Mental health promotion in high risk groups

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An important component of an effective coordinated strategy for the promotion of mental health and the primary prevention of mental distress is the identification of and effective intervention with groups of people who are at high risk of experiencing mental health problems. A large body of epidemiological research has identified several characteristics of people who are at high risk (box).¹⁻⁸

This paper summarises the findings of a recent issue of the *Effective Health Care* bulletin.⁹ This reviewed the results of randomised controlled trials of interventions aimed at one of the high risk groups shown in the box, in people who were not diagnosed as mentally ill, or were not in receipt of mental health services, and which reported either mental health and wellbeing outcomes or measures of mental distress. This summary is based on elements of two recent systematic reviews of mental health promotion¹⁰⁻¹² and other relevant reviews. These were updated by systematic searches from 1995 to April 1997 with the same search strategy as that used by Tilford *et al.*¹⁰ Few reliable economic evaluations have been carried out in this area.¹³ This review does not cover other vulnerable groups such as those with physical illness or disability, children living with adults who have mental health problems, or those who have been abused. It also excludes a discussion of psychological debriefing for people who have experienced major trauma, as there is little reliable evidence that debriefing interventions improve mental health outcomes.^{14 15}

Children

LIVING IN POVERTY

Children in socially disadvantaged communities are at higher risk of experiencing mental health problems in childhood and later life. Evaluations of social interventions aimed at improving the health and social outcomes of these children have been summarised elsewhere.¹⁶ High quality preschool and nursery education such as the Head Start and the High/Scope (Perry preschool) projects have shown improvements in self esteem, motivation, and social behaviour and other educational and social outcomes.¹⁷ Social support visits to new parents to provide them with strategies for tackling child care and child rearing issues have been shown to be effective unless deficits in parental skills are accompanied by a combination of health and socioeconomic problems. A trial of support by mature lay mothers showed improvements in maternal mental health and child care.¹⁸

BEHAVIOURAL PROBLEMS (TABLE 1)

When childhood behaviours such as mood changes and expressed aggression are sufficient to cause distress to the child or others it is sometimes considered to constitute disordered behaviour. Childhood mental distress is strongly predictive of adverse mental health and social outcomes later in life and so prevention may bring long term psychiatric, social, and economic benefits.^{3 13}

Various studies have explored the effectiveness of training parents to develop the skills necessary to deal effectively with childhood

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Groups at high risk of mental health problems considered in the bulletin

CHILDREN

- Living in poverty
- Showing behavioural difficulties
- Within families undergoing divorce
- Within families experiencing bereavement

ADULTS

- Undergoing divorce or separation
- Experiencing unemployment
- High risk of depression in pregnancy
- Experiencing bereavement
- Long term carers of people who are highly dependent

behavioural problems. Interventions involving parental role playing, behavioural management, and play skills reduced attention deficit and hyperactivity symptoms as rated by teachers and parents.¹⁹ Similarly, a trial in Ireland found that parent training resulted in improved child behaviour, psychological symptoms, and increased parental self confidence.²⁰ A two year programme of family management training aimed at parents and social skills training for seven year old boys assessed as disruptive by teachers was highly effective at reducing various measures of behavioural and adjustment problems measured after a further three years of follow up.²¹ Individual home based training of

parents in these social learning techniques may be cheaper than and as effective as office based individual and group training.²² This suggests that parent training programmes—for example, self administered videotape training—shown to be cost effective at improving parent-child interactions and behaviours in children referred for treatment for conduct disorders^{23–25} can also be useful in preventive settings.

Two trials examined the effect of school based social skills training on socially rejected children.^{26 27} Both showed improvements in social skills and less social isolation.

Teenage school attenders with low self esteem benefited from a cognitive behavioural

Table 1 Children: - behavioural difficulties

Author (year), country, objective	Study details	Results (measures)
Bierman and Furman 1984 ²⁷ USA To examine the effects of social skills training in socially rejected children.	Participants: socially rejected 10–11 year old children with poor conversational skills I1: individual coaching; I2: group experience; I3: I1 + I2 10 half hour session with video feedback of social performance over a 6 week period. C: no treatment I1: (n=14); I2: (n=14); I3: (n=14); C: (n=14) Follow up: 6 weeks after intervention	Individual coaching produced a sustained improvement in conversational skills ($p<0.001$). Group experience did not. The combination produced the greatest and most wide ranging improvement Attrition: 0% Follow up is short and long term benefit cannot be assumed
Cole and Krehbiel, 1984 ²⁶ USA To examine the effects of training on behaviour in socially rejected children	Participants: socially rejected children with academic problems (screened for by a sociometric questionnaire) I1: academic skills training; I2: social skills training; I3: academic and social skills; C: no contact I1: (n=10); I2: (n=10); I3: (n=10); C: (n=10) Follow up after intervention and 1 y	Academic skills (I1 and I3) increased their social status ($p<0.01$) (as assessed by other children in the school) ($p<0.05$) and decreased their disruptive behaviour ($p<0.01$) as assessed by classroom observers at 1 y after intervention Attrition: I1=30%, I2=0%, Both=10%, C=40% (at 1 y)
Horan 1996 ²⁸ USA To evaluate the effects of a computer based cognitive restructuring program in students with low self esteem	Participants: students aged between 16 and 19 who had low self esteem I: students had to respond to 13 cognitive restructuring modules focusing on irrational beliefs for 2x50 min periods C: training in relaxation exercises through audiotapes for 2x50 min periods I: (n=28) C: (n=28) Follow up: within 1 week after intervention	Overall benefit found on self esteem ($p=0.01$), irrational beliefs ($p=0.03$), and inadequacy ($p=0.002$), but not for self concept Attrition: I=7% C=7% Power calculation performed Not evaluated yet in a clinical context
Malgady et al 1990 ²⁹ USA To evaluate a hero modelling intervention.	Participants: volunteer Puerto Rican students in New York school with most severe behaviour problems (aged 12 to 15 years). I: intensive 19 week school educational programme about famous Puerto Ricans with whom participants could identify ethnically. C: met in small groups to discuss current events. I: (n=70); C: (n=40) Follow up: after intervention	Improved self concept for boys ($p<0.05$) and girls ($p<0.02$) in families with father absent: reduced trait anxiety at grade 8 ($p<0.05$) but not grade 9 Attrition: I=13%; C=28% No long term follow up: could be applied in UK with different ethnic minorities
Mullin et al 1994 ²⁰ UK To assess the impact of parent training on mothers' wellbeing	Participants: self referring mothers I: 10 week course to teach parents how to deal effectively with their children and self management skills; C: waiting list I: (n=39); C: (n=40) Follow up: after intervention and 1 y after completing the course	Mothers' self esteem as measured by the Rosenberg self esteem inventory had increased in the I group compared with C (mean=33.4 v 31.5, $p=0.03$) after intervention No results presented for I and C group comparisons at 1 y Attrition: I=8%
Siebert and Yates 1980 ²² To examine the effectiveness and cost effectiveness of three systems with social learning techniques for child management	Participants: parents and children aged 5–15 y who showed behaviour problems I1: individual in home 1 h weekly child management training for 5 weeks I2: group 1.5 h weekly child management training for 5 weeks I3: individual in office 1 h weekly child management training for 5 weeks C: delayed treatment but met weekly for 15 min with counsellor I1: (n=8 parents); I2: (n=7 parents); I3: (n=7 parents); C: (n=8 parents) Follow up: 4 months	The 3 training systems produced similar benefit: mean 86% reduction in problem behaviour compared with a 38% reduction in the C group, $p<0.001$: these findings remained at 4 months follow up Costs: opportunity costs: I2=\$93.75, I1=\$95.00, I3=\$142.71; comprehensive costs (including client costs): I1=\$139.75, I2=\$189.29, I3=\$191.51 Attrition: I2 = 14%; I1 = 13%
Strayhorn and Weidman 1991 ¹⁹ USA To examine the effect of parent training on children identified with early behavioural disorders	Participants: children and parents from low income families, showing a behavioural or emotional problem (mean age 3 y 9 months) I: intensive package of group training, role play practice, and individual sessions - aimed to promote "prosocial" behaviour (average 12.5 h) C: video tape and pamphlet on parenting skills I: (n=50) C: (n=48) Follow up: after intervention and 1 y	Intervention produced positive effects as rated by parents. At one year follow up, improvements were seen in teacher rated behaviour After intervention improvement in parenting skills assessed with video recording by raters blind to treatment was correlated with teacher rated behavioural improvements at 1 y ($p<0.01$) Attrition: I=20%; C=23%
Tremblay et al 1991 ²¹ Canada To assess the effects of a preventive programme for disruptive boys in primary school	Participants: 7 y old white francophone boys in kindergarten in poor areas of Montreal assessed as disruptive and at risk by their teachers I: parents trained to monitor behaviour, to reinforce prosocial behaviour, and punish effectively without abuse. Social skills training for the boys and fantasy play I: (n=46); C1: (n=42, control); C2: (n=84, placebo observation) Follow up: 3 y	No short term difference in teachers' rating of child behaviour: mothers of the I group more likely to perceive their child as disruptive ($p=0.02$); this faded over the 3 years: self reported reduction in fighting and stealing in I group boys, after 3 years the % of I group held back after school or put in special classrooms and rated as highly disruptive by teachers was lower (23% v 43%, $p=0.02$) Attrition: I=9%; C1=10%; C2= 5% The beneficial effects were slow to emerge

I=intervention; C=control.

intervention delivered by an interactive personal computer program in a school setting over two days.²⁸ However, this has yet to be evaluated as a health intervention. Ethnic minority teenagers with severe behaviour problems in the United States showed modest improvements in self concept and short term reductions in anxiety after an intervention based on social learning theory in which they were exposed to positive adult role models of the same ethnic group.²⁹

PARENTAL DIVORCE OR BEREAVEMENT (TABLE 2)
Children who experience serious adverse life events such as parental separation or bereavement may experience behavioural and emotional problems.⁸ School based programmes for children of divorcing parents have been shown to increase mental

health. The children of divorce intervention programme (CODIP) used weekly school based sessions, to communicate feelings, and provide emotional support and the skills needed to resolve interpersonal problems. Ten year olds showed greater gains in adjustment and lower anxiety than controls,³⁰ a finding also found in less rigorous evaluations in younger children and ethnic minorities^{31 32} but no long term follow up has been reported. A more labour intensive intervention in 7-10 year olds showed improved skills in children's adjustment to their circumstances, so reducing anxiety and improving their ability to deal with emotional conflict after one year.³³

Workshops for children who have experienced the death of a parent that explored issues of grief and loss and its relation to family dynamics reported improved relations between

Table 2 Children: divorce or bereavement

Author, country, objective	Study details	Results (measures)
Pedro-Carroll and Cowen 1985 ³⁰ USA To assess the efficacy of a school based prevention programme for children of divorced parents	Participants: 4th-6th grade children of divorced parents in 4 suburban schools I: children of divorce intervention programme (CODIP): 10 weekly 1 h sessions for groups of children: affective, cognitive skills building and anger expression and control, mainly led by mental health professional; C: delayed intervention I: (n=41); C: (n=34) Follow up: 2 weeks after intervention	Programme children made significantly better adjustment as measured by teacher related measures of behaviour (p<0.02), and reduced anxiety (p<0.02) as reported by parents Attrition: I=2%; C=6% Short term follow up only
Stolberg and Mahler 1994 ³³ USA To compare the effects of school based intervention for children of divorced parents	Participants: children of separated or divorced parents from 3rd to 5th grades in 11 elementary schools: 42% with clinical diagnosis: schools were unit of randomisation I: three treatment groups with a comprehensive 14 week combination of support on special topics: skill building and skill transfer given by a trained doctoral student and school staff; two C groups I1: (n=23, support only); I2: (n=28, I1 + skills); I3: (n=29, I2 + skills transfer); C1: (n=23, divorce no treatment); C2: (n=26, not divorced); follow up: 1 y	Skill building components yielded significant, adjustable gains beyond divorce controls: reduced internalising and externalising behaviour (p<0.001) and total pathology in the home were observed: greatest improvement was found in the I3 group at 1 year: outcomes were assessed by staff blinded to group allocation Attrition: I1=9%; I2=25%; I3=17%; C1=4%; C2=19%
Sandler <i>et al</i> 1992 ³⁴ USA To evaluate the family bereavement programme, on mental health problems in children	Participants: families who experienced death of 1 parent, within past 2 y, identified from records or referral; children aged 7-17 I: 3 grief workshop sessions to meet others in similar situation and improve parent-child nurturing led by trained family advisers; C: delayed entry I: (n=35 families); C: (n=37 families) Follow up: 6 months	Increased parental perceptions of warmth of relationship with their children (p<0.05) and reduced reports of depression and conduct disorder of their older children (p<0.05): no significant difference in child self reported adjustment problems Attrition: I=31%; C=16% Interviewer was blind to group allocation

Table 3 Adults: divorce

Author, country, objective	Study details	Results (measures)
Bloom <i>et al</i> 1982 ³⁵ ; Bloom <i>et al</i> 1985 ³⁷ ; Bloom and Hodges 1988 ³⁸ USA To evaluate a preventive programme for the newly separated	Participants: newly separated people from an upper middle class population, recruited by advertising and direct mailing to human service agencies and practitioners. I: the Colorado separation and divorce programme of individual counselling and specialised study groups to provide social support and skills; C: interview I: (n=101); C: (n=52) Follow up: 4 y	Significantly less psychological problems (p<0.01) and a decrease in anxiety and total symptom score (p<0.001) in the I group. Attrition: 12% The effect of the intervention on some dimensions of wellbeing took longer to manifest than others

Table 4 Adults: unemployment

Author, country, objective	Study details	Results (measures)
Caplan <i>et al</i> 1989; ³⁹ Vinokur <i>et al</i> 1991; ⁴⁰ Vinokur 1995 ⁴² USA To assess the impact of a job search intervention on depression among the unemployed (JOBS I) at high risk of depression (JOBS II)	Participants: recently unemployed people from Michigan Employment Security Commission I: JOBS I: 8x3 hour group sessions over 2 weeks of job search skill training, mutual support, inoculation against setbacks given by trainers; C: self instruction materials I: (n=606); C: (n=322) Follow up = 2.5 y JOBS II: a replication stratified by risk of depression: I: (n=552, 229 at high risk); C: (n=1249, 486 at high risk) Follow up: 6 months	Reduction in incidence of depression (p<0.001) over 2.5 y: benefit confined to high risk group: by 2.5 y the net average gain in income for those in intervention group was \$4400 Attrition: 87% in JOBS II Intention to treat analysis: not clear if generalisable to long term unemployed
Proudfoot <i>et al</i> 1997 ⁴³ UK To assess the effects of cognitive behavioural therapy on the long term unemployed	Participants: volunteer professional people unemployed for >12 months I: cognitive behavioural therapy 7x3 h weekly seminars C: 7x3 h seminars focusing on social support I: (n=134); C: (n=110) Follow up: 3-4 months after intervention	Improvements in motivation (p<0.02), attributional style (p<0.001), self efficacy (p<0.03), and mental strain (GHQ)(p=0.05) were greater in the I group, more of whom found full time employment (p<0.001) Attrition: I=30%; C=19% Power calculation performed, analysis not intention to treat

parent and child after six months, and reduced parental reports of depression and behaviour problems in older children.³⁴

Adults

UNDERGOING DIVORCE OR SEPARATION (TABLE 3)

The University of Colorado separation and divorce programme, a preventive programme for

newly separated people with individual counselling and group study to provide support and build specific coping skills, was evaluated in volunteers in the United States.³⁵ People reported fewer problems, better psychological adjustment, and lower levels of psychiatric symptoms, which were sustained over four years.³⁶⁻³⁸

Table 5 Adults: pregnancy

Author, country, objective	Study details	Results (measures)
Elliot <i>et al</i> 1988 ⁴⁴ UK To evaluate the effect of prenatal and postnatal parenthood groups on postnatal depression	Participants: 1st and 2nd time mothers vulnerable to postnatal neurotic depression. I: 11 monthly parenthood groups run by a psychologist, and a health visitor beginning as early as possible in pregnancy to 6 months postnatal: group sessions used as a "second screen" to identify those in greater need; C: no intervention I: (n=48) C: (n=51) Follow up: 1 y	Fewer women diagnosed as depressed in the first 2 postnatal months in the I group (6/48, 2 cases, 4 borderline) than in the C group (17/51, 5 cases, 12 borderline) (p<0.02): not significant in 3rd month: greater reduction in self reported anxiety and depression in first time mothers in I group (p<0.05) Attrition: high drop out especially in 2nd time mothers: longer term follow up not reported: high attrition may have led to bias
Lee <i>et al</i> 1996 ⁵⁵ UK To examine the effects of psychological follow up of emotional adaptation in women who miscarry	Participants: women, 6-19 weeks at the time of miscarriage, with no previous miscarriage, not under psychological care, and no intention to terminate pregnancy I: 1 h session of psychological debriefing in own homes at 2 weeks after miscarriage I: (n=21); C: (n=18) Follow up: 4 months after miscarriage	No significant main or intervention effects on the hospital anxiety and depression scale, the impact of events scales, and the reaction to miscarriage questionnaire Attrition: 7% overall Study was small and C group had higher levels of anxiety and depression at baseline
Lilford <i>et al</i> 1994 ⁵⁷ UK To assess whether routine counselling improved psychological wellbeing after foetal loss due to congenital abnormality	Participants: bereaved couples (stillbirth, neonatal death, or termination due to congenital abnormality) I: extra counselling sessions for as long as needed, C: no additional counselling I: (n=35); C: (n=22) Follow up: 16-20 months after entry	No significant differences in grief, anxiety, or depression as measured by the irritability depression and anxiety scale and the Texas inventory of grief scale Attrition: (I=51%); C=36% 7 out of 17 participants attended < 3 sessions
Mueller and Major 1989 ⁵⁶ USA To examine the effects of brief interventions before abortion aimed at women undergoing termination	Participants: women terminating unwanted pregnancy ≤ 12 weeks. I: 7 min verbal presentation before abortion to reduce self blame attributions; I2: 7 min verbal presentation aimed to enhance belief of ability to cope with abortion; C: standard "counselling" before abortion I1: (n=67) I2: (n=70) C: (n=95) Follow up: 3 weeks	No effect at 3 weeks follow up Attrition: 73% Very brief intervention: high attrition
Rees 1995 ⁴⁹ USA To examine the effect of relaxation with guided imagery on anxiety, depression, and self esteem after first birth	Participants: women who had just given birth to their first live child I: 15 min daily tape recorded relaxation with guided imagery (physical relaxation and mental images) for 4 weeks; C: tape recorded music for 15 min every morning for 4 weeks I: (n=30); C: (n=30) Follow up: measured after intervention	Trait and state anxiety and depression were lower and self esteem higher in the I group as measured by the Stait-Trait anxiety inventory (p=0.006), the Centre for Epidemiological Studies depression scale (p=0.01), and the Rosenberg self-esteem scale (p=0.002) Attrition: 0% A non-random sample was used, so results may not be generalisable
Stamp <i>et al</i> 1995 ⁵⁰ Australia To reduce depression in women identified as at risk of postnatal depression	Participants: women at risk of postnatal depression (as detected by an antenatal screening questionnaire) I: additional special antenatal and postnatal groups giving information, preparation and support; C: usual care I: (n=73); C: (n=71) Follow up: 6 and 12 weeks and 6 months postpartum	No significant differences in major or minor depression (as measured by the Edinburgh postnatal depression scale) Attrition at 6 months: I: (n=18%); C: (n=14%) Power calculations carried out: analysed as intention to treat: attendance was low: 31% overall

Table 6 Adults: bereavement

Author, country, objective	Study details	Results (measures)
Constantino and Bricker, 1996 ⁶⁰ USA To compare the effects of nursing bereavement interventions in spouses of people who committed suicide	Participants: spouse survivors of completed suicides I1: 90 min group psychotherapy to achieve realistic goals for 8 weeks, led by a mental health nurse; I2 90 min promotion of the principles of socialisation, recreation, and leisure for 8 weeks led by a mental health nurse I1: (n=16); I2: (n=16) Follow up: after intervention	Little difference in Beck depression inventory, brief symptoms, grief experience, and the social adjustment scale Attrition: 0% Self selected, small sample sizes
Scruby and Sloan 1989 ⁵⁹ Canada To evaluate a bereavement counselling intervention for carers of patients with cancer	Participants: recently bereaved key people of cancer patients cared for on a palliative care unit I: 5 weekly bereavement nurse counselling beginning 3 weeks after the loss using Lindemann model of grief management based in the home; C1: no intervention, measured at 6 points in time; C2: no intervention, measured twice, used to control for a potential learning effect I: (n=10); C1: (n=10); C2: (n=10) Follow up: 18 months	No significant difference in satisfaction, frustration, or learning effect as measured by the Heimler scale of social functioning: all groups showed improvement over time Attrition: not stated Small study, intervention started rather late
Vachon <i>et al</i> 1980 ⁵⁸ Canada To evaluate a self help, widow to widow intervention for widows	Participants: widows of men aged 67 and younger who died in 1 of 7 Toronto hospitals I: letter from a "widow contact" (trained volunteer women who had resolved their own bereavement reactions) who provided emotional support and practical assistance individually and in small groups: only data gathering interviews I: (n=68) C: (n=94) Follow up: 2 y	Intervention achieved "landmark stages" faster: those at higher levels of initial distress were more likely to have shifted to the low distress group after 2 y than the controls (statistics not reported) Attrition: I=65%; C=60% Differential dropout of those with more problems and less support, may cause bias

UNEMPLOYMENT (TABLE 4)

An evaluation of a United States programme (JOBS) aimed at improving job search and problem solving skills and “inoculating” the recently unemployed against set backs, showed better mental health, motivation, and employment outcomes^{39 40} which were sustained over a 2.5 year follow up.⁴¹ A subsequent large randomised field study (JOBS II) confirmed that the benefit was confined to people with fewer depressive symptoms, less financial strain, and low assertiveness, as identified by a screening instrument.⁴²

A recent United Kingdom trial has shown that group cognitive behavioural training can increase general mental health, possibly by increasing re-employment in long term unemployed professionals.⁴³

DEPRESSION IN PREGNANCY (TABLE 5)

Postnatal depression affects between 10% and 15% of mothers and may lead to chronic mental health problems in a considerable proportion of women. This can also adversely affect the child.⁴ Simple self completion screening instruments have been developed to identify high risk mothers.^{44 45} However, these may not be sufficiently accurate for routine use.⁴⁶

Interventions specifically designed to prevent postnatal depression have shown contradictory results.^{18 44 47-51}

Trials of home based social support given to high risk (socially disadvantaged) pregnant women by midwives⁴⁸ or lay mothers supported by nurse professionals^{18 47} strongly suggest that various forms of home support or home visiting during pregnancy can improve mental

Table 7 Adults: carers

Author, country, objective	Study details	Results (measures)
Brodaty and Gresham 1989 ⁶³ Australia To evaluate a training programme to reduce stress in carers of patients with dementia	Participants: carers of people with dementia in Sydney I1: carers received group sessions and training in assertiveness, problem managing, education and family therapy given by psychiatric unit staff Patients received memory retraining I2: 10 days respite for carer and memory retraining for patient; C: 6 month delay for the carers programme I1: (n=36 pairs); I2: (n=32 pairs); C: (n=32 pairs) Follow up: 12 months (waiting list 18 months)	Psychological morbidity (GHQ) was reduced in carers receiving I1 (p<0.05) and a lower rate of patient institutionalisation Attrition: I1=8% I2=3% Limited programme detail
Mittleman <i>et al</i> 1995 ⁶⁴ USA To examine the effects of comprehensive support programme on depression in spouse care givers	Participants: primary spouse caregiver living with a patient with Alzheimer's disease I: 6 sessions of counselling and enrolment in a carer support group; C: standard assistance provided to all caregivers I: (n= 103); C: (n=103) Follow up: 4, 8 and 12 months	I group caregivers were less depressed (measured by the geriatric depression scale (GDS)) than the C group at 8 months (p<0.05) and at 12 months follow up (p<0.001) Attrition: 16% at 12 month follow up No significant differences in baseline depression scores of those not followed up
Schwiebert and Myers 1994 ⁶⁵ USA To evaluate a psychoeducational intervention for adult children caring for ageing parents	Participants: midlife adult children with parentcare responsibilities I: 4 2h, weekly psychoeducational counselling sessions; I1 + I2: received the I in weeks 1 to 4; C1-C3: received delayed treatment during weeks 4-7 I: (n=29); C: (n=22) Follow up: after intervention or 3 weeks after intervention	Improvement after intervention in overall coping effectiveness as measured by the coping resources inventory for stress (CRIS) (p<0.01) Attrition: after test = 0%, 3week follow up = 72% I1 + I2 Multiple analyses were carried out some results may have been significant by chance
Singer <i>et al</i> 1989 ⁶⁷ USA To evaluate community based support services for families of children with developmental disabilities	Participants: parents of children with handicapping conditions I1: intensive support group with case management, access to weekly respite, assistance from community volunteers, and classes on coping skills; I2: less intensive support with case management plus respite care I1: (n=28) I2: (n=21) Follow up: after treatment and at 1 year	I1 were lower after test for mothers on both depression (p<0.001) and anxiety (p<0.003) and for fathers only on anxiety (p=0.01): this was maintained at 1 y follow up for mothers. Only 1/6 and 1/9 moved into non-anxious categories in the less intensive group: families in I2 group received less hours of respite care Attrition: at 12 months for I1 = 18% Not clear of effect of removal of volunteers at 6 months
Szmukler <i>et al</i> 1996 ⁶⁹ Australia To assess the value of counselling sessions for relatives of patients with schizophrenia	Participants: key caregivers nominated by patients with schizophrenia seen by a community treatment team I: 6 weekly 1 h counselling sessions (education and coping) with relative in the family home C: 1 h session discussing caregiving, information giving I: (n=32); C: (n=31) Follow up: 3 and 6 months after intervention	No significant trend towards poorer outcomes for the I group in psychological morbidity or ability to cope as measured by the positive and negative effects scale and the ways of coping scale, or the mastery scale even though participants rated the I highly Attrition: I=22%; C=29%
Toseland <i>et al</i> 1992 ⁶⁶ USA An evaluation of a group programme for spouses of frail elderly veterans	Participants: spouses of frail elderly veterans I: 8 weekly support group meetings of 2 h duration led by a social worker, giving support, education, discussion, problem solving, stress reduction; C: no routine support I: (n=42); C: (n=47) Follow up: within 2 weeks after intervention	More use of active behavioural coping in I group (p=0.01), and less stress and greater improvement in pressing problems (p=0.002): no changes in anxiety, use of community resources, and social support networks: longer follow up needed Attrition: I=7%; C=2%
Toseland <i>et al</i> 1975 ⁷⁰ USA To assess the effects of psychosocial support on cancer patients and their spouse caregivers	Participants: spouses and patients undergoing treatment >3 months after diagnosis and with a moderate level of impairment in daily functioning (terminal phase excluded) I: 6x1 h counselling sessions for spouses and patients focusing upon support, problem solving, and coping skills: C: usual psychological support I: (n=44); C: (n=42) Follow up: 2 months	Wide range of marital strain, depression, anxiety in carers and patients, not differentially affected by group Attrition: 9% Low power ?
Viney <i>et al</i> 1995 ⁶⁸ Australia To evaluate the effect of personal construct modelling to support carers of people with AIDS	Participants: mainly male voluntary AIDS caregivers with high level of tertiary education I: counselling by 3 homosexual experienced counsellors. No standard number of sessions nor length. C: no counselling. I: (n=33); C: (n=38) Follow up 3 months	I group had immediately lower levels of anxiety than C (p<0.05): this difference wore off by 3 months as the anxiety levels in the C group dropped (p>0.1) Attrition: I=39%; C=42% High rate of attrition

wellbeing of mothers and their children.^{16 52 53} Trials also indicate that continuous support for women during labour (by friends or volunteer labour companions) can reduce postnatal depression and raise self esteem.⁵⁴

Several trials have also evaluated interventions specifically designed to reduce postnatal depression.^{44 49 50} The results are contradictory. Women who experience a miscarriage (around 20% mainly in the first three months) or a perinatal death are also at increased risk of psychological morbidity especially in the first few months. None of the three trials examining various forms of counselling or psychological debriefing, however, showed a sustained effect.⁵⁵⁻⁵⁷

BEREAVEMENT (TABLE 6)

Several programmes aimed at reducing mental health problems in recently bereaved spouses have been evaluated in randomised controlled trials. The family bereavement programme already mentioned³⁴ showed positive effects on children and their parents. Running grief workshops (a self help "widow to widow" programme), in which recently widowed women received support from another widow and attended small group meetings, showed accelerated achievement of landmark stages—such as starting new relations and activities. However, there were several weaknesses in the methods.⁵⁸ In contrast, bereavement counselling showed no effect on quality of life, satisfaction, or frustration levels of key people of deceased cancer patients.⁵⁹ A small trial failed to show any difference in depression, after receiving different models of nurse led group psychotherapy, in spouses of people who had committed suicide.⁶⁰

LONG TERM CARERS OF HIGHLY DEPENDENT PEOPLE (TABLE 7)

There are many publications which have evaluated ways of improving the psychological health of people who care for others who are highly dependent either because of age or physical or mental ill health. A meta-analysis looked at 20 controlled evaluations of interventions in which distress of caregivers was a principal outcome.⁶¹ A quantitative review of 15 studies (over half of which were randomised controlled trials) suggested that only two types of interventions have been shown to have any effect: individual psychosocial interventions and receipt of respite care. Group psychosocial interventions showed less effect, a finding confirmed in studies that directly compared individual and group interventions.⁶²

Several other experimental evaluations have been reported since this meta-analysis. Two trials show that interventions—such as carers, group sessions combined with either training in assertiveness and coping skills,⁶³ or counselling,⁶⁴ can reduce psychological morbidity in those caring for elderly people with Alzheimer's disease, at least in the short term. Also, a psychoeducational programme was found to increase the coping ability of adult children caring for aging parents.⁶⁵

A group intervention aimed at spouses of frail elderly veterans also resulted in short term improvements in coping and reduced stress.⁶⁶ Intensive support with case management and respite care was shown to reduce depression and anxiety in parents of children with handicapping conditions.⁶⁷

Randomised controlled trials of counselling by itself showed no sustained effect on improving carers' mental health or reducing strain in the following areas: community based caregivers of patients with AIDS,⁶⁸ family caregivers of patients admitted for schizophrenia,⁶⁹ or spouses and patients undergoing treatment for cancer.⁷⁰

Conclusions

Individual people and groups who are at increased risk of developing mental health problems can be identified and various preventive interventions have been shown to be effective. Children showing behavioural disorders may benefit from a range of interventions including training to improve parenting skills and school based training in social skills. A variety of socially based cognitive and behavioural interventions can be used effectively in children who have had adverse life events such as parental separation, divorce, and bereavement. Specific interventions can help adults adjust to adverse life events such as job loss, bereavement, and divorce. Some psychosocial interventions aimed at promoting support and coping skills, along with respite care, can help to reduce the high levels of strain in carers. There is little evidence that generic counselling, provided by itself, is particularly effective.

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