

The NewCan Practice Framework: Using Risk and Resilience to work at the interface between Professional Expertise and Parental Knowledge and Experience in Child and Adolescent Mental Health

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This paper describes the NewCan¹ practice framework that is designed to enable professionals from a range of agencies (health care, education, social services) to utilise evidence on risk and protective factors in child and adolescent mental health (CAMH) in order that they can:

- assess the child and family needs using a common evidence base and shared language to communicate across all agencies involved in the care of the child;
- enhance local capacity to respond to the needs of these children by identifying resources/services available locally which can enhance protective factors and reduce risk;
- develop a plan of intervention shared by all agencies involved in the care of the child, including the child's contribution and that of their family/carers to the realisation of the plan.

The framework was designed to help practitioners across agencies to identify the most effective combination of universal, targeted and clinical services for each child/family and community that can be configured to respond to the risk and protective factors within the local socio-cultural context. This paper describes the development of the framework and includes some preliminary experiences from professionals and parents who have used the framework in practice.

¹NewCan reflects the origins of the practice framework which was developed in Newcastle upon Tyne UK based on study visits to Canada. It can be accessed at <http://online.northumbria.ac.uk/faculties/hsw/research/nmahp/camh.htm>

Keywords: risk factors; protective factors; resilience; common assessment for child and adolescent mental health; multi-agency working; capacity

Background

Current evidence points to the existence of a spectrum of child and adolescent mental health (CAMH) problems, from mild to moderate, characterised by disruptive behaviour, social withdrawal and poor social integration to more severe diagnosable disorders (Mental Health Foundation 1999). The overall prevalence of children falling within this spectrum in the UK is recognised to be 20 per cent, of which 10 per cent experience more severe diagnosable conditions (Mental Health Foundation 1999, Meltzer *et al.* 2000). Extensive research in the field of CAMH has identified a range of risk factors that increase vulnerability to developing CAMH problems and disorders and resilience factors, which protect against the onset of problems or disorders even in conditions of adversity (see Box

The practice framework is different from other holistic tools in that it is designed to facilitate collaborative work with vulnerable young people and their families by identifying and building on existing strengths and reducing risks in order to do this it:

1. Identifies risk factors/needs/vulnerabilities which could suggest that the young person has developed/is at risk of developing mental health problems.
2. Identifies strengths/protective factors which can protect the young person against developing CAMH problems.
3. Facilitates joint negotiation and understanding of mutually agreed and acceptable plans for reducing the young person's risk/needs and promoting their strengths/resilience with young people, professionals and (if possible) their families. This is achieved using strategies which are evidence based, acceptable and feasible for both young people, their families (if applicable) and professionals within the realities of the situation as experienced by all parties.

Provides a detailed assessment and systematic plan for an individualised pathway of care, which can be disseminated across the tiers of service provision and across agencies to enable a joint understanding and planning for the young person, who maybe in a cycle of chronic vulnerability.

Box 1. The NewCan Practice Framework for CAMH

Two, Wallace *et al.* 1995, Pearce 1993). The impact of these factors on the mental health of children appears to depend on the accumulation of risk factors at an individual, family and community level to which a child/family is exposed (Meltzer *et al.* 2000, Offord *et al.*, 1989). Consequently, the goal of intervention is to change the balance between the adverse effects of risk factors and the beneficial effects of resilience factors. Increasing the effectiveness of protective factors for a child and family may be as important as decreasing the effects of risk factors (Rae Grant *et al.* 1989).

In response to this evidence, a plethora of community initiatives have been introduced; these include: proactively providing recreation and/or extra health

Risk Factors

(increase the probability of a child developing a mental health problem)

In the child: genetic influences; learning disability; developmental delay; difficult temperament; physical illness, communication problems; academic failure and low self-esteem.

In the family: overt parental conflict; family breakdown; inconsistent discipline; hostile relationships; failure to adapt to a child's changing needs; abuse; parental psychiatric illness; criminality; death and loss.

In the community: socio-economic disadvantage; homelessness; discrimination.

Resilience Factors

(allow the child to thrive despite adversity)

In the child: easy temperament; secure attachment; positive attitude; good communication skills; being a planner with a belief in control; humour; religious faith; the capacity to reflect; being female; high intelligence.

In the family: include at least one good parent-child relationship; affection, supervision and authoritative discipline; support for education; supportive marriage with an absence of severe discord.

In the community: a wider supportive network; good housing; high standards of living; high morale; school with strong academic and non-academic opportunities; range of positive sport and leisure activities.

Box 2. Risk and resilience factors identified in the literature

visitor/public health nursing home visiting (Browne *et al.* 1999) parenting programmes to increase social networks, improving relationships in the family system, family problem solving and parental effectiveness (Cunningham *et al.* 1995, Webster-Stratton 1998), promoting a positive school milieu and ethos (Ofsted 1999), and social skills/nurture groups in schools and family centres (Bennathan and Boxall 1996). A range of such interventions is being developed in communities and localities and in some cases are being augmented through Sure Start programmes. Many of these initiatives reflect the creative efforts of practitioners responding to their own interpretations of local need (Offord *et al.* 1998). However, these tend to remain as discrete uni-professional or single-agency interventions targeted at an individual rather than community level. Despite a series of policy recommendations (Health Advisory Service 1995, Audit Commission 1999, Mental Health Foundation 1999, Department for Education and Skills 2003) the risk and resilience literature has not been applied or integrated into a multi-agency context, possibly leading to systematic joint CAMH assessments; nor has it been used to develop joint agency working in practice with families, children and young people in ways that can incorporate them into the decision making on how they perceive their strengths and needs.

An illustrative example of this approach is the introduction of parenting groups, identified as one of the most effective ways of addressing the complex issues in CAMH described above. There is substantive evidence to support the efficacy of parenting groups in the UK (Pugh and Smith 1996). However, low utilisation by those at greatest risk (Cunningham *et al.* 1995) and high drop-out rates (Webster-Stratton and Hammond 1990) remain as problems, raising questions about the potential of parenting groups to make a population impact through changing the risk/resilience profile of the local community and thus raising questions about the cost-effectiveness of such groups in the UK cultural context. It is estimated that about 80 per cent of those children most in need do not receive extra support (Bickman and Rog 1995). If there is to be any substantial change in the population profile of CAMH, then universal and targeted interventions must succeed in maximising utilisation.

Historically, the contribution of a service or professional group has often been reduced to simplistic single variables that do not reflect the sophisticated process underpinning interventions necessary in order to restore/maintain a healthy balance of risk and resilience factors (for example, with health, the impact of service contribution is often evaluated through number of bed days /number of community visits/waiting time targets; in the case of schools it is educational attainment and with social services it can be child protection allocations). Such variables reflect specific professional or organisational functions independently from the totality of needs presented by the service user (which include a holistic set of health, education and psychosocial variables).

Reactive interventions deal with a particular impairment but do not tend to deal with the interaction of health and psychosocial factors related to chronic vulnerability. A reactive response may thus lead clients to seek inappropriate

(and often expensive services) to cope with psychosocial needs, which could often be dealt with more effectively (and more economically) through comprehensive preventative/early intervention services, which aim to optimise individual, family and community strengths. Debates about which community-based interventions to introduce, how to free up resources from services already over-stretched, given the high level of demand highlighted above and how to assess need and measure effectiveness of changes, all serve to reinforce the development of existing single agency services or the introduction of isolated community initiatives to the detriment of the most vulnerable sections of the population. This paper describes how a multi-agency practice framework was developed to achieve a common understanding of local need across agencies as a preliminary process towards the implementation of more evidence-based service provision. The research aimed to iteratively develop, with a range of professional agencies and vulnerable clients, a jointly understood, agreed, evidence-based and contextually relevant practice framework which facilitates systematic assessment and effective, culturally sensitive responses designed to reduce risk factors and promote resilience factors.

Methodology

Action research was used as the primary methodology. This starts from a belief that knowledge about human situations can be generated from our commitment to practical situations and that our practical involvement can in itself create the understanding that our circumstances require (Winter and Munn-Giddings 2001). Action research involves an iterative process of practical decision making and evaluative reflection (Meyer 2000). For the purposes of this research it was important that the methodology could accommodate the following issues:

1. how to optimise resources by capitalising on the cumulative knowledge base (synthesised from both empirical and experiential evidence) which can inform practitioners in their daily practice;
2. how to increase capacity in the system by creating a democratic exchange between evidence from the published literature and evidence from experiential knowledge and skills across the professional/client interface.

An initial practice framework was derived from the literature on risk and resilience in CAMH and was used as the basis for a series of teaching sessions, focus groups and parenting groups. The risk and resilience framework was distributed to participants who were asked to describe critical incidents from their current practice/parenting experience. Each critical incident was analysed to see if the application of the practice framework identified new and novel ways of working that reduced risk and increased resilience. The Practice Framework was iteratively developed through this process of data collection and analysis

Data collection Health, Social Care and Educational Professionals

Four multi-professional focus groups were held (see Table 1). During the same period, 47 health visitors attending the CAMH module were introduced to the practice framework during teaching sessions. Many of the Health Visitors piloted the practice framework during their weekly practice and reported back at subsequent teaching sessions.

Data Collection Parents

Simultaneously, a series of parenting groups were held in which parents were engaged as co-researchers. A population of 75 parents met the inclusion criteria of this study in terms of having a child who had behaviour problems that were severe enough to interfere with their everyday functioning and to cause significant distress to the child and family for a period of more than a month. Fifty parents agreed to be involved. Twenty-five parents attended at least 80 per cent of the sessions (see Table 2). Table 3 provides an overview of the social characteristics of the 25 parents who attended at least 80 per cent of the parenting groups. The first author and a colleague facilitated the parenting groups. Following ethical approval, informed consent was obtained, the parenting groups were tape-recorded and the data transcribed.

Table 1 Range of Professionals who participated in at least one focus group

<i>Professional role</i>	<i>Number from each profession participating</i>
Health visitors who had completed the CAMH module	4
Special educational needs coordinators	4
Head teachers	2
Health Visitors who had not taken the module (including 2 involved in Sure Start programmes)	6
Social worker	1
Child protection officer	1
University lecturers	2
Educational psychologist	1
Speech and language specialist specialising in CAMH	1
Psychiatrist	1
School nurses	3
CAMH nurses	3
Learning disability nurse	1

Table 2 Parent participation in parenting groups

Number of parents invited	Analysis of attendance		
	Number who agreed to attend	Numbers who attended at least 1 session	Numbers who completed
71	56	42 (1 father only)	25 (100% female)

Table 3. Characteristics of parents

Social characteristics	Proportion of those who completed group (N = 25)
Owner occupied house	4%
Educational qualifications beyond 16	0%
Living on benefits	96%
Single parents	84%
Perceived that school was supportive to parents and children	4%
Perceived that social services were supportive	0%
Perceived to be getting effective help from voluntary services	8%
Extended social network support from family	12%
Social network support friends etc.	24%
Children diagnosed with ADHD	8 children = 28%
Difficulties with harassment from neighbours	100%
Low self esteem	92%
Being treated for depression	20%

Finding Professionals

Practitioners identified the multi-agency expertise needed to develop an effective practice pathway to work together to reduce needs and promote strengths and then plan effective ways of integrating and implementing them in the total system. Several key themes emerged:

The need for the different agencies to be aware of each other’s opportunities and constraints, including their time constraints, to enable them to be freed up for practice development and the time needed to undertake what was perceived as a lengthy assessment process:

- Teachers described how limited their time is as a result of national curriculum demands. This restricts the degree of staff development time that can be devoted to the use and application of the framework. However, they also saw the practice framework as an opportunity systematically to identify and

document their huge range of interactions with vulnerable pupils and their families.

- Health workers found this to be a crucial way forward for their practice: ‘it’s just like having the light bulb switched on for what I’ve been trying to do all of these years.’ All professionals agreed that using this tool systematically was helpful in communicating their level of involvement with client and outcome: ‘I feel I have a lot to contribute, but until I used this [practice framework], I know that I often used to leave it out.’ Systematically assessing children and families using the attributes of the practice framework was found to be helpful; e.g. ‘I had never worked explicitly with temperament as a risk factor, and was a bit nervous about discussing it with the family, but it was great. It seemed to make real sense to them and they realised how much they could do with X (child) by just understanding what he needed.’
- Social Services described how they needed to lead the ‘National Assessment Framework for Children and Families in Need’ (Department of Health, Home Office, Department for Education and Employment 2000), which also uses a model of strengths and needs as it was social workers who would be accountable for the ‘initial’ and ‘core’ assessments.

As a result of these findings, the following joint decisions were made:

1. Educational and health professionals would use the framework as a way of underpinning their joint work with the family and to aid the decision making about whether to refer a child to more specialist services. Social services would use the framework as the initial assessment to provide systematic information on the risk and resilience profile, to indicate what input has been provided and also what could continue to be provided if the social worker had then to go on and undertake a core assessment.
2. Practitioners from all agencies unanimously felt that there were wider organisational and systemic implications for the successful implementation of a comprehensive multi-agency assessment, response and evaluation. The following were identified:
 - (a) All practitioners recognised that the underpinning theory of risk and resilience had not been an integral part of their training but that it was essential if practitioners were to use the framework effectively.
 - (b) Developing a common language across the professional groups required considerable work and commitment and was time-consuming. This was particularly highlighted with reference to ‘risk’. Social services tended to interpret ‘risk’ as ‘risk of child abuse’. Health professionals tended to interpret it as the increased likelihood of developing problems/disorders. ‘Risk’ did not appear to be an integral part of school language. Another major difference was the interpretation of problems. Schools and social services referred to emotional and behavioural problems rather than health problems or disorders. Such language differentiation seemed to arise from the differing profes-

sional perspectives, education, experiences and assumptions. The Special Educational Needs Coordinators were helpful in refining the tool so that teacher knowledge and skills could be maximised. They made suggestions about the need to include information on signs of vulnerability or strengths which could be observed in the school system, e.g. age appropriate; separation from parents; ability to learn new skills; peer relationships in school; responding to rules. Additionally, signs of bullying should be looked for.

- (c) It was agreed that it was crucial to acknowledge and identify these differences and that the application of risk/vulnerabilities/needs and resilience/protective factors/strengths provided a common language as all professionals were attempting to promote strengths and reduce needs. It was also felt that the use of strengths and needs would be more acceptable to clients as all individuals have strengths and needs, irrespective of their position.

Findings from Parents

The parents' experiences highlighted that in order to achieve a sustained increase in systemic capacity to support children with behavioural problems, it was necessary to engage parents as partners, to acknowledge their experiences and expertise as carers and to actively respond to their need for psychosocial support to fulfil their demanding role. The parents' experiences indicated their current isolation:

My life stopped, when X was born. . . I don't bother going to friends any more, because I'm too embarrassed and I can't bear dealing with his behaviour and how other people look at him and react to him. . . I thought I was the only one going through this. (Group 6, Parent 1)

I try to go the supermarket late at night before the kids go to bed, so that if they play up, I don't have such a big audience. (Group 2, Parent 3)

and the marginalisation of their children in mainstream services:

You're OK as long as your child can do as they're told—but if they're a bit different or find it hard to sit for the right amount of time or do the same as the others, then they don't stand a chance—they get labelled as naughty and difficult and they start to get blamed for everything. (Parent 1, Cohort 1)

They won't let him be treated like an individual . . . differently . . . I say . . . just leave him alone if he throws a wobbler . . . he needs some time and then he gets over it, but they say they can't let the other children see him getting away with his behaviour—I can't get through to them. (Parent 3, Cohort)

He always gets the blame—even if he isn't there! (Parent 1, Cohort 2)

Parents felt that they had to cope with their deep sense of chronic powerlessness to get appropriate help in the system. This disempowerment led to feelings of pessimism and helplessness:

I've been banging me head off a brick wall for years trying to get someone to see me bairn's got problems—they just think it's me. (Group 2, Parent 1)

I've really had to fight to get anything done. (Group 1, Parent 2)

The hardest part is when they you feel they won't accept your child has problems and they're just judging you. (Group 3, Parent 3)

I sit and worry about how he will turn out. . . which prison he will be in. (Group 6, Parent 2)

The power differentials between parents and professionals seemed to be maintained through 'legitimated knowledge', i.e. that professionals were qualified, had certificates and had been to university.

I feel they're all judging me. (Group 2, Parent 1)

When you're with the doctors and psychologists, it's like you've got to go up to their level because they can't come down to ours. (Group 6, Parent 3)

It's like—you're the pupils—we're the experts. (Group 4, Parent 2)

I felt like I was a guinea pig. (Group 4, Parent 3)

You feel as though you've got to be on your best behaviour. (Group 7, Parent 1)

I was at a meeting at the [Child mental health unit]—I was terrified. They never asked me how I was feeling. (Group 8, Parent 2)

I feel as though they've just read books—they know that children can have tantrums but only mothers can really experience it, but I don't know how to explain what it's like. (Group 6, Parent 3)

I don't feel as though they're interested in what I've got to say . . . yet I'm the mother. (Group 4, Parent 3)

Parents helped to highlight that a potential consequence of 'expert professionals' making decisions without consultation with parents/children (none of the parents across the cohorts felt they had ever been consulted about their opinions or experiences prior to the group) was that services were currently prescribed on the basis of what they can offer rather than being responsive to the presenting needs of the parents/children.

Eventually the social workers came out and I thought—thank God—we're getting somewhere. I wanted help with a break. I was at the end of me tether. On me

own, four kids and him like he is. I couldn't believe it - they measured me house up for a new bath. He's got slight spina bifida, but I can cope with that and so can he. He runs around with the rest of them. . . I didn't want help with that. They couldn't help with any support with him, but I'm getting a new bath! (Group 4, Parent 4)

I wanted some help to cope with him and a break for me. I didn't feel I could go on. We went to family therapy, but didn't find it helpful and then they offered us this carers' scheme, but I had to drive him 20 miles there and back for 2 hours—that was no break to me. I just had to wait in the car until he'd finished- it was exhausting. (Group 5, Parent 2)

I got help for a while—I saw X at the [specialist CAMH unit] but then I was discharged because they felt I was doing OK at the time and now I'm here because the problems are really always with you.

The data from the parents indicated how disenfranchised they felt as service users. Their expertise and experiences were not recognised and used by professionals; instead, professionals tried to fit the family needs into predetermined prescribed frameworks of service provision almost regardless of relevance. Meeting these parents' needs requires social action to transform the current hegemony of professional knowledge, from one in which parents feel excluded from accessing 'specialist knowledge' and from engaging in the knowledge production process, to a state which maximises both professional and carer knowledge and skills.

The current pressure to maintain the status quo of professional hegemony was highlighted when the problems which parents identified such as 'mother blame' and the psychosocial solutions they proposed such as increased availability of recreation and respite for their children, were found to be supported by published research but had not been acknowledged or translated into action via a change in practice or service provision. The parents identified the critical value of the opportunity to engage with other parents in a group, where they can develop a joint consciousness and the confidence to critique the prescribed responses dictated by experts and service planners.

Conclusion

In response to these findings the NewCan Practice Framework (Croom 2001) was developed, which synthesises the research findings into an action plan, responding to the parents' identified need to be listened to, have access to 'specialist information', engage in the decision making on the best way to respond to and evaluate their needs, and have a mechanism for feeding their knowledge and insights back to providers. It also provides a common language that can be used to communicate across professional groups and between parents and professionals from different agencies, thus reducing multiple assessments.

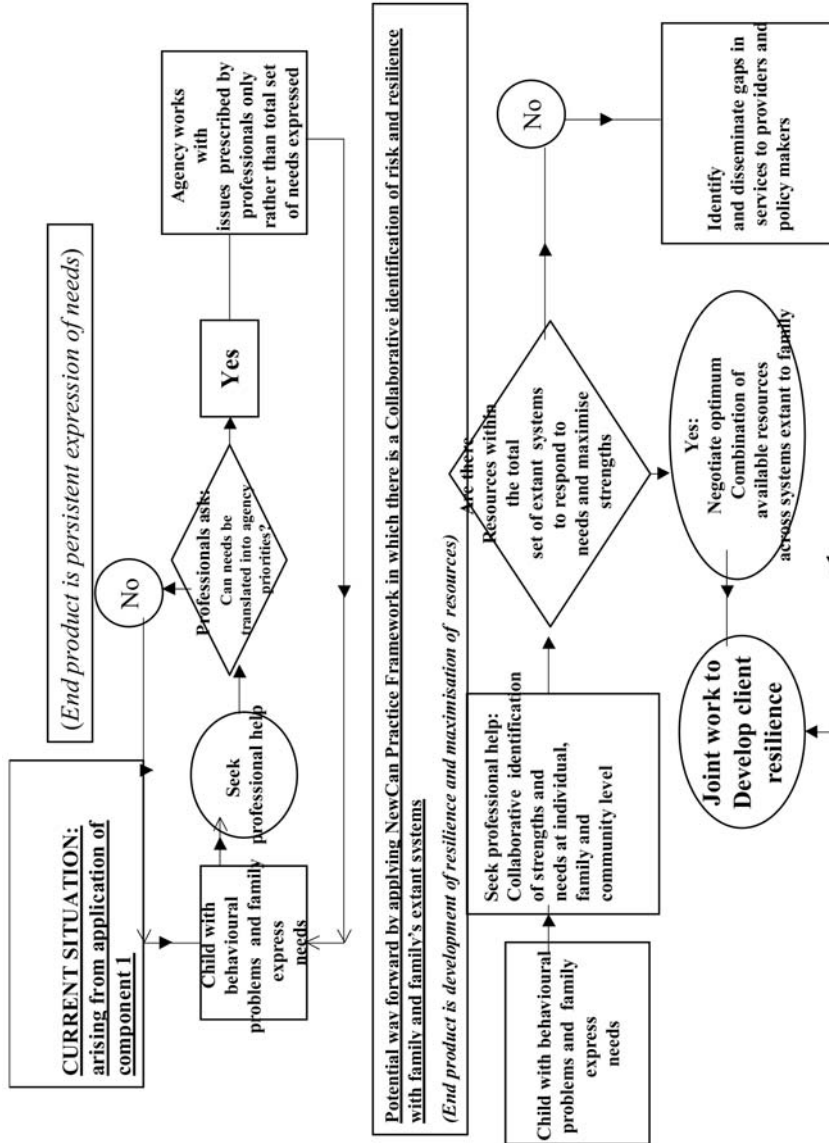


Figure 1. Comparison of practitioner responses to parental/child need before and after implementation of the NewCan Practice Framework

Figure 1 compares the service response to needs experienced by both parents, children and practitioners at the start of this research with the new approach developed as a result of working through the practice framework. It illustrates how the framework is designed to enable both parents and practitioners systematically to assess strengths and vulnerabilities and to identify individual, family and community resources that promote strengths and reduce vulnerability. Working through the process enables practitioners and parents to identify the evidence base for existing service provision, for gaps in local provision and for evidence of local unmet need. It therefore provides a systematic approach to the collection and collation of evidence to inform local planning and service delivery systems.

Funding to undertake a rigorous evaluation of the effectiveness of the practice framework that would meet the high standards of rigour required by the evidence-based health care movement has not been available, despite several attempts to acquire it. A multi-professional educational module has been developed to support the implementation of the practice framework. This has been accessed mainly by School Nurses and Health Visitors but some Social Workers and Teachers have also attended. The Framework is being used in Newcastle upon Tyne, Middlesbrough and Teeside by Health Visitors and School Nurses who have successfully completed the supporting module. Their experiences of using the practice framework are being documented and will form the basis of an evaluation.

References

- Audit Commission 1999. *Children in mind*. London: The Stationery Office.
- Bennathan, M., and M. Boxall. 1996. *Effective intervention in Primary Schools*. London: David Fulton Publishers.
- Bickman, L., and D. Rog. 1995. *Children's mental health services: Research, policy and evaluation*. London: Sage Publications.
- Browne, G., C. Byrne, J. Roberts, and A. Gafni. 1999. Benefiting all the beneficiaries of social assistance. *National Academies of Practice Forum* 1(2): 132-42.
- Croom, S. 2001. The NewCan Practice Framework: Practice Framework for Working jointly with Parents and Young People to identify Child and Adolescent Mental Health (CAMH) Issues and how to reduce the likelihood of CAMH problems and to build on the strengths of the young person, family and the community they live in.
- Cunningham, C., R. Bremner, and M. Boyle. 1995. Large Group community based parenting program for families of pre-schoolers at risk of disruptive behaviour problems. *Journal of Child Psychology and Psychiatry* 36: 1141-59.
- Department for Education and Skills 2003. *Every child matters. Green Paper for Consultation*. London: The Stationery Office.
- Department of Health, Home Office, Department for Education and Employment 2000. *Working together to safeguard children: A guide to inter-agency working to safeguard and promote the welfare of children*. London: The Stationery Office.
- Health Advisory Service 1995. *Child and adolescent mental health services: Together we stand. An NHS Health Advisory Service thematic review*. London: HMSO.

- Meltzer, H., R. Gatward, and R. Goodman. 2000. *Mental health of children and adolescents in Great Britain*, Office of National Statistics. HMSO. Office of National Stats.
- Mental Health Foundation 1999. *Bright futures*. London: Mental Health Foundation.
- Meyer, J. 2000. Using qualitative methods in health related action research. *British Medical Journal* 320: 178-81.
- Offord, D. R., M. H. Boyle, J. E. Fleming, H. Munroe Blum, and I. Rae Grant. 1989. Ontario Child Health Study: Summary of selected results. *Canadian Journal of Psychiatry* 34: 483-91.
- Offord, D., S. Kraemer, A. E. Kazdin, and R. Harrington. 1998. Lowering the burden of suffering from child psychiatric disorders: Trade-off among clinical, targeted and universal interventions. *Journal of American Academy of Child Psychology and Psychiatry* 37(7): 686-94.
- Ofsted 1999. *Principles into practice: Effective Education for pupils with emotional and behavioural difficulties*. London: Ofsted Publications Centre.
- Pearce, J. 1993. Child health surveillance for psychiatric disorder: Practical guidelines. *Archives of Diseases in Childhood* 69: 394-8.
- Pugh, G., and C. Smith. 1996. *Learning to be a parent: A survey of group based parenting programmes*. London: Family Policies Studies Centre.
- Rae Grant, N. I., D. Offord, H. Munroe Blum. 1989. Ontario child health study: Implications for Clinical services. *Canadian Journal of Psychiatry* 34: 492-9.
- Wallace, S. A, J. M. Crown, A. D. Cox, and M. Berger. 1995. *Epidemiologically based needs assessment: Child and adolescent mental health*. London: Department of Health.
- Webster-Stratton, C. W. 1998. Preventing Conduct problems in Head Start children: Strengthening parent competencies. *Journal of Consulting and Clinical Psychology* 66: 715-30.
- Webster-Stratton C. W., and M. Hammond. 1990. Predictors of treatment outcome in parent training for families with conduct problem children: comparison of two cost effective treatments and a control group. *Journal of Consultant and Clinical Psychology* 56: 558-66.
- Winter, R., and C. Munn-Giddings. 2001. *A handbook for action research in health and social care*. London. Routledge.

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