
Prevention of depression: psychological and social measures

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The role of pharmacotherapy in the management of depressive disorders is well-established and frequently reviewed. This paper focuses on the prospects for reducing the incidence, prevalence and morbidity of depression through psychosocial interventions. A central requirement in prevention is a knowledge of the epidemiology of the disorder being investigated. This data can be used to identify high-risk groups. By comparing the number of known cases with population levels of morbidity, it allows comment on help-seeking behaviour and accessibility of services. Also, differences in incidence and prevalence rates give some indication of the chronicity of the disorder.

This article begins with a brief review of the epidemiology of depressive disorders and then examines key concepts in prevention. Research on primary, secondary and tertiary preventive strategies is then discussed.

The risk of depression

Epidemiology

About 3% of GP attenders have a recognised depressive disorder, while an equal number of sufferers go unrecognised. The median age of onset of affective disorders is early adulthood (about 23 years). Unipolar disorders are twice as common in women as men. Marital history is a powerful influence on depression rates with continuously married subjects, cohabitantes and never married subjects demonstrating the lowest morbidity. There is an inverse relationship between depression and social disadvantage. When the latter is controlled for, there is minimal evidence of racial or ethnic differences in the prevalence of depression. Eighty per cent of individuals who experience a minor episode later suffer a major depression.

Associated psychobiosocial factors

Bipolar disorder and severe unipolar disorders are the most familial forms of affective disorder. However, even where genetic influences are strong, environmental factors are important in determining whether a depressive disorder occurs and the form it takes. Psychosocial factors influencing vulnerability to depression include life events, social support networks, early environment and premorbid personality. Key risk and protective factors are summarised in Box 1.

Life events

In comparison with the general population, depression sufferers experience a significant excess of independent undesirable life events in the six months prior to episode onset, or they report chronic difficulties (Paykel & Cooper, 1992). An increase in such events may also be implicated in recurrence or maintenance of depression (Scott & Paykel, 1994). However, in the community, only about 10% of individuals who experience an exit event develop a clinical depression. Hence, mediating factors need to be explored.

Social support

Many depressives demonstrate premorbid deficits in interpersonal relationships. However, research suggests that lack of support does not directly predispose to depression. Social support reduces depression risk by buffering individuals against the impact of adversity (Alloway & Bebbington, 1987). A specific form of support, namely the presence of a confidante, is known to reduce vulnerability to onset and may also protect against recurrence of depression. Other characteristics of effective support are that it has to be perceived by the individual as adequate, and it has to be available to them at times of crisis.

Level of expressed emotion (EE) in a key relative at the time of a depressive episode is a significant predictor of outcome in unipolar and bipolar patients.

Box 1. Risk factors and protective factors

Risk factors include:

Close biological relative with depression
(due to genetic or depressive effect)

Severe stressors

Low self-esteem

Female gender

Social disadvantage

Protective factors include:

Presence of a confidante

Coping skills – problem-solving ability;
personal resilience

Early adversity

Brown (1989) suggested that a loss of mother before the age of 11 years was associated with increased risk of adult depression because of the adverse effect on the individuals self-esteem. There is no evidence from recent reviews (Parker, 1992) that childhood bereavement or parent-child separations specifically predispose to adult depression. While such events may be associated with a number of disorders, any negative effects are probably a consequence of inadequate post-loss parenting. Childhood exposure to a parental style of 'affectionless overcontrol' is associated with an increased risk of neurotic disorders, particularly non-melancholic depression, in adult life. Physical or sexual abuse in childhood also increases the risk of adult depressive and other mental disorders.

Premorbid personality and coping strategies

While personality factors may affect the course of an affective disorder, no personality characteristics have been found to be specifically associated with onset of depression. Individuals who develop a first depressive episode differ from never-ill controls in showing higher levels of neuroticism, lower levels of emotional stability, less resilience and higher levels of interpersonal dependency (Hirschfeld & Shea, 1992). Cognitive theory highlights that high levels of neuroticism are associated with chronic low self-esteem, global negative affect and enhanced recall of negative self-related material. This may partly explain the role of this trait in the development of depression.

Alternative models of vulnerability to depression

focus on perceived self-efficacy, coping and problem-solving strategies. Coping consists not only of what an individual does but also of what psychological and social resources are available. Individuals differ in the extent and efficacy of their coping responses. For example, those who generate fewer and less effective alternative solutions to problems may be at increased risk of depression and deliberate self-harm.

Key concepts in prevention

Epidemiological data are used initially to identify those people at greatest risk of affective disorder (the target population). Historically, three forms of prevention have been defined :

- (a) Primary : aimed at reducing the incidence of the disorder
- (b) Secondary : aimed at reducing prevalence
- (c) Tertiary : aimed at reducing associated disabilities.

The strategies used in secondary and tertiary prevention are essentially those employed in good clinical practice. Primary preventive interventions are less well defined, but may be categorised as 'pro-active' or 'reactive' (Jenkins, 1994).

Box 2. Issues for clinicians

A sound knowledge of epidemiology helps clinicians understand which psychosocial factors may predispose to, or protect against, the onset of depressive disorder.

The introduction of self-rating questionnaires is an inexpensive way of improving the detection of depressive disorders in community settings. To be truly effective this strategy probably needs to be linked to training that improves treatment.

Even where genetic or biological influences are strong, taking a psychosocial (distressed person), as well as a biomedical (diseased organ) approach improves patient outcome.

For example, improving parenting skills which may in turn enhance a child's self-esteem and reduce the risk of depression in adulthood, is a pro-active intervention. Counselling recently bereaved individuals to reduce the risk of abnormal grief reactions is a reactive intervention. Selecting

candidates for such approaches is a critical consideration. Three targeting strategies are recognised :

- (a) Universal: measures regarded as desirable for all members of the community (e.g. health promotion, improved housing)
- (b) Selective: measures appropriate to high-risk groups within the community (e.g. young female single parents)
- (c) Indicated: measures targeting an individual at very high risk (e.g. someone with a strong genetic predisposition).

These preventive interventions operate at different levels within the social order. Macro level interventions are aimed at changing the society and culture. Psychiatrists may seek to operate at a macro level by trying to influence government policies to reduce poverty, unemployment and poor housing. Micro level interventions are aimed at individuals, primary groups or social networks. It is easier to show the efficacy of micro level interventions with individuals in their immediate environment, particularly if the strategy is highly targeted as in selective or indicated measures (Jenkins,1994; Scott & Leff,1994).

Specific psychosocial preventive strategies may comprise individual or family therapy or may focus on general behavioural change in the individual (e.g. social skills training) or significant others. The social environment may also be modified either by enhancing existing support systems or creating a new more protective environment (e.g. through changes in lifestyle).

Systematic research on psychosocial aspects of the prevention is limited. In the biological field, there is a small literature on primary prevention (regarding the role of genetic counselling) while secondary and tertiary preventive strategies are described in the detailed research on the benefits of different drugs in the acute, continuation and maintenance phases of depression treatment. The increasing awareness of psychosocial factors associated with onset and maintenance of depression means the development of prevention programmes is likely to expand in the next decade. Potential strategies are reviewed below.

Preventive strategies in depressive disorder

Primary prevention

Primary prevention strategies may target early aspects of the lifespan (genetic or constitutional vulnerability or childhood adversity), or may focus on individuals experiencing specific life events (see Table 1).

Interventions in parent-child relationships

The impact of poor parenting may not specifically predispose a child to depression in adulthood. However, if parental care could be improved, or self-esteem of the child at risk enhanced, it might have a long-term primary preventive effect. Rutter (1985) highlights how problems experienced by one individual may adversely affect another individual in the immediate environment, which may further worsen the interaction and problems of both people. Strayhorn & Weidman (1991) attempted to intervene in this vicious cycle by targeting distressed mothers who were having difficulty managing children who had identified behaviour problems. Support for the mothers was associated with reduced levels of behavioural disturbance in the offspring.

School programmes with 'at risk' children and adolescents

In the USA, Shure & Spivack (1982) described improved problem-solving skills with a programme targeted at over 200 young children with behaviour problems who came from disadvantaged backgrounds. Others describe small projects which reduced neurotic traits in adolescents through the use of rational emotive therapy. School programmes that educate children and adolescents in how to cope with conflict and crises and improve

Table 1. Primary prevention strategies

Strategy	Example
Reduce individual vulnerability Improve parent-child interactions Offer event-centred interventions	School programmes to improve coping skills in adolescents Supporting mothers of children with behaviour disorder Counselling for individuals: at risk of abnormal grief facing severe trauma e.g. cancer surgery with risk factors for depression e.g. divorce

life skills may benefit women more than men (Mrazek & Haggerty, 1994). School-based suicide prevention programmes are not deemed effective.

Event centred interventions

Most life events implicated in studies of depression are inevitable consequences of the life cycle. However, the occurrence may signal a period of increased risk of onset of depression and preventive interventions may be feasible. This approach lies on the border between primary and secondary prevention.

Support and counselling reduces depression and other psychiatric morbidity in those at high risk of abnormal grief reactions (Raphael, 1977; Parkes, 1981). Furthermore, research showed that treated high-risk individuals were less symptomatic than nontreated controls up to 20 months post-intervention. Morbidity rates in the counselled group were reduced to the same levels as found in individuals at low risk of an abnormal grief reaction.

In the USA, Bloom *et al* (1985) describe a programme of pre-divorce counselling targeted at adults demonstrating other risk factors for depression. A four year follow-up study of 150 individuals demonstrated fewer symptoms of anxiety and depression and better vocational outcomes in the intervention group.

Maguire *et al* (1980) randomly assigned women having surgery for breast cancer to counselling or to practical advice. The prevalence of anxiety and depression was similar in both groups, but episodes were of shorter duration in the counselled women and they showed better social and psychological adjustment at post-operative follow-up after 18 months. However, the reduced morbidity during episodes might have been a function of early recognition and prompt referral (i.e. secondary prevention), rather than representing primary prevention.

Secondary Prevention

The secondary prevention of affective disorders encompasses early case detection and early initiation of treatment (see Table 2).

Early detection

Early detection of affective disorders depends in part on the attitude of the individual towards any symptoms which develop, and the behaviour of the professional they present to. As few as 50% of those developing depressive disorders seek help (Scott & Paykel, 1994). Individuals with endogenous symptoms, limitations in ability to work, impaired functioning and lower levels of social support are more likely to consult. Between 25–50% of individuals with depressive disorder will remain undetected by their GP. Depression is more frequently missed in young men, people presenting with somatic symptoms, and those who mention emotional disturbance late in the interview.

The use of self-report or simple observer-rated questionnaires such as the General Health Questionnaire, the Beck Depression Inventory, or the Hospital Anxiety and Depression Scale offer a cost-effective method (a GHQ costs about two pence to complete) of helping primary care staff detect depression. Importantly, research has shown that notifying a GP that a patient was a psychiatric case produced a better outcome than non-notification.

An alternative approach is to use educational programmes to improve case recognition. In Sweden, Rutz *et al* (1989) described a programme that improved detection and management of depression and suicide risk. Evidence from England (Scott & Paykel, 1994) suggests that a package aimed at improving the interviewing skills of primary care physicians produces similar results. At a national level, professional colleges (American Psychiatric Association; Royal College of Psychiatrists) have initiated the 'DART' (Depression Awareness, Recognition and Treatment) and the

Table 2. Secondary prevention

Strategy	Example
Improve early case detection	Screening questionnaires e.g. Beck Depression Inventory Education and interview skills training for GPs Increase awareness of depression and enhance help-seeking e.g. Defeat Depression campaign
Offer early intervention	Support and monitoring of at-risk mothers or pregnant women e.g. NEWPIN project Improve access to professional help e.g. self-referral, liaison attachment to primary care

Table 3. *Tertiary prevention*

Strategy	Example
Reduce relapse and recurrence	Psychotherapies alone or as an adjunct to pharmacotherapy Cognitive therapy Couples therapy/IPT Family therapy
Provide vocational rehabilitation	Establish meaningful daytime activity
Develop support programmes	Psycho-education programmes Network therapy Social skills training Befriending schemes Assertive outreach Lifestyle counselling

'Defeat Depression' campaigns. These aim to improve knowledge and treatment skills of professionals, and to raise awareness, reduce stigma and encourage help-seeking by sufferers.

Early intervention

Early intervention offers possibilities both of interrupting distress before it reaches the level of clinical depression (at the border of primary/secondary prevention) and of markedly shortening clinical depressive episodes.

Newton (1988) describes befriending projects where at-risk parents are supported in the community in an attempt to enhance child development and improved parental functioning. The Newpin project in London relates most closely to those at risk of depression. Mothers who were vulnerable to depression according to the Brown and Harris model, formed a contract with a volunteer supporter from a similar social background who offered input over an extended period. Self-evaluation by the women suggested that self-esteem, self-confidence and interpersonal relationships had improved and that the mothers related better to their children (Newton, 1988).

In New South Wales Barnett & Parker (1985) undertook a project with primiparous women who had been shown to be at greater risk of neurotic and depressive disorders. The women were assigned postnatally to either professional support, lay support or a control group with no additional help offered. Overall, those who received professional help showed a significant reduction in post-natal anxiety levels compared to the other groups; those receiving lay support showed a non-significant improvement.

Access to services

Increasing direct access to mental health services (e.g. offering self-referral or providing liaison sessions in primary care) is another way of increasing detection and early intervention. More information is needed about the accessibility or acceptability of the services to certain high risk groups. For example, young Asian women have higher suicide rates than young Asian men, but attend GPs less often than any other subgroup in the general population.

Tertiary prevention

Although the measures described in this section lie more in the realm of treatment they have preventive implications since the interventions reduce prevalence rates of symptomatic disorder. Recent studies confirm that at least 50% of those with first depressive episodes have a further episode, while the median prevalence of chronicity is 12% (Scott, 1992). About 15% of deaths are due to suicide, and mortality rates from other causes are also increased in people with affective disorders.

Prevention of recurrence and relapse

The role of pharmacotherapy in preventing further episodes has been well studied and clear guidelines exist. Psychosocial approaches are less clearly evaluated, but the literature is expanding rapidly (see Table 3).

Interpersonal psychotherapy was of significant value in reducing recurrence in one study, but did not reduce early relapse in a controlled study of

continuation medication (Scott & Paykel, 1994).

There is accumulating evidence that cognitive therapy may reduce relapse rates in mild to moderately severe unipolar depressions (US Department of Health and Human Services, 1993). Evans *et al* (1992) demonstrated that the relapse rate with cognitive therapy was no different from that of patients receiving continuous drug treatment and was only half that of the patients who stopped their drug treatment immediately after their depression remitted. If cognitive therapy alone reduces risk of relapse this will be the first time any form of antidepressant treatment has been shown to have an effect beyond the point of termination of the intervention. Whether the combined use of cognitive therapy and pharmacotherapy bestows any additional benefit over either treatment alone is inconclusive. However, a cognitive approach may significantly enhance coping skills, lithium compliance and outcome in bipolar and unipolar cases (Scott, 1992).

The research on EE demonstrated that (in contrast to schizophrenia) depressives with high EE relatives were not protected by drug treatment or by reduced contact. However, Jacobson *et al* (1993) reported that marital therapy alone or in combination with individual cognitive therapy offers effective treatment of the acute depressive episode and may prevent relapse.

Rehabilitation

There has been a failure to investigate the residual disabilities of individuals with affective disorders (Scott, 1992). Vocational rehabilitation of these patients focuses less on the role of work performance and more on its potential for restoring confidence, improving self-esteem and enhancing feelings of mastery. Only broad guidelines are available, but meaningful daytime activity seems important. Re-employment may reduce depression in socially isolated men who have been made redundant, and women working outside of the home show less impairment following depression than housewives.

Educational and support programmes

Psycho-educational programmes for hospital-treated depressives and their families may be associated with better resolution of the index depressive episode and better global outcome (Glick *et al*, 1994). Also, individuals with chronic neurotic disorders and their families benefit more from home-based support of a community psychiatric nurse rather than intermittent symptom-orientated out-patient appointments.

Improving individual coping repertoires,

network therapy (where each member of the sufferer's primary group takes responsibility for initiating specific social changes), befriending projects and social skills training have been advocated but not fully evaluated. Lastly, in some individuals, reducing stress can only be achieved through significant changes in lifestyle (e.g. taking a less demanding job). However, care is required. Change should not be made until the individual's mental state is stable, and it must not condemn the individual to an unfulfilling existence.

Box 3. Controversial issues

No model of depression onset is robust enough to allow mental health services to introduce cost-effective primary preventive programmes.

Many unrecognised cases of depression are mild and self-limiting. To be perceived as clinically relevant preventive strategies must ensure that either:

- (a) early detection of mild cases is matched by early detection of severe cases, or
- (b) the long-term outcome of the mild cases detected is significantly improved.

Few bipolar patients receive psychosocial interventions in day-to-day clinical practice, yet the limited research data available shows that outcome is improved if such approaches are provided. The effect may be due to the indirect improvement in treatment compliance, but even so, shouldn't we employ such approaches more often?

Conclusions

Analysis of epidemiological data identifies high-risk groups and potentially allows the development of primary, secondary and tertiary preventive strategies across the lifespan. Evidence of the prevention of first episodes of depression is not available.

Promising lines of primary prevention research relate to trying to improve coping skills, and enhancing 'protective' factors during times of increased vulnerability to depression onset. Individuals with a wide range of coping strategies and resources available to them are less likely to reach the pathological end-state of depression in response to stress (Scott, 1992).

Event-centred interventions, which fall on the

boundary between primary and secondary prevention, are the most relevant approaches for clinical psychiatrists. There is a possibility that major affective disorders may be prevented by interventions at the subclinical level. Psychosocial input to individuals at high risk for depression who have experienced, or are about to experience, a significant life event seems to reduce morbidity rates to the same level as low-risk individuals.

Prospects for secondary prevention vary. Accessibility of services can be modified. Primary care professionals can be encouraged to improve detection rates of affective disorders and help-seeking behaviour may be promoted through public education. However, improving case recognition must be linked to training that improves the management of depression. Only 30% of recognised cases of depression in primary care currently receive adequate treatment.

While the mechanisms of action of putative risk factors in the onset of depression are unresolved, the role of psychosocial variables in the presentation and maintenance of the disorder is less contentious. Clinically, the prompt introduction of multimodal treatment during the acute depressive phase and rigorous attention to aftercare of the individual and their family are the most effective preventive strategies currently available. As such, there is no substitute for following 'good practice' guidelines in an attempt to reduce the morbidity and mortality associated with depressive disorders.

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Multiple Choice Questions

- 1 Epidemiological studies of depressive disorders demonstrate that :
- about 3% of GP attenders suffer from a depressive disorder
 - the median age of onset is 35 years
 - never married individuals are at greater risk than currently married individuals
 - early loss of a parent specifically predisposes to adult depression
 - the lifetime risk of developing major depressive disorder in those with a minor depression is <50%
- 2 In prevention:
- the most effective primary prevention approach is a universal strategy of improved housing conditions
 - event-centred interventions are likely to be the most cost-effective form of prevention
 - in the USA, educational programmes for adolescents have specifically reduced the incidence of depression
 - if individuals mention psychological symptoms early in a consultation, GP recognition rates for depressive disorder are increased
 - young Asian women are more likely than young Asian men to attend their GP for a mental health consultation

- 3 In depressive disorders:
- the risk of recurrence after a major depressive episode is >50%
 - interview skills training has a demonstrable effect on recognition rates
 - specific rehabilitation programmes for depressive disorder are well developed
 - cognitive therapy and maintenance drug therapy significantly reduce relapse rates following a major depressive episode
 - psycho-educational programmes may improve the outcome of hospital-treated depressives

MCQ answers

1		2		3	
a	F	a	F	a	T
b	F	b	T	b	T
c	F	c	F	c	T
d	F	d	T	d	T
e	F	e	F	e	T