a knowledge of 'normal' coping with illness and other stressful events is essential and the diagnostic process will be guided by the extent to which an individual's symptoms are in excess of this, both in terms of severity and duration. For instance, failure to appreciate that some cultures grant compassionate leave from work following bereavement might lead to such a person being identified as disordered in another culture. Finally, the presence of functional impairment is also an indicator of a pathological response.

With regard to symptoms and functioning, it is recommended that these should only be regarded as excessive if they are 'clinically significant', although this has not been defined and has been criticized as being inadequate and tautological.

#### 4.3.2 Distinction from Other Psychiatric Disorders

Because of the symptom overlap between adjustment disorder and a number of axis I disorders such as major depression and generalized anxiety, the possibility that these diagnoses might be present rather than adjustment disorder must be considered. The failure to diagnose major depression, for instance, could have serious treatment and prognostic implications. Alternatively,

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**Table 1. Variables to consider in distinguishing adjustment disorder from normal responses to stressors**

<table>
<thead>
<tr>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal circumstances and context of the stressor</td>
</tr>
<tr>
<td>Proportionality between symptom severity and triggering event</td>
</tr>
<tr>
<td>Persistence beyond expected duration</td>
</tr>
<tr>
<td>Cultural norms for emotional response/expression</td>
</tr>
<tr>
<td>Duration and severity of functional impairment</td>
</tr>
</tbody>
</table>

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diagnosing such disorders as major depression when a diagnosis of adjustment disorder is more appropriate could reinforce the ‘culture of prescribing’ even when spontaneous recovery is likely. A problem arises if the DSM-IV-TR diagnostic criteria are rigidly applied since, once the criteria (symptom numbers and duration) for any other disorder are reached, the diagnosis of adjustment disorder cannot be made. In practice it is more likely that major depression will be over-diagnosed at the expense of adjustment disorder than the converse, due to the low threshold applied to major depression.

Post-traumatic stress disorder and acute stress disorder require the presence of a Stressor of a magnitude that would be traumatic for almost everybody and a specific symptom constellation, although these have recently been challenged. However, not everybody exposed to such traumatic events develops post-traumatic stress disorder and the possibility that other disorders, such as adjustment disorder, can occur needs to be considered. Finally, 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 recognisable syndrome after a period of watchful waiting, especially if symptoms persist despite termination of the stressor.

For those experiencing long-standing stressors, the persistently low mood that is the response to these may be misdiagnosed as dysthymia, as enduring personality change after psychiatric illness (ICD-10 only) or as depressive personality disorder (DSM-IV-TR only).

5. Co-Morbidity

The preamble to the section on adjustment disorder in ICD-10 points to the greater prominence of personal vulnerability in the aetiology of this disorder as compared with others. While this is suggestive of co-morbidity with personality disorder, the research base for this is limited. Some studies identify cognitive style as a possible contributing feature. In particular, traumatic childhood experiences are hypothesized as stimulating the perception of events as outside of one’s control, thus leading to distress and depressive symptoms. Other studies have identified the trait of neuroticism as being associated with adjustment disorder when compared with those who are symptom free. Few studies have examined the disorders that are co-morbid with adjustment disorder, an exercise that is hampered by the fact that the criteria for adjustment disorder preclude its diagnosis if the criteria for another condition are met. Yet a recent study found that 46.1% of patients exhibited co-morbidity and this was highest for major depression (relative risk [RR] 26.8) and post-traumatic stress disorder (RR 5.1). This should not be surprising since co-morbidity is commonly associated with all psychiatric disorders and the finding may represent the co-occurrence with another disorder of different aetiology.

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. Substances may be misused for relief of symptoms such as anxiety and depression, which are prominent in adjustment disorder. Alternatively, substances such as alcohol are themselves depressants and abuse of these agents may present with mood-related symptoms, leading to misdiagnosis. There is some evidence for the latter from a study that found that 59% of patients diagnosed with adjustment disorder were relabelled on discharge as having a primary diagnosis of substance misuse.

6. Treatment

There are few trials of treatment, whether psychological or pharmacological, for adjustment disorder, but in clinical practice the focus has been mainly on psychological interventions.

6.1 Psychological Interventions

In general, brief therapies are considered the most appropriate as adjustment disorders tend to be short lived, although lengthier therapies may be required when stressors are chronic or when there is an underlying personality pathology that increases vulnerability to such stressors.
There are three broad components[20] to the psychological interventions for adjustment disorder.

6.1.1 Enabling Reduction or Removal of the Stressor

These measures consist of practical assistance in removing the stressor from the person or the person from the stressor. For example, when an individual is in a violent relationship, encouraging the person to obtain protection or to leave is likely to reduce the levels of distress. Moreover, many stressors can be minimized or avoided, such as when a person takes on too much work. Problem-solving techniques may assist the patient in making these decisions.

6.1.2 Measures to Facilitate Adaptation

When a stressor cannot be removed, such as a person caring for a sick relative, measures such as psycho-education, problem-solving techniques or cognitive restructuring may help reframe it.

Putting support systems in place can help a distressed person deal with problematic situations especially when it results in practical assistance, such as someone being available when a carer needs time off. This may involve harnessing the input of family members or encouraging involvement in a support or self-help group.

6.1.3 Altering the Response to the Stressor—Symptom Reduction/Behavioural Change

Relaxation techniques can reduce symptoms of anxiety, and more general measures that include facilitating the verbalization of fears and emotions and exploring the meaning that the stressor has for the individual might also ameliorate symptoms. Many who are confronted by life’s problems will engage in deliberate self-harm, either due to hopelessness, anger or some other emotion. Assisting the person in finding alternative responses that do not involve self-destruction will be of obvious benefit and, to date, dialectical behaviour therapy has the best evidence base.[48]

Interventions may be delivered individually or in groups, and family or interpersonal therapy may be of value in some contexts.[20] In general, the psychological therapies span the range including supportive, psycho-educational, cognitive and psychodynamic approaches. Although not yet tested in relation to adjustment disorder, resilience-enhancing techniques might also have a role.[59]

Unfortunately, the evidence base for these approaches is limited. A few studies have focused on the elderly, who are particularly vulnerable to adjustment disorders. One study utilized ego-enhancing therapy during periods of transition[50] while another used ‘mirror therapy’ in those with adjustment disorder secondary to myocardial infarction,[51] both with benefit.

In a younger population, cognitive therapy was helpful when administered to those with adjustment disorder who experienced work-related stress.[52] While among army conscripts it was beneficial to those with adjustment disorder,[53] in a study of terminally ill cancer patients,[54] similar improvements were found in those with adjustment disorder and other psychiatric diagnoses when they were treated with cognitive therapy.

A grey literature study of nine patients with adjustment disorder[55] found benefits from eye movement desensitization.

Some of these psychological interventions have been tested in specific medically ill groups such as cancer patients, those with heart disease, HIV and so on. While improvements in coping have been demonstrated, it is unclear if patients had adjustment disorder, some were open-label pilot studies[56] and survival and quality of life rather than symptoms were the outcome measures in others.[57] Another study confirmed the benefits of brief dynamic and supportive therapy for minor depressive disorders[58] that included adjustment disorders, but the sample size[30] was small and diagnostically diverse.

6.2 Pharmacological Interventions

The pharmacological management of adjustment disorder consists of the symptomatic treatment of insomnia, anxiety and panic attacks and the use of benzodiazepines is common.[59] While antidepressants are advocated by some,[60] especially if there has been no benefit from psychotherapy, there is little solid evidence to
support their having an effect on depressive symptoms in those with adjustment disorders. Nevertheless, antidepressants with sedative properties targeting sleep and anxiety may have a role when benzodiazepines are contraindicated, such as in those with a history of substance dependence.

There are few trials specifically directed at the pharmacological treatment of adjustment disorders and these are mainly of patients with adjustment disorder with anxiety. Some of these studies are summarized in table II.

A recent double-blind, controlled study comparing a benzodiazepine (lorazepam) with a non-benzodiazepine anxiolytic (etifoxine) found that the anxiolytic effects of each were similar, although more patients responded to the non-benzodiazepine medication.

Two randomized, placebo-controlled studies examined herbal remedies including extracts from kavain (kava-kava) and valerian plus other extracts among outpatients with adjustment disorder (with anxiety) and demonstrated a positive effect on symptoms. A further study in patients diagnosed with adjustment disorder with anxiety found that anxiolytics and antidepressants were equally effective, while a pilot study of cancer patients with anxious and depressed mood showed a benefit from trazodone in comparison with a benzodiazepine, although the results were not statistically significant.

One study in primary care examined the response of patients with major depression and those with adjustment disorder to antidepressants using reported changes to functional disability based on case note information. Overall, the adjustment disorder group was twice as likely to respond to antidepressants. However, being a retrospective case note study, the relevance of the results is questionable.

One of the few studies to compare pharmacological with psychological interventions randomly assigned 85 patients diagnosed with adjustment disorders to supportive psychotherapy, an antidepressant, a benzodiazepine, ademetionine or placebo. All improved significantly.

Table II. Summary of medication trials in the treatment of adjustment disorder (AD)

<table>
<thead>
<tr>
<th>Study (year)</th>
<th>Design</th>
<th>Treatment, dosage and duration</th>
<th>Population</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nguyen et al.[62] (2006)</td>
<td>r, db, pg</td>
<td>Etifoxine 50 mg tid vs lorazepam 0.5-1 mg/day for 28 days</td>
<td>191 outpatients attending GPs</td>
<td>HAM-A score decreased by 54.6% vs 52.3% (p=0.0006)</td>
</tr>
<tr>
<td>Volz and Kieser[63] (1997)</td>
<td>r, db, pc</td>
<td>Kavain (kava-kava) extract WS 1490 vs placebo for 25 weeks</td>
<td>101 outpatients</td>
<td>Kavain decreased HAM-A score significantly more than placebo from week 8</td>
</tr>
<tr>
<td>Bourin et al.[64] (1994)</td>
<td>db, pc</td>
<td>Valerian and other extracts (Euphostis®) 2 tablets tid vs placebo for 28 days</td>
<td>182 outpatients</td>
<td>Extracts decreased HAM-A score significantly more than placebo from day 7 to day 28</td>
</tr>
<tr>
<td>Anseaux et al.[65] (1996)</td>
<td>db, pg</td>
<td>Tianeptine 37.5 mg/day vs alprazolam 1.5 mg/day vs mianserin 60 mg/day for 6 weeks</td>
<td>152 patients</td>
<td>Similar improvement with all three treatments</td>
</tr>
<tr>
<td>Razavi et al.[66] (1999)</td>
<td>r, db</td>
<td>Trazodone mean dosage 111.5 mg/day vs clorazepate mean dosage 17.5 mg/day for 28 days</td>
<td>18 cancer patients</td>
<td>Successful response to treatment in 10/11 patients receiving trazodone vs 4/7 patients receiving clorazepate (p=0.1373)</td>
</tr>
<tr>
<td>Hameed et al.[67] (2005)</td>
<td>Retrospective case review</td>
<td>Antidepressants in major depression vs AD</td>
<td>96 primary-care patients</td>
<td>Response rates better in patients with AD than in patients with depression</td>
</tr>
<tr>
<td>De Leo[68] (1989)</td>
<td>r</td>
<td>Viloxazine vs lorazepam vs ademetionine (S-adenosylmethionine) vs psychotherapy vs placebo for 4 weeks</td>
<td>85 outpatients</td>
<td>All treatments produced similar improvements on the Zung Self-Rating Depression Scale</td>
</tr>
</tbody>
</table>

a Dosage not specified.
da = double-blind; GPs = general practitioners; HAM-A = Hamilton Rating Scale for Anxiety; pc = placebo-controlled; pg = parallel-group; r = randomized; tid = three times daily.
Overall, these studies lend little support for the superiority of antidepressants, and arguably for any specific treatment, in the management of adjustment disorders but further studies are clearly required.

6.3 Treatment Setting

Finally, the question of the setting in which these interventions should be delivered is important and, while it might be tempting to redirect those with adjustment disorders from the specialist services back to their primary care physicians, the demands in terms of time and skills might make this impractical. Management in a community setting in which large numbers of patients are offered an intervention delivered by clinical psychologists is another possibility. This has been tested in individuals self-diagnosed as 'stressed', by providing a 1-day free workshop comprising psycho-education using a cognitive approach. At 3 month's follow-up the intervention group was significantly less symptomatic than the waiting list control groups. This approach needs to be tested in patients diagnosed with adjustment disorder since it may have been reaching only those in the throes of normal adaptation to stressors. For the moment, patients diagnosed with adjustment disorder by psychiatrists are best treated by members of the psychiatric multidisciplinary team who have the appropriate skills.

7. Conclusions

Adjustment disorders are common, yet this diagnosis is made in the absence of specific diagnostic criteria, an issue that has been the subject of criticism. This lacuna has made research into the epidemiology and treatment of these conditions difficult. The diagnosis is currently one that is based on clinical judgement concerning the appropriate response to a stressful event or its consequences. It also demands a judgement that resolution will occur when the stressor is removed. Treatments are mainly psychological but some brief pharmacological interventions have also been examined, although overall data are sparse. The fact that, despite the conceptual and diagnostic difficulties, the diagnosis continues to be made is indicative of its utility. Much work is still needed to develop evidence-based interventions for adjustment disorders. Meanwhile, the best evidence is for psychological treatments.

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Correspondence: Prof. Patricia Casey, Consultant Psychiatrist and Professor of Psychiatry, University Department of Psychiatry, Mater Misericordiae University Hospital, Eccles Street, Dublin 7, Ireland.
E-mail: apsych@mater.ie