Carr, A. (2002). Chapter 17. Conclusion. In A. Carr (Ed.), *Prevention: What Works with Children and Adolescents? A Critical Review of Psychological Prevention Programmes for Children, Adolescents and their Families* (pp.359-372). London: Routledge.

CHAPTER 17

CONCLUSIONS

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The objective of this book has been to identify intervention programmes which prevent a range of relatively common psychological problems in childhood and adolescence. In order to identify effective prevention programmes we reviewed over 200 studies involving more than 70,000 children. Furthermore, the studies we selected for review were the most methodologically robust that we could find using both computer and manual searches of the English language literature for the past quarter of a century. We can therefore place considerable confidence in our conclusions which are summarized in this chapter. Our conclusions concern the prevention of the following list of problems:

1. developmental delay in low birth weight infants
2. cognitive delays in socially disadvantaged children
3. adjustment problems in children with physical disabilities
4. adjustment problems in children with sensory disabilities
5. adjustment problems in children with autism
6. challenging behaviour in children with intellectual disabilities
7. physical abuse
8. sexual abuse
9. bullying
10. adjustment problems in children with asthma
11. adjustment problems in children with diabetes
12. teenage drug abuse

13. teenage pregnancy, sexually transmitted diseases and HIV infection
14. post-traumatic adjustment problems in children and adolescents
15. suicide in adolescence

To make the text below more readable, all assertions in this chapter are made unreferenced. References on which assertions are based are contained in relevant chapters of this volume. Furthermore, while we are reasonably confident about the reliability and validity of our conclusions, it is important to stress that all of our conclusions are open to revision in light of new evidence. For example, future programme evaluation studies of autistic children may show that low intensity speech and language intervention programmes are as effective as highly intensive behavioural programmes. So our conclusions are not cast in stone. Rather, they are the best we can offer, today, in light of available scientific evidence.

1. PREVENTION OF DEVELOPMENTAL DELAY IN LOW BIRTH WEIGHT INFANTS

Low birth weight is a problem that places infants at risk for developmental delay. About 7% of all births in industrialized countries have low birth weights and 1% of children at birth meet the criterion for very low birth weight. Social disadvantage and pre-term birth are the main risk factors for low birth weight. Families in which low birth weigh infants are born should be engaged in programmes which begin in neonatal intensive care units and involve home visiting, community based outpatient and pre-school follow-up sessions. Such programmes should include child stimulation; parent training and support; and conjoint parent-child sessions to promote secure attachment. Such programmes should be continued throughout the pre-school and early school going years until a comprehensive multidisciplinary assessment indicates that the child's development falls within normal limits. Children with a high level of biological vulnerability as indexed by

very low birth weights and neurological impairment may require more intensive programmes. Special efforts should be made to help parents stay engaged with these programmes. Home visiting and the provision of transport to day centers may facilitate this.

2. PREVENTION OF COGNITIVE DELAY IN SOCIALLY DISADVANTAGED CHILDREN

Children from socially disadvantaged backgrounds show delayed development of cognitive abilities. They obtain lower scores on tests of intelligence, cognitive skills, language development and academic attainment, compared with children who are not reared in poverty. Rates of cognitive delay are about 10% in lower socio-economic groups compared with 2-3% in higher socioeconomic groups. Four broad types of early intervention programmes have been developed for socially disadvantaged children.

- Home-visiting programmes which aim to help socially disadvantaged parents understand and meet their children's needs for intellectual stimulation, secure attachment, and consistent supervision
- Pre-school programmes which aim to directly provide disadvantaged children with a stimulating pre-school environment to compensate for their intellectually impoverished home environment
- Combined home visiting and preschool programmes which aim both to enhance the quality of disadvantaged children's home environments and give them accesses to enriched pre-school environments.
- Multisystemic programmes which attempt to extend support services for children and families into middle childhood.

Multisystemic programmes are the most effective. Overall, the average child who participates in a multisystemic early intervention programme fares better than 93% of children whose families do not participate in this type of programme. In rank order of effectiveness after multisystemic programmes, are home visiting programmes; combined home-visiting and pre-school programmes; and programmes that involve pre-school enrollment only. Overall, longer programmes are more effective than shorter programmes and the most effective programmes extend beyond five years. Disadvantaged children at risk for cognitive delay should be offered effective early intervention programmes to prevent such delays occurring. Effective programmes involve a comprehensive range of components delivered by a multidisciplinary team who receive continuous training and supervision. Effective programme are intensive, involving frequent and long term contact. They involve children's families fully and build upon their cultural beliefs, traditions, and practices. Preschools in effective programmes have small child-teacher ratios and modify the curriculum to meet the unique needs of individual children. Effective programmes use manualised curricula to ensure that all staff involved in implementation provide the intervention as intended. Effective programmes also evaluate participants with appropriate assessment instruments before, during and after the intervention and at follow-up to monitor progress and respond to children who are having difficulties benefiting from participation. Effective also programmes include additional supports to maintain initial positive effects.

3. PREVENTION OF ADJUSTMENT PROBLEMS IN CHILDREN WITH CEREBRAL PALSY

Cerebral palsy, which effects about 1 in 400 children, is a disorder of movement and posture that results from an insult to, or anomaly of the immature central nervous system

in centres which govern motor activity. Children with cerebral palsy often have other co-morbid disabilities including intellectual disability, seizure disorders, visual and auditory impairments, learning difficulties and behaviour problems. Best practice involves offering comprehensive multidisciplinary rehabilitative programmes of care specifically designed to minimize the impact of the constraints placed by cerebral palsy and comorbid conditions on the child's physical and psychosocial development. Such programmes may include environmental alterations to manage the musculoskeletal complications of cerebral palsy; the use of carefully designed devices to aid posture and mobility; medication, nerve blocks and motor point blocks and neurosurgury to reduce spacticity; and orthopedic surgery. In addition to these essentially physical interventions a range of other interventions including neurodevelopemental therapy, infant stimulation, therapeutic electrical stimulation, special education and conductive education should be included in overall multidisciplinary care plans.

To be effective neurodevelopmental therapy must be offered at a high level of intensity with clinic physiotherapy sessions once or twice a week and daily home practice. Such intensive programmes should not be offered until the infant is six months and the effectiveness of this type of treatment for infants is enhanced if it is preceded by an infant stimulation programme during the child's firs six months. In toddlers and young children when coupled with inhibitive limb-casting neurodevelopmental therapy is particularly effective in improving the motor functioning of limbs for which inhibitive casts are worn for a set period of time each day. Therapeutic electrical stimulation may be offered as a parent administered manualized home based programme to effectively improve gross motor functioning in specific muscles or muscle groups. Special education and conductive education when offered as day programmes are equally effective in promoting cognitive, motor and social development to young children.

4. PREVENTION OF ADJUSTMENT DIFFICULTIES IN CHILDREN WITH SENSORY IMPAIRMENTS

The prevalence of deafness is about 4 per 1000 and about 1 in every 3000 children has severe visual impairment. For children with sensory impairments cognitive and social development are invariably more challenging than for children without sensory impairments. In addition, deaf children face particular challenges in developing language and blind children are particularly challenged in developing sensori-motor integration and motor skills. Developmental screening procedures are essential to facilitate early identification of children with sensory impairments. Multisystemic family-based early intervention programmes should be offered to families with children who are detected through screening procedures as having sensory impairments. These multisystemic family-based early intervention programmes should include child-focused and parent-focused components and these components should be offered flexibly on a home-visiting basis and at local health, social or educational centres for families of children with sensory impairments. The SKI*HI curriculum is a good example of this type of intervention. Child-centered interventions should focus on promoting the use of all senses including the impaired sense, especially in the case of visually impaired children. In addition child-centered interventions should focus on training the child in communication skills including oral speech and sign language in the case of deaf children. Child-centered interventions may be taught by an adult with a sensory impairment who acts as an advocate and role model for the child, introducing them to the deaf and blind minority cultures. Parent-centered interventions should provide information on sensory impairment, and coaching in techniques that parents can use to help their children learn communication and social skills. Parent-centered interventions should also provide

parents with ongoing personal support and advice on how to access health, social and educational services. For school aged children, school-based programmes should follow-on from home based child-centered programmes. In school-based programmes, systematic and intensive instruction, tailored to children's unique learning profiles should be used to promote language development. Social problem solving skills should also be taught to promote social understanding and behavioural adjustment, as in the PATHS programme. Long-term parent-centred programmes should run in parallel with the child-centered school-base programmes, to provide a forum within which parents can address the various problems that occur as their senorally impaired children make various life-cycle transitions such as entering puberty and leaving high school.

5. PREVENTION OF ADJUSTMENT PROBLEMS IN CHILDREN WITH AUTISM

A triad of deficits typify most autistic children. These deficits occur in social development, language and behaviour, particularly imaginative or make-believe play. The prevalence rate for autism is 9.6 per 10,000. The outcome for children with autism is poor and up to 60% are unable to lead an independent life. Autistic children with a non-verbal IQ in the normal range and some functional language skills at the age of five have the best prognosis. Underestimating the potential of children with autism to develop life skills and avoid developing secondary adjustment problems is a major pitfall to be avoided. In order to prevent adjustment problems in children with autism screening and assessment systems which allow for the early detection of autism are vital. Once identified youngsters with autism require intensive intervention. Lovaas' behavioural intervention programme; Schopler's TEACCH programme; and speech and language focused programmes all hold promise as secondary preventative interventions for children with autism. Psychological interventions can have marked impact on the cognitive, behavioural and social

adjustment of children with autism in the short and long term. Effective interventions are intensive and protracted and occur across multiple contexts including the home and the school or preschool setting, with highly collaborative working relationships between parents, teachers and clinical staff. Effective interventions have an adult to child ratio varying from 1:1 to 1:3, are highly structured and based on theoretically derived procedural treatment manuals. Effective intervention programmes are sufficiently flexible to address the unique profile of needs of each child. They are designed to enhance skills in five key areas: (1) attending to aspects of the environment essential for learning; (2) imitation; (3) language usage; (4) imaginative play; and (5) social interaction. In addition, psychoeducational and relief care support services for parents may be required, although research on this issue is lacking.

6. PREVENTION OF CHALLENGING BEHAVIOUR IN CHILDREN WITH INTELLECTUAL DISABILITIES

Challenging behaviour, particularly self-injury; aggression; and property destruction are of central concern to parents and carers of people with intellectual and other developmental disabilities because they are particularly unresponsive to routine care practices and because they place clients, parents and carers at risk of injury. Substantial reductions in challenging behaviour may be achieved using behavioural interventions following rigorous and systematic functional analysis. Through this type of assessment, factors that maintain challenging behaviours may be identified. Individualized behavioural programmes may then be developed based on these assessments and implemented to prevent challenging behaviour from persisting. For children and adolescents with developmental disabilities, both proactive and suppressive interventions can effectively prevent challenging behaviour. Proactive interventions include functional communication

training, negative reinforcement, neutralizing routines and instructional manipulation. Suppressive Interventions include overcorrection, restraint and punishment. One central practice issue is how to decide which category of intervention to consider in any particular case. Interventions that focus on antecedents of challenging behaviour, such as functional communication training, neutralizing routines and instructional manipulation have been used to good effect with challenging behaviour that is directed at others (such as aggression) and the self (self-injurious behaviour) and in a wide range of community and institutional settings. These interventions, because of their non-coercive and non-aversive nature and their suitability to multiple settings, may be the interventions of first choice when youngsters present with challenging behaviour. In contrast, interventions which focus predominantly on altering the consequences of challenging behaviour such as over-correction, restraint and punishment have been used exclusively with self-injurious behaviours in predominantly institutional settings in the studies reviewed in this volume. These may therefore be viewed as second line interventions to consider when functional communication training, neutralizing routines and instructional manipulation have not been effective, particularly within institutional settings, and particularly with self-injurious behaviour. Strong ethical justification is required in using these more coercive interventions. For example, where youngsters are engaging in potentially fatal self-injurious behaviour, their use may be ethically justified.

7. PREVENTION OF PHYSICAL ABUSE

Because physical child abuse is a violation of children's rights, because it leads to deleterious short and long-term psychological consequences, and because the prevalence of serious physical abuse is about 10%, the prevention of physical child abuse is imperative. Physical abuse occurs in families characterized by high levels of stress and

low levels of support when children place demands on their parents which outstrip parental coping resources, and parents in frustration injure their children. Families at risk for physical child abuse should be identified by screening mothers prenatally. Subsequently they should be engaged in multimodal community based programmes which begin prenatally and which include home visiting conducted by nurses or paraprofessionals, behavioural parent training, stress management and life skills training until a comprehensive multidisciplinary assessment of risk factors indicates that the risk of physical abuse has been substantially reduced. Participating in home visiting programmes, particularly those that begin prenatally, can reduce the risk of physical child abuse and child hospitalization by half. Poor, unmarried teenage mothers may derived greatest benefit form home visiting programmes. Stress management training programmes and behavioral parent training child abuse prevention programmes lead to marked short-term improvements in parental well-being and in parent-reported child welfare and this is sustained at follow-up. Unfortunately the marked short-term improvements in parenting skills which arise from participation in behavioural parent training child abuse prevention programmes are not maintained at follow-up and so ongoing booster-sessions are required for gains in parenting skills to be maintained in the long-term. Attrition is a problem in all physical child abuse prevention programmes. The lowest drop out rates occur in home-visiting and inpatient programmes and the highest drop out rates occur in behavioural parent training programmes conducted on a group basis in community centres rather than parents homes or inpatient settings. This underlines the importance of ongoing long-term home visiting.

8. PREVENTION OF SEXUAL ABUSE

Estimates of prevalence rates vary from 2-30% in males and 4-30% in females depending on definitions used and population studied. Sexual abuse has profound short and long-term effects on psychological functioning. Behaviour problems shown by children who have experienced sexual abuse typically include sexualized behaviour, excessive internalizing or externalizing behaviour problems, school based attainment problems and relationship difficulties. About a fifth of cases show clinically significant long-term problems which persist into adulthood. Primary prevention programmes which equip preadolescent children with the skills necessary for preventing CSA should be routinely included in primary school curricula. These programmes should be developmentally staged with different programme materials for younger and older children; be of relatively long duration spanning a school term; be taught using multimedia materials and active skills training methods; and be multisystemic. That is programme should include components which target not only children but also parents, teachers and members of the local health, social and law enforcement services. The curriculum of the parents' and teachers' training components should cover an overview of child abuse and child-protection issues; a preview of the children's programme lesson plans; and information on local child protection procedures and the roles of parents and teachers in these procedures. Training is important for effective programme delivery and a range of personnel may be effective instructors. Thus parents, teachers, mental health professionals and law enforcement officers may all take the role of instructors in child abuse prevention programmes provided they are adequately trained. CSA prevention programmes do not lead to increased sexualized behaviour, anxiety or other significant adjustment difficulties.

9. PREVENTION OF BULLYING

Bullying in schools is a significant problem for a large minority of children. Estimates for the prevalence of being bullied frequently vary from 4-13%. Estimates of engaging in frequent bullying range from 1-7%. Whole school bullying prevention programmes effectively reduce both reports of bullying and reports of being bullied in the short-term (over periods of an academic year) but also in the longer term over periods of up to three years. To prevent bullying, the whole school approach to bullying should be routinely introduced into primary and secondary schools. The whole school approach to bullying incorporates a wide range of strategies at school, class and individual levels within the context of an overall school policy in which the administration of the school, including the board of management, the principal, teachers and other staff along with the pupils take responsibility for preventing bullying. The anti-bullying school policy must be given the highest priority and be backed up with specific prevention strategies. Particular care should be taken to implement such programmes fully and consistently in accordance with programme guidelines. School staff should be provided with periodic training and consultancy to help them implement programmes effectively. The effectiveness of whole-school bullying prevention programmes is determined by the degree to which the programme integrity is maintained and the degree to which external training, consultancy and support are offered to ensure proper implementation of whole-school bullying prevention programmes.

10. PREVENTION OF ADJUSTMENT PROBLEMS IN CHILDREN WITH ASTHMA

Asthma is one of the most common chronic diseases with a prevalence rate of about 10% among children. Its effects are pervasive and can lead to restrictions in daily activity, absences from school, repeated hospitalization during severe attacks, hypoxia, seizures,

brain damage and, if left untreated, asthma is potentially fatal. The course of asthma is determined by the interaction between abnormal respiratory system physiological processes to which some youngsters have a predisposition; physical environmental triggers; and psychological processes. Psychological interventions for pediatric asthma include:

- Psyhoeducation to improve understanding of the condition
- Relaxation training to help reduce physiological arousal
- Skills training to increase adherence to asthma management programmes
- Family therapy to empower family members to work together to manage asthma effectively.

Psychological interventions should be offered in conjunction with routine pediatric management of asthma, particularly where children have severe symptoms, repeated hospitalizations and/or adherence problems. In such cases multisystemic family based, psychoeducational programmes which include relaxation and behavioural skills training should be provided. These should typically be clinic based and involve approximately about six to eight sessions. Where service demands greatly outweigh available resources, self-administered psychoeducation should be provided as a preliminary measure but this should ideally be followed-up with further intervention, particularly where youngsters have severe symptoms or adherence problems. If resources permit and particularly when parents cannot engage in treatment, relaxation training and biofeedback techniques should be made available within the context of child-focused programmes. For children with severe asthma that is not well controlled with conventional treatment methods, family therapy (rather than multiple family group psychoeducation) should be provided. The most effective programmes involve relaxation training (using frontalis biofeedback or self-hypnosis) and family therapy.

11. PREVENTION OF ADJUSTMENT PROBLEMS IN CHILDREN WITH DIABETES

Type 1, or insulin-dependent diabetes mellitus (IDDM), is an endocrine disorder typically diagnosed in childhood, characterized by complete pancreatic failure. The prevalence rate is approximately 1.2-1.9 cases per 1000 children under the age or 20. The long-term outcome of IDDM is associated with devastating complications in some cases, including blindness and leg amputation, particularly those where there has been poor regime adherence. For youngsters with diabetes, blood glucose levels as close as possible to the normal range is achieved through a regime involving a combination of insulin injections, balanced diet, exercise and self-monitoring of blood glucose.

For diabetic youngsters five type of psychological intervention programmes can prevent adjustment problems and improve adherence and metabolic control. These are:

- Family crisis intervention programmes
- Family-based behavioural programmes
- Family-based communication and problem-solving skills training programmes
- Child-focused coping skills training programmes and
- Intensive inpatient psychoanalytic psychotherapy.

For newly diagnosed diabetic children family-based multidisciplinary crisis intervention programmes should be routinely offered. Such programmes should include psychoeducation; supportive family counselling; school liaison meetings; home visiting; and peer counselling for newly diagnosed patients from youngsters with experience in managing diabetes. For youngsters who continue to show poor metabolic control during the preadolescent years family-based behavioural programmes may be offered. In these programmes self-care skills are modelled and rehearsed. Initially parents prompt and reinforce skill use, but gradually youngsters take increasing responsibility for self-

management of their diabetes regime. In adolescence, where youngsters show poor metabolic control, family-based communication and problem-solving programmes should be offered. Such programmes should include parent simulation exercises in which parents are invited to complete diabetes management tasks while their adolescents act as their 'coaches'. This exercise helps parents to empathize with the challenges faced by their youngsters and facilitates joint problem-solving. Adolescents with poor metabolic control may also be offered coping skills training programmes to develop the skills to cope with peer pressure to violate their diabetic regime. Regular booster sessions should be offered after the completion of such programmes. All of the programme mentioned so far in this section are relatively brief (ten to thirty sessions). Where brittle diabetes develops intensive inpatient psychoanalytic psychotherapy three to five times per week over four months should be offered. The cost of such treatment can be justified in terms of the impact such programmes can have in preventing short-term complications and repeated hospitalizations and in the longer term in delaying the onset and progression of serious complications associated with diabetes.

12. PREVENTION OF DRUG ABUSE

Between 5 and 10% of teenagers under nineteen have drug problems serious enough to require clinical intervention. One strategy for preventing youngsters joining this minority is to provide school-based prevention programmes which aim to prevent or reduce usage of gateway drugs: nicotine, alcohol and marijuana. These gateway drugs are invariably the first step on the road to serious drug problems for those youngsters that eventually develop such difficulties. Young teenagers should routinely participate in peer-led school-based programmes of up to 30 sessions in which they receive accurate information about the immediate effects of drugs; conservative normative information about drug use; and

learn drug refusal skills and general social problem-solving skills. These programmes should involve active teaching methods, multiple booster sessions in mid-adolescence and be integrated into the school curriculum so that most youngsters attend all classes. These school-based programmes should be the nucleus of a wider multisystemic programmes which involve members of youngsters significant social systems.

13. PREVENTION OF TEENAGE PREGNANCY, STDS AND HIV INFECTION

Risky sexual behaviour is a highly significant problem throughout the world. Unintentional teenage pregnancy, sexually transmitted diseases, and HIV infection are the principal negative outcomes of risky sexual behaviour. Relatively brief classroom based prevention programmes can favourably influence knowledge, attitudes, beliefs and intentions relevant to sexually risky behaviour. Specifically these programmes can delay the onset of sexual activity in sexually inexperienced young adolescents, decrease the frequency of unprotected sex in sexually active adolescents mainly by increasing the frequency of condom use.

Classroom based programmes for preventing sexual risk-taking should be routinely included in secondary school curricula. Such programmes should include psychoeducation, communication and behavioural skills training as the main components. Didactic methods and group discussion may be used for psychoeducational training. However, live modelling and/or video modelling, rehearsal, role-playing and corrective feedback should be used to train participants in using both communication skills and behavioural skills for practicing safe sex. These skills include anticipating and avoiding or escaping from sexually risky situations, and buying, carrying and using condoms. Programmes for younger adolescents should focus particularly on delaying the onset of sexual intercourse and those for older teenagers should focus on the avoidance of

unprotected sexual intercourse. The positive impact of prevention programmes in reducing sexual risk taking diminishes over time, so follow-up sessions should be routinely included in clinical or educational practice. Training is important for effective programme delivery and a range of personnel including health educators and teachers may be effective instructors.

14. PREVENTION OF POST TRAUMATIC ADJUSTMENT PROBLEMS

Survivors of traumas such as child abuse, natural disasters and accidents may develop serious psychological problems including acute stress reactions and PTSD. However, psychological intervention programmes can prevent the development of such reactions or prevent such reactions from persisting. Tertiary PTSD prevention programmes of twelve to twenty-four sessions should be routinely available to pre-adolescent and adolescent CSA survivors. These programmes should include graded exposure, coping skills training, safety skills training and behavioural parent training. Secondary PTSD prevention programmes should be routinely available for children and adolescents following natural disasters and major accidents or illnesses. Such programmes should include grief work and coping skills training and may take the form of Critical Incident Stress Debriefing. Such progrmames may span three to seven sessions. Offering at least a portion of the intervention programme in a group format may be important for successful treatment. For single incident traumas such as accidents and assaults, graded exposure and coping skills training offered in a group format over eighteen sessions is an effective tertiary prevention approach.

15. PREVENTION OF SUICIDE IN ADOLESCENCE

Currently, suicide accounts for about a third of deaths in the 15-24 year age group, and is the leading cause of death among young men. A variety of psychological, social and biological factors may predispose adolescents to suicide and trigger suicide attempts. Child-focused multimodal programmes which include some combination of didactic instruction and discussion; bibliotherapy; and behavioral skills training may be very effective in increasing suicide-related knowledge; willingness to seek help if suicidal; and willingness to encourage potentially suicidal peers to seek professional help. Multisystemic prevention programmes which includes didactic instruction and discussion coupled with behavioural coping skills training for adolescents and other members of their social networks are moderately effective in increasing suicide-related knowledge and positive attitudes to suicidal peers while decreasing hopelessness and potentially self-harming risky behaviour, particularly among females. Classroom based suicide prevention programmes should be included as part of an overall youth suicide prevention strategic plan which also includes screening programmes for students at risk; crisis services and hotlines for students at risk; postvention programmes for survivors in social networks where suicide has occurred; and programmes which aim to restrict access to potentially lethal self-harming methods.

It is cost-effective to provide students with booklets containing information about suicide before engagement in classroom based programmes. Such booklets should contain information on suicide myths and facts, warning signs for suicide, risk factors for suicide, and strategies for helping distressed peers obtain help from mental health services. Classroom based programmes of three to twelve hours delivered by specially trained teachers or school counsellors or psychologists should cover a similar curriculum and also include communication, problem-solving, decision making, and stress

management training. Referral skills, particularly those for forming 'no harm agreements' where peers ask suicidal adolescents to make promises not to hurt themselves before talking with professional counselors, should be a key feature of classroom based suicide-prevention programmes. Active teaching methods including video-modelling, role-play, rehearsal, corrective feedback and home practice should be used for skills training. Programmes should include training sessions covering a similar curriculum for teachers, parents, and mental health professionals from the school and local community. Finally, programmes should be delivered by trained personnel, have manualized procedures, and be evaluated using reliable and valid outcome measures.

COMMON THEMES IN EFFECTIVE PREVENTION PROGRAMMES

Certain common themes emerge from the fifteen sets of conclusions outlined above. These broad themes constitute a set of principles for designing, delivering and evaluating effective psychological prevention programmes.

Prevention programmes based on sound psychological theory, particularly multifactorial systemic theories, can reduce adjustment problems in biologically or psychosocially vulnerable children and adolescents. Multisystemic programmes are particularly effective. These include components that target the individual youngster and members of the significant social systems of which the youngsters in a member including the family, school, peer group and community.

Child focused elements of effective multisystemic programmes equip the child with specific skills or experiences which are important for addressing their biological or psychosocial vulnerability. They do this by reducing personal risk factors and strengthening personal protective factors.

Components of multisystemic programmes that target vulnerable youngsters families, parents, schools and peer groups, aim to enhance the amount of social support these systems can offer vulnerable children or involve members of these systems in providing the child with skills to manage his or her unique vulnerabilities.

Effective multisystmeic prevention programmes are delivered by trained staff, parents or peers who are well supervised and who follow manuals which specify the programme curriculum and intervention procedures. Curricula of effective programmes are based on sound psychological theory and are developmentally and culturally matched to participants age and ethnic status. Effective programmes involve multiple teaching methods such as didactic instruction and discussion on the one hand and modelling, rehearsal, corrective feedback and extended practice on the other. They also use multimedia including verbal presentations, print, video, and drama where appropriate.

Effective programmes are intensive involving frequent contact with good child:facilitator ratios; are of longer rather than shorter duration; and involve follow-up booster sessions. They are delivered by credible facilitators. In adolescence this may mean programmes are delivered by peers.

Effective programmes are delivered in a convenient setting. So for mothers with infants, home visiting is an important setting for programme delivery. For adolescents, the school may be the most appropriate setting.

Effective programmes, include monitoring procedures, such as frequents staff support and supervision, to insure that programme integrity is maintained.

Effective programmes also include evaluation procedures to insure that programme effectiveness is monitored. Evaluation studies should be methodologically robust and score highly on the methodological checklist contained in Chapter 1. The

effectiveness of programmes may be enhanced by investigating the relationships between a range of factors and overall outcome, and redesigning programmes in light of findings from such process based research. Important factors that may have a bearing on outcome and deserve investigation include programme design features (such as curriculum content, programme duration, type of facilitators involved; teaching methods used; programme setting etc); characteristics of participants (such as age, gender, level of disability or vulnerability, coping style etc.); and characteristics of participants social networks (such as family structure, peer group deviance, type of school etc).

These common principles may serve as a template for the development of future psychological prevention programmes.
