TYPES OF PSYCHIATRIC TREATMENT

Preventive aspects of child psychiatry

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This is the twelfth of a series of articles on treatment of child psychiatric disorders.

The government paper *The Health of the Nation* emphasises disease prevention and health promotion.¹ In the area of mental health it has an objective to reduce ill health and death caused by mental illness and it states that the mental health of children and adolescents is 'a particularly important area as many are vulnerable to physical, intellectual, emotional, social or behavioural developmental disorders which, if not treated, may have serious implications for adult life'. There is now plentiful evidence to support this.^{2,3} Those who work with children see the prevention and treatment of emotional and behavioural disorders in children as valuable in their own right and not just to prevent adult mental illness. This article considers a number of conceptual issues, points to contexts in which preventive action may be taken, and cites a number of examples.

Terminology and the goals of prevention

Caplan's categorisation of prevention is somewhat confusing in that it covers what is commonly seen as treatment and rehabilitation as well as prevention.⁴ Primary prevention aims to reduce the incidence of mental disorders of all types in a community, while secondary prevention aims to reduce the duration of a significant number of those disorders that do occur. Tertiary prevention is focused on the diminution of impairment resulting from disorders.

Rae Grant helpfully proposes that primary prevention can be seen as covering health promotion and disease prevention⁵; secondary prevention encompasses early identification and treatment; tertiary is equivalent to rehabilitation. To call all these prevention is to emphasise a 'future orientation' and has the advantage that it indicates the indistinct division between primary prevention and treatment.⁶ Newton argues that it is better to draw the line between primary and secondary prevention at a higher level of impairment, that is, at the level of 'caseness' – a level of symptomatology approximating to 'that of most patients seen by psychiatrists in out-patient settings'.⁷ Newton argues further that as preventive work is targeted towards those most vulnerable to disorder it is likely that they will have some symptoms already. As she emphasises a disease model she favours a high risk strategy targeted to those most vulnerable to serious mental illness. Preventive intervention 'should increase the individual's capacity to control their own life circumstances' and 'should make maximum use of existing natural, community and

voluntary support networks'. Newton's terminology works somewhat better than Caplan's does for child mental health^{8,9} and will be adopted in this article, which aims to cover a range of activities in primary health care that could certainly be classified as early secondary prevention in Caplan's scheme.

Services and prevention

In developed countries most children with emotional and behavioural disorders (80–90%) do not reach specialist mental health services.^{8,10} By no means all of these could be considered as below 'case' level. If specialist services are to be involved then their activities are necessarily indirect, supporting primary health care workers, teachers, and paediatricians. These activities have been covered in some degree by the earlier articles on consultation and paediatric liaison,^{11,12} which are necessarily concerned with both prevention and the treatment of children with substantive emotional and behavioural disorders. In the case of an individual child it can be academic whether one is concerned with prevention or treatment. What is needed is appropriate working arrangements between primary health care, paediatrics, schools, and the specialist child and adolescent mental health services. However where resources are scarce more time should be spent on primary prevention and early secondary prevention using organised programmes, as limited resources will be rapidly blocked by severe and intractable cases. This is an appropriate use of resources but is unpopular with many referrers who want difficult problems off their hands.

A conceptual framework

Primary prevention has been considered in a variety of ways and Orford⁶ draws attention to the typology emanating from Bloom¹³ and Heller *et al.*¹⁴ This subdivides prevention into community wide, milestone, and high risk. The focus of prevention may be a combined one so a programme for all primigravida mothers in a particular community includes both community wide, milestone, and high risk components. Risks can be a facet of an individual or of their environment in the form of chronic stressors or specific experiences, namely life events.¹⁵ Such specific experiences range from personal traumas as in sexual abuse to natural disasters.¹⁶

In the case of children parents are often the mediators of stressors and indeed may be the

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stressors themselves. A public health categorisation⁶ draws attention to these distinctions. The host or child is the individual at risk while the parent is the agent or environmental medium through which the noxious influence is transmitted – all this occurring in a particular environment, that is ecology or circumstances. Child mental health services are concerned with dysfunctions in relationships as well as symptomatology in individual children. However it reduces terminological confusion if attempts to improve relationships in the absence of child symptomatology are designated prevention. The child can be conceived also as involved in interlocking systems at different levels: micro-, meso-, exo-, and macro-¹⁷. The microsystem corresponds to the child's immediate family and the macrosystem to influences at national and international level.

These conceptualisations highlight the manner in which prevention can be focused at different points. However child psychological and psychiatric disorders are not only multifactorial but generated and sustained by a variety of processes. One model is that of the child with particular vulnerabilities and liabilities, assets and resources, subject to chronic difficulties in the psychosocial environment such that particular experiences may bring about disorder.¹⁸ The factors can feed into this general model in various ways. For example there can be causal chains and transactional or circular processes.^{19–22} A causal chain would exist where a child with a developmental disorder then experiences educational failure, becomes disillusioned with school, plays truant, and becomes delinquent. A transactional process would be when parental unresponsiveness consequent on depression leads a child to be more insistently demanding, provoking indecisive and hostile parental behaviour. This in turn generates non-compliant child behaviour leading into a circular coercive process.^{20–23} Knowledge about common causal chains, transactional and circular processes provides guidance for preventive action. The action can be conceived as primarily focused on reducing personal vulnerability, increasing competence, reducing stressors or their impact or diminishing the adverse effects of particular experiences. It may also aim to change circular processes by altering communications, roles, perceptions, attitudes, or beliefs.

The part played by specialist child and adolescent mental health professionals can range from direct participation with particular children and families to the promotion of preventive programmes focused on high risk populations, or the role of advocate applying political pressure at a local or national level.⁵ Some of those writing about prevention define primary prevention only in terms of programmes as opposed to individually focused approaches.⁶ Apart from the somewhat blurred distinction between prevention and treatment there are evidently many opportunities for preventive activity in day to day clinical work.

Problems with primary prevention

The problems that arise are practical, economic,

and ethical. Practically, if a child is asymptomatic, the family or others in contact with the child, such as the school, may be reluctant to engage in a preventive programme. A school may require persuasion to adopt an antibullying campaign. Secondly intensive programmes may bring about short term change: sustaining change may be more difficult.

If a non-discriminating preventive approach is employed as in some anti-AIDS campaigns, there is a danger that those most in need will not be engaged sufficiently and it will not be possible to modulate the approach according to the needs of different groups.²⁴ Even if a high risk approach is used there is considerable danger that it will help those who do not require help and fail to reach those in greater need.^{24–27} For example the Rochester primary mental health project aimed to reduce the need for psychiatric treatment among primary grade children identified as having 'incipient problems' on the basis of classroom observations, psychological tests, and interviews with the mothers.²⁸ Not only did the intervention fail to reduce the rate of referral for psychiatric treatment in the index group but the referral rate was less than 20% in the control high risk group. This means that more than 80% of those in the index group had an intervention that they did not need.

Ethical considerations arise because there may be unintended or adverse affects of the intervention,²⁹ for example through labelling or involvement in inappropriate intervention processes.³⁰ Is it possible to justify the routine treatment of all children who have been sexually abused whether or not they are symptomatic? There are somewhat varying reports of the adverse long term consequences of child sexual abuse and these may relate in part to issues of definition and the need to identify concomitant risk factors.^{31–32} This highlights the importance of correct identification of the high risk group and the features responsible for the increased risk.

Focus for preventive intervention

(A) CHILD VULNERABILITY

(i) Genetic counselling

A recent review concludes that childhood autism 'is probably quite strongly genetically determined'; that some varieties of multiple chronic tics may be due to a single gene locus, and that major affective disorders with origin in childhood, particularly those of bipolar type may have a significant genetic component.³³ There are of course a wide variety of genetically determined physical disorders encountered in current paediatric practice that may carry an increased risk for child mental health problems, but genetic counselling in these cases is usually more concerned with the prediction of physical rather than psychiatric disability. Of the disorders encountered in child psychiatric practice it is probably only pervasive developmental disorders, tics and bipolar affective disorders that require discussion of genetic issues with parents. In autism and related disorders parents may limit their offspring because of the very high heritability that can be presumed in families with other affected individuals.³⁴

(ii) Children with chronic or recurrent physical disabilities

Children with chronic disease are more likely than healthy children to develop emotional and behavioural disorders.³⁵ This is particularly true for disorders involving the central nervous system or physical disability. Rates are also higher where there is mental retardation. The impact on family members, both parents and siblings, is increasingly well understood. Preventive work both with regard to the child and to the family, is a component of good paediatric practice.³⁶ The manner in which child psychiatrists and psychologists may link up with paediatricians for a wide range of children's physical disorders is described in the liaison article in this series,¹¹ however there is evidence that a comprehensive counselling approach with children, parents, or families may produce mental health benefits, particularly in individuals where there are additional risk factors.³⁷ Davis and Rushton trained parent advisors in basic counselling skills in order to work with families of children with moderate to severe intellectual or multiple disabilities.³⁸ Work was initially on a weekly basis but with gradually decreasing frequency over a 15 month period. The aim was to support the family and encourage them to develop a problem solving approach using the family's own resources. There were significant improvements in many aspects of family relationships, not just with the index child. For example mothers developed more social contacts and felt more positive about the child, themselves, and their husbands. Compared with the randomly allocated control group index children made significantly greater developmental and behavioural progress. This is an approach that has potentially wide applicability in a range of disorders including for example asthma and diabetes.

(B) CHRONIC DIFFICULTIES: THE CHILD AND HIS FAMILY

For the young child the family constitutes the child's main or sole environment, mediating or buffering wider environmental influences. At a later stage the school and the immediate community have more direct effect. There has been a wide range of preventive programmes in the USA and some in the UK that aim to promote the development of high risk children, either by direct approaches to the child or through the family, or both. High risk for the child has usually been defined in terms of the environment, although in some studies they have been selected because of low intelligence quotient (IQ) or emergent psychological or psychiatric symptomatology. In this latter case the programmes can be considered prevention in Newton's terms and early secondary prevention in Caplan's. The aim of the programmes has varied from promotion of the child's intellectual growth and educational attainment to concern with their emotional development, more particularly the prevention of child abuse and neglect. Variation between programmes and the inclusion of diverse elements in them makes comparisons difficult. For example there is variation in

(a) whether the focus is on the child, the parents, or both; (b) whether the intervention has its onset during pregnancy, primary or secondary school; (c) how long it is sustained; (d) the personnel involved who may be specialist, primary health care professionals, or volunteers; and (e) the method that may vary not only as to whether it is directed to individuals or groups but also whether the orientation is educational, behavioural, or psychodynamic. There have been several valuable recent reviews.^{5 7 24 39 40}

(i) Who should the programme be directed to?

Seitz drew attention to the greater benefits from programmes for disadvantaged children that have included family support with or without direct action with the child.³⁹ Commenting on the Consortium for Longitudinal Studies she pointed out that parents were engaged in virtually all the 11 studies reported on by the consortium,⁴¹ there being active involvement in more than half the projects. Other projects she reviewed that focused just on the child produced short term IQ gains that tended to wash out and very rarely long term educational or psychosocial benefits. Sometimes there were improvements compared with controls,⁴² but still a very high rate of educational failure. This was disappointing considering the normal IQs that the children had attained before entering school. Seitz argues that one of the later preschool programmes, the Perry preschool project,⁴³ obtained good results because there was a very extensive home visiting programme: 1-1.5 hours a week for 40 weeks per year for two years.

Of the projects with a more explicit family support model the Rochester nurse home visitation programme has been among the most successful.⁴⁴⁻⁴⁶ Women recruited to the project were pregnant with their first child and had one or more of three characteristics: low socio-economic status, age less than 19, or single parent status. Even in this successful project only 80% of the women invited to participate became involved and this emphasises that there is no project that has been successful with all families. Indeed McGuire and Earls have picked on the failure of early preventive intervention programmes to engage all families to point out that it is commonly the families most in need even among disadvantaged groups that are least cooperative.²⁴ In contrast to Seitz they advocate a direct approach to the child in these instances. However they acknowledge the success of the Rochester nurse home visitation project. In this programme the most intensively visited group had nine prenatal home visits of 1-25 hours and further visiting for two years postnatally; weekly for the first month after delivery and then with diminishing frequency to visits at six week intervals. There were lower rates of child abuse, and observational data showed less punishment and restriction of children in the index group with greater availability of play materials. The children of the highest risk families who were visited made the greatest gain in intellectual functioning and the mothers had fewer subsequent pregnancies, returning to school more frequently. Those beyond school age were more

likely to get jobs and were less dependent on welfare.

Sylva has also turned the focus towards children outside the home. In a review she concluded that (a) educationally orientated preschool programmes can prevent cognitive and behavioural problems later in life; (b) the children most at risk of behavioural and intellectual problems attend day care provision; and (c) there is an urgent need to improve educational provision in day nurseries if the 'life chances of so many disadvantaged children are to be improved'.⁴⁷

It is likely that no one approach will engage all families. The experience of the child outside the home should not be neglected – indeed should be used as there is evidence that it can have a protective effect.^{48–50} However neither should the family be ignored – sustaining change is a major issue in prevention. A failure to have any impact on the family may have crucial consequences in this regard.³⁹

(ii) When should the intervention occur?

(a) *Intervention in pregnancy and preschool* – One project systematically compared the efficacy of home visiting during pregnancy as opposed to postnatally.⁵¹ The observed quality of maternal interaction with the child was best among those with prenatal visits as opposed to those with postnatal visits or no visiting prenatally or postpartum. As the improvements in the prenatally visited group were similar to those found in the Rochester nurses home visiting project it may be that the timing of intervention is crucial as Seitz suggests,³⁹ because Larson's postpartum visited group did not get visits until six weeks after discharge from hospital. In the UK Elliot *et al* identified pregnant women as vulnerable to postnatal depression on the basis of a less than satisfactory marital relationship, previous psychological problems, or a high score on a measure of anxiety.⁵² Support groups during pregnancy were effective in reducing the rates of postnatal depression in involved mothers. They were less successful in engaging second time mothers who were often more concerned with problems surrounding their first child.

Reviewing the evidence from pregnancy and preschool programmes McGuire and Earls conclude that, although earlier prevention may be more effective, there is a need to sustain any improvements that may have been brought about.²⁴

(b) *Primary school intervention* – The most considerable initiative to test prevention (in Caplan's terms early secondary prevention) in the UK are the Newcastle studies.⁵³ Groups of children aged 7–8 years and 11–12 years were selected on the basis that they were above cut off points on behavioural screening measures. For each age group three different interventions were compared using index and control groups. Parent counselling combined with teacher consultation by a social worker was used in both age groups, as was group therapy, which was also conducted by social workers but with small groups of children within the school. Teacher aids conducted a compensatory enrichment programme of nurture work in primary schools and

teachers employed behaviour modification in the secondary school supported by psychologists. Behaviour modification and group therapy showed significant benefits over controls on a range of outcome measures and to a lesser extent this was true of the nurture work, but parent counselling combined with teacher consultation did not show benefits. Relative improvements in behaviour at home and school in the group therapy and behavioural treatment groups increased with the passage of time but academic improvements were not sustained. Repetition of this work with other high risk primary school children has pointed to the importance of parental resilience as a factor in outcome,⁵⁴ especially in protecting against hyperactivity and conduct problems. Whether parental resilience is something that can be promoted by prevention is not known.

Another preventive approach used in primary schools has been daily lessons employing 'game' activity to develop children's interpersonal cognitive problem solving.^{55–57} This approach appears to have been successful with preschoolers but the results among primary school children have been less firmly positive.⁶ Other child centred school age programmes are referred to by Rae Grant including affective education and social skills/assertiveness approaches.⁵ She comments that results are somewhat mixed and that the programmes have tended to have a narrow focus and brief duration.

(iii) Who should do the interventions?

In the UK there have been a variety of preventive projects with children under 5, many employing health visitors,⁹ some using volunteers,⁵⁸ and there have been studies of the effects of day care provision.³⁹ There have been no direct comparisons of the effectiveness of different types of professionals compared with volunteers, although one study has compared family therapy, community support in the form of parallel groups for mothers and toddlers, and behavioural management in the home implemented by specialist health visitors.^{60,61} The design does not use a comparison between different types of professionals using the same treatment approach.

(a) *Health visitors* – Recognition of the high prevalence of emotional and behavioural problems in young children⁶² and the unique position of health visitors for contact with families with young children⁹ has led to many attempts to train or support health visitors in work with young families; to alleviate maternal depression, to assist mothers in managing children's behaviour problems, and for prevention of child abuse. Approaches have included a year's seminar course for health visitors,⁶³ a district wide consultation service for health visitors,⁶⁴ and support groups providing discussion of mutual families, supervision of the health visitors own work, discussion of formal topics, and discussion of possible referrals.^{65,66} The first two of these examples were spearheaded by psychologists and the third by a child psychiatrist. Other models have used specialist health visitors and Stevenson identifies three types.⁶⁷ The first is

based in a specialist mental health service and is an outreach health visitor, functioning like a community child psychiatric nurse. The second is a specialist nurse practitioner with particular skills in the field of mental health and the management of children's behavioural problems who acts as a teaching consultancy resource for other community health visitors. The third model is intermediate. It recognises that not all health visitors wish to do more intensive psychological work with young families so that a group of specialist health visitors are formed – one within each health visitor unit in a district service – who take referrals from health visitor colleagues and general practitioners.

Despite the evident attractiveness of approaches using health visitors, systematic evaluations using control groups have all been equivocal in terms of benefits to maternal mental health,⁶⁰⁻⁶⁹ mothers' reported ability to manage emotional behavioural problems, and the level of behavioural problems in the children themselves. Stevenson *et al* attempted to form groups of postnatal mothers in general practice but the group with a sustained take up was a very low proportion of the whole – 15%.⁶⁰ The aim had been to prevent child abuse by improving mothers' mental state and relationships with their children. This report exemplifies the problem of ensuring engagement with the most needy families where prevention is concerned. The same investigators went on to attempt early secondary prevention by training health visitors in behavioural techniques in working with families with 3 to 4 year old children showing behavioural problems.⁶⁹ This study and that by Weir and Dinnick⁶⁸ both failed to demonstrate significant improvements attributable to health visitor intervention. The third study, referred to above, compared family therapy, parallel mother and toddler groups, and specialist health visitors. It also produced somewhat equivocal results, although the mothers' groups were the most successful in resolving the preschool children's problems.⁷⁰

Probably the most widespread programme is the child development programme based at Bristol University.⁷¹ In this scheme health visitors are trained to become more aware of the mental health and social problems in the families they see and appreciate that the child is best helped by fostering a mother's self esteem and competence in promoting the development of her child. There are also two structured interviews the health visitors use, one designed for women who have recently had their first child and the second for those who are experiencing parenting difficulties with a preschool child. Training lasts up to three years and is given to a subgroup of self selected health visitors. The scheme has now been taken up by 18 health authorities across the UK. Although very positive results are reported, there has been no systematic evaluation employing control groups. One commentator considered that claims for the efficacy of the programme in improving children's development and reducing the rate of child abuse are 'undermined' by 'difficulties in the design and analysis of evaluation data'.⁷² For example although the rate of injuries per 1000

children per year was well under half the national average, health visitors recruiting the first 1000 families (those involved in the evaluation) had instructions to exclude children on child abuse registers. Newton observed health visitors at work in the programme and thought that there was too much emphasis on cognitive skills.⁷ Although health visitors have reported that the training improved their understanding of the difficulties faced by mothers and made them more sensitive to their needs and improved job satisfaction, it also made the work more emotionally exhausting.⁷³ Tensions can arise within a health visiting service if the necessary reorganisation of caseloads means that the specialist health visitors have smaller numbers of families to deal with in comparison with their colleagues.⁷

The approach using workshops and regular support for health visitors in the New Forest did not prevent referral to the specialist service. On the contrary referral rate increased but it was thought that referrals became more appropriate.^{65,66} An interesting aspect of this particular approach has been the use of joint first visits with health visitors and joint ongoing work. However there was still a handful of health visitors who had not visited the clinic in the four year period reported on.

(b) *Befriending schemes for mothers* – Home start,⁷⁴ the most widespread befriending scheme in the UK, started in Leicester in 1974. In 1990 there were 138 schemes not only in the UK but in Germany, Canada, Israel, and Australia. Recognising that many families have difficulty rearing young children the schemes aim to support parents by trained volunteer befrienders. The relationship between volunteer and befriender is central. Local organisations have a paid home start organiser backed by a support group and links to relevant local agencies. The focus is on families with children under 5 and although the main work occurs in the befriending relationship, many schemes provide a range of other supportive opportunities such as mothers' groups. Volunteers tend to be older and somewhat better educated than those who they are supporting. An uncontrolled evaluation of the project provided very encouraging results⁷⁴ with health visitors and families reporting considerable change in more than 80% of instances. Volunteers themselves were the most conservative but even they reported at least some change in more than 80% of cases.

Newpin was set up with an explicit goal to prevent child abuse and neglect.⁷⁵ Starting in south London in 1982 it is much less widespread than home start but there are now several centres within and outside London. The distinction between befriender or volunteer and the mother befriended is not emphasised and all mothers have the opportunity for personal development work in groups. Those taking on a befriending role also have weekly teaching of a more didactic type over a six month period. The Newpin centre and the ability to drop into it and use the creche are very important components of the scheme. Initial uncontrolled evaluation pointed to marked improvements in the mothers' mental state and in areas that had been identified as a focus of a change such as maternal isolation or

the relationship with the child.⁷⁵ A more rigorous controlled evaluation confirmed the marked benefits to the mothers themselves in that virtually all of those well involved in the scheme reported improvements in their mental well being and ability to take charge of their own lives.^{76,77} Analysis taking into account duration of involvement in the scheme indicated that improvements in mental state required somewhere between six and 12 months. The relationship with the child was blindly evaluated from videotapes of meal and bath times in the home. This very rigorous assessment indicated that improvements in parent-child relationship were more difficult to establish. These occurred in a number of instances but there were mothers with extended involvement in the scheme, and who had improvements in their own mental health, who still had unsatisfactory relationships with their children. The scheme has now made appropriate modifications to deal with this issue. Not all mothers were well engaged, and in the period evaluated some 30% dropped out. This appears to reinforce the point made by McGuire and Earls that some of the most needy individuals may not be reached by preventive approaches.²⁴ However in the case of Newpin it was those with an intermediate level of difficulty, either in terms of parental mental state or child problems, that tended to drop out; those with more severe problems stayed in. The stringent evaluation of the parent-child relationship has been rarely attempted in the assessment of prevention projects or treatment services.

There is no doubt that befriending schemes can fill a widespread need.⁵⁸ However, different approaches will be required for different families. There always needs to be an established working relationship between such schemes and professional services to effect mutual referral.

(iv) *What method should be used?*

(a) *Didactic compared with relationship based* – Seitz's discussion of this issue has already been referred to in considering who the programme should target. In her review it is difficult to disentangle the person targetted from the approach used; educational or family support.³⁹ An American project compared two models of family support and found that a didactic approach was less successful than one that focused on relationship building, treating the mother as the person with the responsibility to promote the development of her child.^{7,78}

(b) *Home compared with day care* – Changes in the pattern of family life have emphasised the need to understand the influence of child day care. The quality of the care outside the family is clearly crucial, but where day care is meeting certain needs of the child better than at home, the child can benefit.⁵⁹ However it is not always the case that high risk children are well served by day nurseries.⁷⁹ It is not only the quality of care that can be important but also the characteristics of the child.⁸⁰ Children from disadvantaged home circumstances gain in social competence and intellectual ability but results for children's interaction with peers, relationships with their mother, and compliance with adults are more

mixed. Given that those children attending day nurseries in the UK tend to be a high risk population, preventive action in this area is clearly important.⁴⁷ One programme to improve the quality of day care is being evaluated in the UK. The programme includes training nursery staff to run art, music, and movement sessions (G Milavic, personal communication, 1992).

(v) *Short and long term effects of prenatal/infancy programmes*

Rae Grant has usefully summarised the short and long term effects of prenatal/infancy programmes,⁵ drawing on the High/Scope Perry preschool programme and other studies in the Consortium for Longitudinal Studies already referred to (tables 1 and 2).^{43,81,82} These impressive results must be viewed with the qualifications given by Seitz³⁹ and McGuire and Earls²⁴ that much depends on the nature and quality of the programme. It needs to be oriented to family support as well as direct intervention with the child, and also sufficiently persistent.⁴⁰ Some of the most seriously needy individuals may not be engaged. Rae Grant lists the characteristics of effective early childhood programmes⁵:

- (1) A developmentally appropriate curriculum based on child initiated activities.
- (2) Groups of fewer than 20 children of 3–5 years with two adults to each group.
- (3) Staff trained in early childhood development.
- (4) Supervisory support and in service training for the curriculum.
- (5) Sensitivity to the non-educational needs of the child and family.
- (6) Developmentally appropriate evaluation procedures.

It will be seen that the resource implications are considerable. A major problem with such intensive programmes is generalising them to all needy families in the community.

(iv) *Children of psychiatrically ill parents*

That there is a high risk of emotional and behavioural disorders among children of psychiatrically ill parents is well established.^{83,84} Although goals for prevention have been described,⁸⁵ namely to improve the stability of the family system, to foster the ability of the mother to meet the children's needs, and to minimise the pathology to which the children are exposed, there have been no systematic studies of inter-

Table 1 Short term effects of prenatal/infancy programme⁵

(1)	<i>Children</i>
	Better physical health
	Better nutrition provided to both parents
	Fewer low birthweight babies
	Fewer feeding problems
	Fewer accidents and emergency room visits
	Reduced incidence of child abuse
(2)	<i>Parents</i>
	Better social support networks
	Greater confidence
	Improved parenting skills
	Better parent-child interactions
	More stable marital relationships
	Less abuse of children
	Longer time periods between pregnancies
	More frequent, appropriate use of other services

Table 2 Long term effects of prenatal/infancy programmes⁵

(1)	Children Less aggressiveness and distractibility in school Less delinquency Better attitudes towards school Better social functioning Higher rates of prosocial attitudes
(2)	Parents More registration in school by mothers More high school completion by mothers Higher rates of family employment

ventions to prevent the occurrence of emotional and behavioural disorders in the children. It is clear, as in the case of children in institutions, that the development of positive experiences⁴⁸ and the establishment and maintenance of good relationships with either one of the parents or someone outside family can have a protective effect. Similar mechanisms have been demonstrated in the case of marital discord.^{49, 50} Clearly the preventive interventions described above such as the prenatal intervention to prevent postnatal depression⁵² and befriending schemes such as Newpin that aim to improve parental mental health are relevant, but what is needed is the evaluation of a specific programme to benefit children living with a psychiatrically ill parent.

(C) LIFE EVENTS AND EXPERIENCES

Prevention programmes may prepare children in such a way that they avoid unsatisfactory experiences as in the case of sexual abuse, or assist them in coping with the consequences of trauma once they have happened, as in the case of natural disasters. Children who are already vulnerable by virtue of their own characteristics, early experiences or family environment are most likely to have adverse consequences to noxious life events, so psychological and psychiatric problems after such events may be as much an index of the child's vulnerability as the impact of the event. The connection is obvious for self harm or separation from parents where it is now well established that it is the antecedents, concomitants, and consequences of separation that are of crucial importance in determining the mental health outcome.⁸⁶

(i) Naturally occurring transitions

An example of a preventive programme that attempts to prevent the adverse consequences of naturally occurring transitions is the school transition environment programme that has attempted to reduce the stressful effects of transition to high school.^{87, 88} This programme involved reorganisation of the school as well as specific interventions with the children themselves. For example the classrooms for children entering the school were arranged to be close to each other so that the new students did not need to adapt to frequent changes in environment and peers. 'Home-rooms' were provided for the new pupils where teachers were available to provide counselling and support, some of this on a regular basis. Follow up benefits are said to have included less school failure, behaviour disorders, substance abuse, and delinquency.

(ii) Bereavement

This has been much more fully studied in adults and grief reactions in young children tend to be milder and shorter than in adolescents.⁸⁹ However in a study by Black and Urbanowitz children over 5 who talked in the family about the dead parent in the month after bereavement were less likely to have parents who were severely depressed or grieving and more likely to have a good psychological outcome a year later.⁹⁰

(iii) Divorce

Children are increasingly likely to experience parental separation or divorce. Prevention programmes with the children in these families have been tried out but have not been adequately evaluated.³ In one such programme, the children of divorce intervention programme, 9–11 year old children were recruited through parents to engage in some 10 or 11 one hour group meetings in the school.^{91, 92} Each group contained between six and nine boys and girls. In the first study a delayed intervention control group was used and in the second comparison with a demographically matched comparison group of children from intact families attending the same school classes. Significant improvements occurred in teachers' ratings of problem behaviours, parents' rating of their children's adjustment, and the children's own ratings of levels of anxiety but the measures taken after the test were taken only two weeks after the intervention ended and there was no later follow up.⁶

(iv) Hospitalisation

There have been a number of studies demonstrating that children benefit from preparation for hospitalisation.^{93–96} Such interventions have been shown to reduce children's distress during the admission and subsequently and it may be that this is in part due to a reduction in parental anxiety, if a parent is involved in the preparation procedure.⁹⁴ There is a recent review of prevention of adverse effects of hospitalisation.⁹⁷ A number of psychological approaches are now being used to assist children with basic medical procedures and these are referred to in Eiser.³⁵

(v) Child sexual abuse

Various educational approaches have been used to teach children how to avoid abuse and obtain assistance from adults,⁹⁸ and it has been shown that children can be taught these skills,⁹⁹ but it is unclear whether they are able to employ them in real life situations. There is also the problem of whether the greatest impact is on children who are already well protected and at low risk for abuse in their own families.¹⁰⁰ It has been shown that whole school years can be engaged in such prevention programmes, and one study in Dublin has compared parent and teacher orientation with such orientation combined with a programme for the children (M Lawlor, personal communication, 1992). The difficulty that arises is whether the effort involved produces a commensurate benefit. Clearly it would be valuable to know whether it is orientation of

the adults that is of more crucial importance than the instruction of the children, but long term follow up of the Dublin study will be needed to establish this.

The treatment of asymptomatic sexually abused children has already been mentioned. Whether this should occur will depend on views about long term outcome.^{31 32}

(iv) Adoption, fostering, and care

The need to support families after placement of children for long term fostering or adoption is very clear.¹⁰¹ As yet there is no controlled trial of interventions to assist parents and children and ensure the stability of the placement. Such children, particularly those that are fostered, have higher rates of emotional and behavioural difficulties and lower levels of scholastic attainment.^{102 103} Thus there is plenty of scope for prevention, although this may be secondary rather than primary in that many of the children already have evidence of emotional and behavioural problems.

There are particularly high rates of emotional and behavioural disorders among children who have experienced institutional care (P Roy, presentation to Royal College of Psychiatrists, London, March 1983).¹⁰⁴⁻¹⁰⁷ These young people are particularly vulnerable at the point of discharge from care and Newton describes one project, the Bradford after care team.⁷ The project aims to enable young people to deal better with the practical and emotional problems that they face and reduce the need for future social work support. The service tries to establish contact with the young people before they have actually left care. It employs both individual and group work. Although the service was not taken up by those approached and there have been no attempts to evaluate, Newton concludes that there is good circumstantial evidence that the service is effective in preventing psychiatric disorder.

(vii) Teenage pregnancy

Another particularly vulnerable group are girls experiencing teenage pregnancy. Not all those young women who become pregnant before the age of 21 are necessarily a high risk group¹⁰⁸ but there are probably a relatively high proportion who can be considered so. Birch found that 40% of pregnant schoolgirls in an inner London borough were already known to the social services and half of these had been in care.¹⁰⁹ Newton⁷ describes the St Michael's hostels¹¹⁰ in south London as an example of a preventive service for these young mothers.

(D) THE COMMUNITY

(i) Housing

There are higher rates of child psychiatric disorder in urban, particularly inner city areas,^{111 112} and one contributing factor appears to be the greater risk for disorder in preschool children associated with flats and high rise buildings.¹¹³ This may be partly due to increased risk from maternal depression in these circumstances,^{114 115}

but also because people feel in less control of their environment in large cities.¹¹² However it is also likely that high levels of environmental threat are present in inner city areas. Direct experience of threat or reports of assaults and burglaries were associated with maternal depression and disorder in preschool children in an inner city area.²³ Coleman has shown the features of housing estate design associated with anti-social behaviour in young males who are the major contributor to environmental threat.¹¹⁶ Where housing design promotes the unimpeded unsupervised movement of young adolescents, vandalism and other antisocial behaviour is more prevalent.

(ii) The school

There has been increasing recognition of the part that schools can play in modulating the risk for emotional and behavioural problems in children and in influencing their academic performance.^{112 117 118} The factors in schools that promote children's behaviour and attainment are now well understood, namely high expectations for work and behaviour, good models of behaviour provided by teachers, a respect for children and their achievements with opportunities for them to be involved in the school as an organisation, clear disciplinary rules with an emphasis on encouragement of good behaviour and sparing use of punishment, pleasant working conditions, good teacher-child relationships, and a supportive coherent structure for teachers. It has proved much harder to improve schools as organisations.^{119 120} However one area in which there has been considerable success has been bullying. Approaches were pioneered by Olweus in Norway^{121 122} and are now being promoted by the voluntary organisation Kidscape in the UK.¹²³

In the USA the Yale Newhaven primary prevention project has been promoted in primary schools since 1968.^{124 125} The programme uses a school planning and management team and has a parent participation programme, a mental health team and attention to the specific educational needs of children. The project is reported to have improved academic achievement and staff and pupil attendance, and reduced child behavioural problems and staff turnover. Parent involvement in school activities increased.

(iii) The community outside the family

One project has demonstrated that a recreation programme concerned with the development of skills outside the school situation and offered to poor children can reduce vandalism in comparison with that shown in a comparison housing project.¹²⁶

Roles for specialist child mental health professionals

It is clear that there are many roles for the specialist child mental health professional that are concerned with prevention. At the individual level they may be working on parent-child relationships in the absence of symptomatology

in the child, improving parental mental health, or working to promote better family function that may have beneficial effects for siblings that can be considered preventive, even if there is an index symptomatic child. Consultation and liaison roles have already been referred to and in these circumstances there may be a primary prevention role in working with groups of staff who are directly involved with vulnerable children such as those experiencing chronic physical illness. The teaching role overlaps with both consultation and liaison in that good teaching involves follow through. Ideally there is active discussion of work with particular families in order to reinforce and sustain the effects of any formal teaching.

Child psychiatrists and psychologists have also been involved in facilitating community projects and programmes of the various types described in this article. Research evaluation is crucial if there is to be a satisfactory understanding about how to focus preventive efforts economically. Finally there is the advocate role which can be considered relevant to all those working with children. It looks to improve the general climate and circumstances both economic and social in which children are raised.

Comment

It will be seen that there is a very wide range of activities in which specialist child mental health professionals may be engaged that can be considered preventive, encompassing primary prevention and early secondary prevention as defined by Caplan, or simply prevention as defined by Newton. Generally such professionals become involved in high risk prevention rather than that aimed at communities at large. However some are engaged in activities at community level both directly or by advising those who are directly involved.

It continues to be important to understand the nature of the pathological processes in order that preventive efforts are focused appropriately. There is a need for effective screening procedures for risk if efforts are not to be wasted. Evaluation is crucial in order to understand the limitations of a preventive intervention not only in terms of what it can achieve but also in terms of those whom it reaches.

There is little doubt that more attention needs to be focused on the development of the resources available to children and protective factors; not confining efforts to the reduction for liabilities and risks. There are many circumstances, as for example where a parent is mentally ill, when little can be done in a direct sense about the risk factor, but there is much that can be done protectively in attempting to give children good and satisfying experiences and relationships with others that promote their self esteem.

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