1. Various attempts have been made to formally classify psychiatric disorders, the two major systems being:

   1.1 The **ICD-10 Classification of Mental and Behavioural Disorders** (World health Organisation, Geneva) is part of the 10th edition of the International Classification of Disease. This appendix follows the common abbreviation of **ICD-10**. It is the international system used by the majority of clinical psychiatrists in Great Britain.

   1.2 The **Diagnostic and Statistical Manual of Mental Disorders (fourth edition)** (American Psychiatric Association Washington DC). References to it in the appendix follow the common abbreviation of **DSM-IV**. It is a system devised mainly by and for workers in the USA, however UK psychiatrists were consulted in its formulation.

2. The two systems above have been in existence for many years but only in their current editions have they been closely comparable.

3. This appendix summarises the clinical features and the aetiology of disorders which feature altered mood. It is generally based on the ICD-10 system with any major comparisons and distinctions with DSM-IV being discussed where relevant. The ICD-10 codes (numbers usually prefixed by an F) are also provided.

NORMAL LOW MOOD

4. Most people experience periods of low mood at some stage in their lives. This is a normal part of the human condition. Only when the low mood causes clinically significant distress or impairment in social, occupational or personal functioning can it be considered to be a disorder. In addition the depression must not merely be an understandable response to a particular event but must be manifestation of a behavioural, organic or psychological dysfunction in the person.

CLASSIFICATION OF MOOD DISORDERS

5. The fundamental abnormality in this large group of disorders is the disturbance of mood (the subjective emotional state) or “affect” (the observable emotional state), the most common disturbance being depression. An elated or irritable mood (mania) may also occur but this aspect of affective disorders is less common.

6. There are numerous possible ways of classifying mood disorders according to course, presumed aetiology, symptomatology or severity. None of these are entirely satisfactory and many diagnostic labels exist as a result of the differing schools of thought. The most widely used classification systems (DSM and ICD) described above are “atheoretical” and are based on symptomatology and course of the disorder; no cognisance is consistently taken of factors such as the underlying pathology, genetics or other aetiological factors.

UNIPOLAR DEPRESSIVE DISORDERS

7. This section deals with depressive illnesses where no episodes of mania have occurred. They may be classified according to severity and/or the course of the disease. If a single episode has occurred this may be classified as a "**depressive episode**" (F32) with the qualifier of mild, moderate or severe, the latter being either with or without psychotic features. The general requirement is that these disorders should last for at least two weeks, there is no history of mania, and that the episode is not due to drugs alcohol or a physical disorder. A depressive episode may or may not occur as a response to an obvious life event, situation or psychosocial stressor. The condition may occur only occasionally in a patient's lifetime.

DEPRESSIVE EPISODE: Severe F32.2 (without psychotic features)

8. The main feature of this condition is a markedly low mood, the individual losing all interest and enjoyment in his surroundings with a profoundly impaired capacity to experience pleasure ("anhedonia"). This state is not improved by normally pleasant experiences or good news. There is a lack of energy and drive although often the patient may be agitated and restless. Anxiety may be present, the thoughts being predominantly pessimistic. Ideas that he may be suffering from serious physical disease, that he is failing at work or that the future holds nothing for him are common. He may ruminate about the past, feeling unreasonable guilt about a wide variety of events, both important and insignificant.

Other features associated with severe depressive disorders

Biological features (somatic syndrome)

9. At this level of depression certain "biological features" are recognised, although some of these features may be present in milder forms of depression. They are also referred to as "**somatic symptoms**", "**melancholia**" or "**vital depression**" and comprise:

    9.1 Diurnal variation of mood, usually lowest in the morning.

    9.2 Loss of appetite and subsequent weight loss.

    9.3 Early morning wakening (at least two hours before normal).

    9.4 Observable psychomotor retardation or agitation.

    9.5 Loss of interest in all or almost all activities.

    9.1 Lack of reactivity to pleasurable stimuli.

Psychotic features (Depressive episode severe with psychotic features F32.3)

10. In addition to the above features of severe depressive disorder, the occurrence of more bizarre ideas may indicate the presence of psychotic features: these are mainly delusions but sometimes hallucinations occur.

10.1 Delusions: this is defined as “a belief that is firmly held but on inadequate grounds, is not affected by rational argument or evidence to the contrary and is not a conventional belief that the person might be expected to hold given his cultural background and level of education”.

10.2 In depressive disorder the delusions are congruent with the mood and often contain themes such as worthlessness, guilt, disease, and poverty. For example the patient thinking that he has made a minor concealment on his tax returns and believing that he will be severely punished or his family will suffer dire consequences.

10.3 More bizarre “nihilistic” delusions may be present in which the person believes that he is dead, that parts of his body have ceased functioning, the world has stopped, he has caused the end of the world or that time has stood still.

10.4 Hallucinations: these are rare but may include voices commenting on the patient’s worthlessness. Extremely rarely, some may have visual hallucinations of scenes of death and destruction.

Cognitive impairment and “depressive pseudodementia”

11. Attention and concentration may be so impaired that the person complains of losing their memory: occasionally the apparent impairment may be so severe that it resembles dementia. This is more commonly seen in the elderly and is sometimes referred to as depressive pseudodementia.

Depressive stupor

12. This is a rare condition formerly seen in severe untreated depressive illnesses, in which the psychomotor slowing and poverty of speech becomes so extreme that the patient becomes motionless and mute.

DEPRESSIVE EPISODE: Moderate F32.1

13. The mood is low and psychomotor retardation is sometimes more common than agitation. The patient may be irritable in response to minor frustrations. Over-concern with vague aches and pains may be present as may unreasonable worry over areas such as finances, work, or the family may preoccupy the patient. With this degree of depressive disorder some of the aforementioned biological features may be present to a varying extent. There is inevitably a difficulty in continuing with domestic, work and social activities.

DEPRESSIVE EPISODE: Mild F32.0

14. The core feature is low mood and gloomy outlook with loss of enjoyment and increased fatiguability. There may be loss of appetite or overeating, however the latter is not accompanied by great feelings of satisfaction and enjoyment. Occasional biological features may be present, however if all are present the condition probably falls into the “moderate” category. A certain degree of impairment in social, occupational and domestic functions may be present, however this is not complete.

RECURRENT DEPRESSIVE DISORDER F33

15. If there are repeated episodes of marked depressive illness (usually of 3-12 months duration) with intervening periods of at least two months without any symptoms, a diagnosis of recurrent depressive disorder may be considered. This may be subtyped according to the degree of severity exactly as in depressive episodes described above. Whether a markedly recurrent depressive disorder eventually continues as purely depressive or is interspersed with periods of mania, only time may tell: the diagnosis would then change to bipolar disorder. The pattern may be further obscured if the suffered dies before demonstrating a manic episode. Therefore in using a label of severe recurrent depressive disorder with psychotic features there may be implications regarding a genetic aetiology.

RECURRENT BRIEF DEPRESSIVE DISORDER F38.1

16. This diagnosis describes a depressive disorder in which the episodes last no more than two to three days and occur very frequently (usually at least monthly) and for at least a year.

DYSTHYMIA F34.1

17. This is a relatively recent term for a depressive disorder which formerly lay within the rubric of “depressive personality disorder” or neurotic depression”. Studies however are suggesting that the condition meeting the criteria for “dysthymia” in the various classifications may in fact represent several different conditions. Currently however it is regarded as a very chronic but relatively mild condition which must have been evident for at least two years.

18. The symptoms are mainly of feeling depressed and tired most of time, with everything being an effort: nothing is enjoyed. Sleep is often poor in an ill-defined way and various somatic complaints are common. The depression tends to be more subjective than objective and it is not sharply demarcated from the patient’s usual personality. Social and occupational functioning is not usually significantly affected.

“Double depression”

19. Superimposed on the dysthymic picture (above) there may be episodes of a more severe depressive disorder, thus producing the so-called “double depression”. Some studies have shown that there is a subgroup of dysthymics who are more susceptible to this pattern, the differences in this group include a family history of mood disorders, diurnal variation of gloominess, anhedonia and inertia. In addition the condition responds to antidepressants and there may be emergent hypomania when on treatment with tricyclics.

MANIA F30

20. Episodes of mania and hypomania occurring in the absence of depression in a person’s lifetime are rare and these disorders are usually considered to represent one aspect of the bipolar disorders (below).

21. The core of the syndrome of mania is not elation as much as a subjective sense of well-being and boundless energy. The patient feels full of ideas and grandiose plans, however which when thwarted (as they must be), produce irritability. There is increased activity with restlessness and a feeling that the person has no need for sleep.

22. There is excessive talkativeness ("pressure of speech") new thoughts being triggered half way through sentences ("flight of ideas") this often being accompanied by rhymes and puns. There is a sense of grandiosity, loss of inhibitions and reckless behaviour such as spending sprees, dangerous driving and sexual indiscretions.

23. **Mania with psychotic symptoms** F30.2

23.1 In addition to the features of mania, delusions, hallucinations and other psychotic phenomena may be present.

23.2 Delusions when present are often mood congruent, ie follow the grandiose ideas, the person believing themselves to be advisers to government, related to royalty etc.

23.3 Hallucinations: these may be mood congruent eg hearing voices telling the individual they have superhuman powers, or very occasionally, mood incongruent eg voices speaking about neutral topics.

23.4 Other psychotic symptoms such as passivity (feelings or actions felt to be under control of others), thought withdrawal or insertion and thought broadcasting. These may occur in up to 20% of people with mania although these phenomena are more usually associated with schizophrenia, being "first rank" symptoms (cardinal signs of acute schizophrenia).

HYPOMANIA F30.0

24. This is a lesser degree of mania, either in the quantity of behaviours exhibited or that those exhibited are less extreme. There is some interference with the activities of daily living with increased activity or restlessness, distractibility, mild overspending, increased sexual energy, sociability and overfamiliarity.

BIPOLAR DISORDER F31.0

(Bipolar affective disorder, manic depression)

25. This form of mood disorder is characterised by episodes of illness at both ends of the mood spectrum, ie both depressive episodes (usually with severe, somatic and or psychotic symptoms) and mania. Those who have only shown previous episodes of mania very frequently go on to suffer from at least one depressive episode and although they are apparently purely manic, often in fact become both manic and depressive ("bipolar") eventually.

26. Similarly there are those with apparent recurrent depressive episodes who may need to be reclassified as bipolar if they develop a manic episode later in the course of their illness. The “lifetime” diagnosis is therefore of importance in these disorders.

27. There are various possible combinations of the components of bipolar disorder, the depressive episodes being as described in the severe or moderate unipolar depressive disorders above.

28. The occurrence of mania, hypomania and depressive episodes varies between individuals, some exhibiting more of one extreme of mood than the other. Mixed states can occur with features of both mania and depression. Some fluctuate rapidly from one to the other, the so-called “rapid cyclers”.

29. The DSM-IV classification system differentiates between bipolar 1 and bipolar 2 disorder, the latter exhibiting the milder form of the manic episode, ie hypomania.

CYCLOTHYMIA F34.0

30. This is a persistent instability of mood with an enduring tendency to experience periods of mild elation and mild depression. Formerly the condition was included with the personality disorders as it is so pervasive. However it is more common in those whose relatives suffer from bipolar affective disorder and is therefore now tending to be classified as a genetically determined mental disorder in its own right.

31. The mood swings are usually perceived by the individual as being unrelated to life events. The condition may never come to the attention of the medical profession as the elevated mood may be welcomed, with increased sociability, more self-confidence and a sense of being better able to cope, the “depressed” phase being tolerated and seen as inevitable.

BRIEF DEPRESSIVE REACTION F43.20

32. This is a mild depression which occurs as a response to a stressful occurrence. It does not last for more than a month. It is an **adjustment disorder** and is more fully dealt with in that appendix.

PROLONGED DEPRESSIVE REACTION F43.21

33. This is a mild depressive reaction, generally lasting for up to two years which occurs as a response to a stressful event. This category includes the formerly termed “reactive depression”. It is an **adjustment disorder** and is more fully dealt with in that appendix.

MIXED ANXIETY AND DEPRESSIVE DISORDER F41.2

34. In those conditions where both anxiety and depression are **equally** present this category may be used. It is characterised by somatic symptoms of palpitations, tremor, dry mouth etc. with worry and feelings of depressed mood. If any aspect of the syndrome is stronger than the others however, the more specific appropriate diagnosis should be used.

NEURASTHENIA F48.0

35. This formerly familiarly diagnosed condition is now rarely used in the UK and North America. It is regularly and widely used in a number of countries which led to its inclusion in ICD-10. It is classified with the anxiety disorders, however, it is characterised by low mood and hence included here. It is represented by two forms, both forms, however, being characterised by the core symptoms as follows;

35.1 **Core symptoms**: Mild depressive symptoms, anxiety and irritability. Insomnia -difficulty getting off to sleep and waking during the night with difficulty getting back to sleep.
Tension headaches and non-specific "dizziness".

35.2 **First form**: the complaints are mainly mental, with increased fatigue after mental effort and decreased occupation performance. There is decreased concentration and generally inefficient thinking.

35.3 **Second form**: there is an emphasis on feelings of bodily weakness and exhaustion after minimal effort, with muscular aches and pains and an inability to relax.

DEPRESSIVE PERSONALITY DISORDER F34.1

36. This is a clinically well recognised constellation of symptoms which is variously placed in the classification systems. In the ICD-10 it lies with the affective disorders under the nomenclatures of cyclothymia and dysthymia. In DSM-IV it is mentioned by name only under 'personality disorders not otherwise specified' but the diagnostic criteria are included in the section "for further study" as there is currently insufficient information to include it in the main body of personality disorders in that particular system. The features include:

> "a persistent and pervasive feeling of dejection, gloominess, cheerlessness and unhappiness. These individuals are overly serious, incapable of enjoyment or relaxation and lack of sense of humour... They also tend to brood and worry, dwelling persistently on their negative and unhappy thoughts. Such individuals view the future as negatively as they view the present; they doubt that things will ever improve, anticipate the worst and whilst priding themselves on being realistic, are considered by others to be pessimistic."

Mood disorders after childbirth

37. Several varieties of depressive illness may appear in the period following childbirth. The mildest and most frequent is a mildly depressed mood; the “baby blues” which occurs in 50-66% of women. More severe frank mental illnesses may also occur varying from a depressive episode with biological features to a full blown depressive psychosis (ie depressive illness with biological and psychotic features) and in some rare cases, schizophrenia-like psychosis. A minority of workers feel these latter disorders should be classified separately as some recent research has suggested a specific response to oestrogen however most experts in this field are of the opinion that the clinical picture of puerperal psychosis is so rarely (if ever) reliably distinguishable from the affective disorders of schizophrenia that a special category is not justified.

AETIOLOGY OF MOOD DISORDERS

38. The aetiology of the range of disorders discussed above is complex, and the inter-relationship between the various factors is the subject of much current study. It is also fraught with historical pre-conceptions such as endogenous as opposed to reactive types of depression and the “neurotic/psychotic” dichotomy. One major difficulty is the current diagnostic labelling systems which merely describe symptoms, severity and course. Thus if two conditions with completely differing aetiologies happen to show similar end pictures they will both be labelled in the same way despite their fundamental aetiological differences.

Genetic Causes

39. The majority of genetic studies have concentrated on cases presenting with more severe symptoms, ie the bipolar and severe (psychotic) unipolar depressive disorders. Family studies have shown that parents, siblings and children of severely depressed patients have a morbid risk of 10-15% for affective disorder, against the risk of 1-2% in the general population. Twin studies have shown these high rates to be largely due to genetic factors, this being confirmed by adoption studies. Other studies have shown that bipolar disorder occurs more frequently in the families of patients with bipolar disorder than in those patients with a unipolar depressive disorder.

40. The mode of transmission of the major affective disorders is as yet unknown however it has been established that major genes (not just polygenes each of small effect) do exist. Current research on the serotonin transporter gene on chromosome 17q11.1-17q.12 has shown abnormalities in those with major affective disorder and further research is in progress.

41. Linkages have been reported between colour blindness, Xg blood group and certain HLA antigens, however none of these have been confirmed. Studies of large families (the Amish) with bipolar disorder have suggested linkage with two markers on the short arm of chromosome 11, the insulin gene and the cellular oncogene HA-ras-1. This lies near the gene for tyrosine hydroxylase, an enzyme involved in the synthesis of catecholamines, these being implicated in the aetiology of affective disorder. This linkage has not been confirmed by some other kinship studies.

42. The evidence for a genetic contribution to the affective disorders is strong and genetic factors are particularly important in the aetiology of bipolar disorder and the more severe forms of unipolar depressive disorder.

43. The genetic contribution to the more moderate types of depression is complex. Studies have shown that they do have a tendency to aggregate in families, and it is thought that genetics and family environment contribute to the aetiology. "Neurotic" type depression (related to low self-esteem, overly severe disappointment reactions, feelings of helplessness, reliance on external sources of self-esteem, and an irritable, angry and unhappy nature) appears to receive a contribution from early family environment, with a varying genetic endowment.

44. The data therefore suggest that for the less severe forms of depressive disorder, depression is familial but that the genetic contribution is small and perhaps indirect. In this type depressive disorder, personality factors probably have an important effect, which in turn have a strong genetic contribution. Several studies have shown the personality traits of introversion and depression to be inherited traits, whilst studies using other measures of personality have confirmed the heritability of extraversion/introversion and neuroticism.

Neurochemistry

45. Almost all effective drugs for depressive illness profoundly affect neurotransmitter function, neurotransmitters being the chemical links between neurons. Most conventional antidepressants either reduce the breakdown of neurotransmitters (for example, the monoamine oxidase inhibitors), or block their reuptake at the synapse (the linking area between neurons) for example, the tricyclic antidepressants. The overall effect in either case is to increase the level of the neurotransmitter at the synapse. However the receptors also undergo a compensatory change and it may be that it is this aspect which has the effect of improving mood.

46. Most of the monoamine systems are interconnected and it is becoming increasingly clear that several monoamine neurotransmitters are involved, notably noradrenaline and serotonin (also called 5-HT). Serotonin exerts an important influence on mood, sleep, circadian rhythms and the release of prolactin and corticotrophin (see paragraph on endocrine abnormalities). Somewhat surprisingly, studies have shown that breakdown products of serotonin are low or normal in mania (whereas raised levels had been expected on the grounds that mania is often considered to be the "opposite" of depression). Low concentrations persist after clinical recovery from both depression and mania which may indicate low serotonin function is a trait present in people who are prone to develop depressive disorders.

47. Long term use of various antidepressants ultimately results in enhanced serotonin mediated transmission for example by de-sensitisation of pre-synaptic inhibitory autoreceptors.

Endocrine abnormalities

48. Cortisol is an essential hormone which is normally excreted throughout the day and night in waves. Plasma cortisol levels become elevated in about half of the moderate to severely depressed patients. Despite this they do not show the clinical features of excess cortisol, possibly because the number of relevant receptor sites is reduced. However this phenomenon is not exclusive to mood disorders and is also noted in manic patients (not on treatment) and schizophrenia.

49. More importantly in depressive illnesses the normal diurnal pattern of cortisol secretion is altered, ie the normal fall in the afternoon and evening is lost, the level remaining consistently high. Furthermore 20-40% of depressed patients do not follow the normal pattern when given a dose of the synthetic corticosteroid dexamethasone and instead of suppressing their own production, continue to secrete cortisol. This has also been noted in mania, schizophrenia and dementia.

50. Other neuroendocrine abnormalities found in some depressive disorders include the abnormal response of prolactin and thyroid-stimulating hormone to thyrotrophin stimulating hormone. In addition there is some suggestion that the “rapid-cyclers” are more likely to be women and to have reduced thyroid function. This group may also be less responsive to prophylactic lithium therapy.

51. The unipolar and bipolar sub groups differ on a number of measures, for example prolactin and cortisol correlations prolactin rhythms, urinary 3 methoxy-4-hydroxy phenol glycol levels, plasma noradrenaline, plasma alpha 2 receptors, CSF prostaglandins and glucose uptake.

52. It has been suggested that the transient mood disturbance in the few days following childbirth relates to the readjustment in oestrogen and progesterone after delivery. Changes also occur in adrenal steroids and also in corticosteroid binding globulin. These postulates are as yet unconfirmed.

Psychoanalytical theory

53. Freud suggested that just as mourning results from loss (ie. death), so melancholia results from loss of other kinds. He postulated this stemmed from the “oral stage” of development when a child’s needs were inappropriately met and they became subsequently stuck in this phase, dependent on the instinctual gratifications particular to that phase. This led to a tendency to be excessively dependent on others for the maintenance of self-esteem. There are many other similar hypotheses, however more recent epidemiological studies have not confirmed these ideas.

Cognitive theory

54. Cognitive processes, ie thoughts and beliefs, are postulated as playing a decisive role in emotional behaviour. Beck theorised that children or adolescents, as a result of an unrelenting succession of tragedies (such as social rejection by peers, the criticism of teachers, the depressive attitude of parents or their loss through early death), learn a negative view of the world. This negative set of attitudes is activated whenever an aspect of a new situation resembles (even very remotely) the conditions in which the original negative view was learned.

55. These negative attitudes influence the interpretation of the environment and a distorted view of reality results. Thus if the individual's negative attitude centres on him being inept, during a depressive illness this person would expect to fail most of the time. Similarly if they were self-blaming, in depression they would feel a responsibility for all misfortunes. There are several recognised errors of thinking with illogical conclusions including:

55.1 **Arbitrary inference,** which is a conclusion based on inappropriate or insufficient evidence, eg a man feels useless because it rains on the day he is holding a barbecue.

55.2 **Selective abstraction.** This is a conclusion based on only one aspect of a many-faceted situation eg a worker blames herself for the malfunction of an article, even though many others had a hand in its production.

55.3 **Overgeneralisation.** This is a sweeping conclusion based on a single trivial event for example a student feels his wrong answer in a single lesson is final proof of his stupidity.

55.4 **Magnification and minimisation.** These are gross errors in evaluating performance, eg a woman who scratches her car says the car is ruined and regards herself as a useless driver. Similarly someone who feels worthless despite a succession of significant achievements.

56. These illogical cognitions have been noted to precede illness episodes in certain types of depressed patients, however it appears that in some, these faulty beliefs **follow** the onset of a depressive illness, therefore whether they are aetiological or consequential is uncertain.

Cognitive learning theory

57. Learned helplessness is a behaviour explained by the theory that the individuals believe that they have no control over the outcome of situations. This is said to have stemmed from early childhood experience in an environment in which it appears to them that whatever choice they make, unpleasant consequences result and certain depressed patients thus acquire the potential to lapse into "learned helplessness" or depression as a adult. It is thought to be a mechanism more common in women.

58. Virtually all studies have confirmed that in the lesser degrees of depression there is much greater frequency of females, whereas in the more severe forms of bipolar disorder the sexes are equally represented. Suggestions to explain this phenomenon include the idea that women possibly volunteer more symptoms, men conversely may under-report or tone down feelings of depression or express their depressed mood in other ways. Other studies have shown this excess of females is restricted to those women who have had children or have been married.

Life events

59. Events which are associated with depression are generally “loss events”, such as loss of a job, relative or close friend, health or status. However the precise role in depression is difficult to define, partly due to the difficulties associated with “life event” research such as poor differentiation from merely feeling low and fed-up to severe psychotic depression. The way in which life events are identified also affects the studies in that people with a depressive disorder may be more likely to think about bad occurrences in the past and thus report them more frequently.

60. Possible explanations for the association may be that it is non-specific and that just as many events may precede other illnesses, it may be coincidental, or it may be spurious ie the event is only seen as stressful because the person is depressed, or there is a “search after meaning” and a cause for the distress is sought. Research has attempted to overcome these difficulties however the majority of research is contradictory.

61. Early research showed an excess (x6) of stressful events in the six months prior to the onset of a depressive illness, however this also been found in some studies of suicide (x7) and in schizophrenia (x2-4).

62. Studies have shown that in some women there is a complex interplay of vulnerability and social factors which may contribute to the development of a depressive disorder. Vulnerability factors which have been identified are low self-esteem, the loss of a mother in childhood, being married, having 3 or more children under 14 years, being unemployed and lacking support from a partner have been identified as reducing the woman’s ability to cope with a “life event”. More recently research has concentrated on the meaning life events have for the individual. These findings cannot be generalised to males.

63. However the author of the above work was only able to confirm one of the four vulnerability factors in a separate study, that is having three children under the age of 14. Furthermore these findings have not been replicated by the majority of studies.

64. The lack of a confiding relationship has had more support as a factor in depression: whether it represents the lack of opportunities which make people more vulnerable or whether it is a reflection of distorted perception by the depressed person is not yet determined.

65. Other studies have looked at the relationship between adverse life events in the differing subtypes of depressive disorders but results are inconclusive and inconsistent. Several studies have given support to an association between adversity and mild depressive disorders. Some researchers have shown a significantly higher amount of persistent stressors in these non-biological depressives rather than a peak of events in the period just prior to the onset of illness and several studies have shown that life events are much more frequently reported in some families by up to a factor of four. A possible interpretation is that at least part of this often reported association between encountering life events and reporting depressive symptoms is that both are predisposed to by a common familial factor.

66. The role of life events in the psychotic depressive disorders is even less well understood, some studies showing that a proportion of cases of mania are precipitated by events that might have been expected to induce depression. A study by Brown, Harris and Hepworth has suggested however that those with depression with psychotic and biological features probably have no greater incidence of life events that the general population. In these cases life events may have a role however it is more likely that the events merely affect the timing and frequency of episodes of illness.

CONCLUSION

67. Genetic factors play a large part in the aetiology of mood disorders. The effect of a major gene is considered to be strongest in patients with more severe unipolar depressive disorder and in those with bipolar disorder.

68. Social and psychological mechanisms (including the effects of early family environment) appear to have a greater influence on the development of the moderate depressive disorders, although genetic factors may play a role.

69. There is an overlap between the clinical features of dysthymia and depressive personality disorder and it is apparent that they have many aetiological factors in common. Polygenic effects (ie multiple genes of small effect including those which determine temperament) and the influence of early life experiences are important in the aetiology of both conditions.

REFERENCES

The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. 1992. Geneva. World Health Organisation. p110-131.

Diagnostic and Statistical Manual of Mental Disorders. 4th Ed. 1994. Washington DC. American Psychiatric Association. p317-391.

Katz R and McGuffin P. The genetics of affective disorder. Progress in experimental and psychopathological research. 1993. p16:200-21.

Bebbington P E, Hurry J and Tennant C. Adversity and the symptoms of depression. International Journal of Social Psychiatry 1988;34:163-171.

Oswald I. What is Seasonal Affective Disorder? BMJ 1986;292:1326.

McGuffin P. Major genes for major affective disorder. BJP 1988;153:591-596.

WPA dysthymia Working Group. Dysthymia in Clinical practice. BJP 1995;166:174-181.

Johnson S L and Roberts J E. Life Events and Bipolar disorder: implications from biological theories. Psychological Bulletin. 1995. p117:3 434-449.

Craddock N and McGuffin P. Approaches to the genetics of affective disorders. Annals of Medicine 1993;25:317-22.

Snaith P. Nosology and nerosis. Concepts of mental disorder. (Eds) Kerr A and McClelland H. Royal College of Psychiatrists. Gaskell. 1991. p129-142.

Weissman M M. The Affective Disorders: Bipolar Disorder and Major Depression. Concepts of mental disorder. (Eds) Kerr A and McClelland H. Royal College of Psychiatrists. Gaskell. 1991. p103-111.

Warsh J J and Li P P. Second Messenger Systems and Mood Disorders. Current Opinion in Psychiatry 1996;9:23-29.

Maj M. Predictors of Course of Depression. Current Opinion in Psychiatry 1994;7:22-25.

Cassano G B, Tundo A and Micheli C. Bipolar and Psychotic Depressions. Current Opinion in Psychiatry 1994;7:5-8.

Alnaes R and Torgersen S. Mood Disorders: Developmental and Precipitating Events. Canadian Journal of Psychiatry 1993;38(3):217-224.

Robinson D S. Serotonin Receptor Subtypes and Affective Disorders. Clinical Neuropharmacology. New York. Raven Press Ltd. p16:3 S1-S5.

Brown G W. Life Events and Affective Disorder: Replications and Limitations. Psychosomatic Medicine 1993;55:248-259.

Brown G W, Harris T O and Hepworth C. Life Events and Endogenous Depression: A Puzzle Re-examined. Arch Gen Psychiatry 1994;51:525-534.

Hirschfeld R M A. Depressive illness: Diagnostic issues. Bulletin of the Menninger Clinic 1991;55:144-155. (Eds) Sadovnivk A D, Remick R A, Lam R, Zis A P, Yee I M, Huggins M J and Biard P A.

Mood Disorder Service Genetic Database: Morbidity Risks for Mood Disorders in 3,942 first-degree relatives of 671 index cases with single depression, recurrent depression, bipolar I, or bipolar II. American Journal of Medical Genetics 1994;54(2):132-40.

Kendler K S, Kessler R C, Walters E, MacLean C, Neale M C, heath A C and Eaves L J. Stressful Life Events, Genetic Liability, and Onset of an Episode of Major Depression in Women. American Journal of Psychiatry 1995;152(6):833-42.

Cozolino L J, Goldstein M J, Nuechterlein K H, West K L and Snyder K S. The Impact of Education about Schizophrenia on Relatives Varying in Expressed Emotion. Schizophrenia Bulletin 1988;14(4):675-87.

Perris C. The Distinction between Unipolar and Bipolar Mood Disorders. A 25-years Perspective (Review). Encephale 1992;18 Spec No 1:9-13.

Paykel E S, Cooper Z. Life events and social stress. Handbook of affective disorders. (Ed E S Paykel). 1992. Edinburgh Churchill Livingstone. p149-170.

Rudorfer M V. Monoamine Oxidase Inhibitors: Reversible and Irreversible (Review). Psychopharmacology Bulletin 1992;28(1):45-57.

Miklowitz D J, Goldstein M J, Neuchterlein K H, Snyder K S and Mintz J. Family factors and the Course of Bipolar Affective Disorder. Archives of General Psychiatry 1995;45(3):225-31.

Winokur G. A Familial (Genetic) methodology for determining valid types of affective illness. Pharmacospychiatry 1992;25:14-17.

Ogilvie A D, Battersby S, Bubb V J, Fink G, Harmar A J, Goodwin G M and Smith C A D. Polymorphism in serotonin transporter gene associated with susceptibility to major depression. Lancet 1996;347:731-33.

Murray D Oestrogen and post-natal depression. Lancet 1996;347:918-919.

Gregoire A J P, Kumar R, Everitt B, Henderson A F and Studd J W. Transdermal oestrogen for treatment of severe postnatal depression. Lancet 1996;347:930-33.

July 1996