

A review of evidence for prevention from the UK focal point for violence and injury prevention S. Wood, M. A. Bellis, J. Nurse, M. Strotkin

Minister de la constant de la consta

About the UK focal point for violence and injury prevention

The 49th World Health Assembly (1996) declared violence a major and increasing global public health problem. In response, the World Health Organization (WHO) published the World Report on Violence and Health and initiated a major programme to support and develop violence and injury prevention work globally. As part of this programme, each member state has designated a national focal point for violence and injury prevention. The network of focal points works with the WHO to promote violence and injury prevention at national and international levels, develop capacity for prevention, and share evidence on effective prevention practice and policy.

Authors

Sara Wood is a researcher in violence and injuries at the Centre for Public Health at Liverpool John Moores University.

Mark A. Bellis is the Director of the Centre for Public Health at Liverpool John Moores University, Director of the North West Public Health Observatory, and lead for the UK focal point for violence and injury prevention.

Jo Nurse is a Public Health Consultant at the London School of Hygiene and Tropical Medicine.

Melanie Sirotkin is Director of Public Health for NHS Salford and Salford City Council.

Acknowledgements

We would like to thank Dr Ruth Hussey, North West Regional Director of Public Health, for supporting the promotion of evidence-based injury prevention. Our thanks extend also to Karen Hughes, Lee Tisdall, Lindsay Furness, Gayle Whelan and Donna Halliday (Centre for Public Health, Liverpool John Moores University), for their help in planning, writing and preparing this booklet.

A summary of evidence: successful or promising interventions to prevent youth violence

Family support: The use of preschool enrichment programmes such as *Early Head Start*, parenting programmes such as the *Nurse Family Partnership*, and family therapy, have all been associated with reductions in aggressive and violent youth behaviour.

Youth support and guidance: Social development and wilderness challenge programmes can reduce aggressive, violent or anti-social youth behaviour. Cognitive behavioural therapy can also reduce behavioural problems among those with conduct disorder. There is some evidence that youth mentoring schemes can reduce bullying and fighting behaviour in childhood.

Modifying environments: Managing nightlife environments (e.g. improving venue management, providing training for bar staff) can reduce levels of violent crime and lead to cost savings. Although outcomes have been inconsistent, modifying school environments have also achieved positive benefits in reducing bullying behaviour.

Reducing availability of alcohol: Internationally, there is some good evidence for restricting the availability of alcohol in reducing violent behaviour (e.g. through restricting sales times).

Enforcement of legislation: There is some evidence that community enforcement programmes, which increase criminal justice responses to violent crime, can reduce violent offences.

Multi-component interventions: Although more costly to implement, combining more than one approach to violence prevention (e.g. parenting programmes, academic enrichment, mentoring etc) can be effective in reducing aggressive and violent youth behaviour.

Youth violence is violence that takes place between people aged 10-29 years of age (1). It includes violent acts carried out in schools (e.g. bullying), on the streets (e.g. gang violence) or in nighttime environments (e.g. in and around bars and clubs). Levels of violent crime are difficult to determine. However in 2006, around 12% of 10-25 year olds surveyed across England and Wales admitted assaulting another person in the last 12 months (2).

Physical effects of youth violence can include bruising, cuts. scratches, broken bones and head injuries, or in severe cases even death. There are also emotional consequences for victims, including fear, depression or post-traumatic stress disorder (3). Since youth violence often occurs in public places, it can also have a negative effect on the wider community through fear of going out in the nighttime environment or in public places where young people congregate (e.g. parks). A wide range of factors are associated with youth violence. These include: biological characteristics such as neurological damage; personality traits such as hyperactivity, impulsiveness or attention problems; poor parental supervision; strict parenting styles; maternal depression (4); conflict between parents; family violence (e.g. physical punishment or intimate partner violence); single-parent households; low socio-economic status; having delinquent friends; and certain environmental factors such as living in deprived areas or neighbourhoods with high levels of crime (1). Cultural and social influences, such as toleration for violence as a normal method of resolving conflict, are also known to be associated with higher levels of violence (1). Additionally, men are more likely than females to be both victims and perpetrators of youth violence (2,5).

A variety of interventions have been developed to prevent and reduce levels of youth violence. This factsheet details some of the more common intervention types, along with evidence for their effectiveness. The majority of evaluated work has been conducted in the US, but programmes and research from the UK have been incorporated wherever possible.

Youth violence in the UK: some facts

- In a survey of 10-25 year olds, 3% had carried a knife with them at some point in the last 12 months (2);
- In 2008/09, 9.5% of those aged 16-24 had been a victim of violence in the past 12 months (5);
- Around 40% of schoolchildren in England and Wales aged between 10 and 15 have experienced bullying in the past 12 months (6);
- A crude estimate of the total costs of youth violence is £12.6 billion annually (3).

1. Family support

With many risk factors for youth violence related to poor family functioning, family support programmes have been used to prevent or address aggression and behavioural problems in children, which are often precursors of youth violence. These aim to encourage early child development, strengthen family relationships, improve parenting skills and abilities, improve parental mental health and well-being, and provide help with family circumstances (e.g. help finding employment).

1.1 Preschool enrichment programmes

Preschool enrichment programmes improve the school readiness and academic achievement of children by enhancing their development in preschool years (aged three and over) (1). Programmes can be universal, but are often targeted at children from low-income families in deprived areas. They frequently cover language skills, communication, literacy, numeracy, and the development of social and emotional skills. Preschool enrichment is often combined with other initiatives such as parent training, health services, and family support to provide a comprehensive programme. Thus, they may also be considered multi-component interventions

In the UK, the most widespread preschool enrichment programme is Sure Start. Here, while evaluations have reported better social development and more positive social behaviour among participating children (7), the effects on violent behaviour are unknown. However, in the US, there is some good evidence that preschool enrichment programmes can prevent violent behaviour both in childhood and in later life. For instance:

- Participation in the Early Head Start programme has been associated with lower levels of aggressive behaviour at age three (8);
- Participation in the Child-Parent Centre programme has shown reduced levels of arrest for violent offences at age 18 (9);
- Participation in the High/Scope Perry programme found that by age 40, participants had significantly lower lifetime levels of arrest for violent crime (10).

Preschool enrichment programmes: some examples

Early Head Start: A US, community-based programme for low-income families with infants/toddlers (ages 0-3). It aims to improve the health of pregnant women, encourage child development, provide family support (e.g. adult education, help finding a job), and provide parent training (www.ehsnrc.org).

Sure Start: Based on Early Head Start, Sure Start runs in the UK and works with families/children from pregnancy to age 14. For preschool children and their families (up to age five), Sure Start brings together child education, child care, health services and family support within dedicated children's centres.

The Child-Parent Centre programme: A US programme providing education and support services to families/children in deprived areas. For three and four year olds, the programme includes activities to encourage child development, a parent programme to improve child-parent relationships, outreach services, and health/nutrition services (www.waisman.wisc.edu/cls/Program.htm).

High/Scope Perry programme: Based in the US, this programme targets children from birth to age four in deprived areas. It develops skills including decision making, language, problem solving, relationships, empathy, and dealing with conflict. Parental training and home visits are also included (www.highscope.org).

1.2 Parenting programmes

Parenting programmes increase parental skills and improve parent-child relationships. They provide support and information, strengthen parents' ability to adapt to the changing needs of the child, develop strategies to cope with their child's behaviour and increase knowledge about child development and capabilities (1,11,12). Programmes can be provided either as a group or individually, at home (known as home visiting programmes) or within the community, and

presented either universally or targeted specifically to vulnerable families (e.g. disadvantaged or teenage mothers). They are usually delivered by health professionals (e.g. nurses or social workers) during the first two or three years of a child's life. However, parenting programmes can also be delivered to parents of older children displaying behavioural problems (e.g. conduct disorder [13]).

Parenting programmes can be effective in reducing the likelihood of problematic child behaviour. Programmes with the most evidence for effectiveness are the Nurse Family Partnership, Triple P (Positive Parenting Programme), and Incredible Years. For instance:

- In Switzerland, participation in Triple P was associated with a reduction in reported dysfunctional child behaviour one year later (14);
- In Norway, reductions in problematic child behaviour were greater among children of families taking part in the Incredible Years programme than among controls (15), with reductions still seen one year after the end of the programme;
- In the US, participation in the Nurse Family Partnership programme was associated with fewer incidents of running away, arrests, convictions and violations of probation, and behavioural problems related to the use of alcohol and drugs 15 years later (16).

The Nurse Family Partnership is currently being implemented and evaluated in 30 sites in England (17). Parenting programmes can also be effective in treating children with conduct problems (13).

Parenting programmes: some examples

Nurse Family Partnership: A nurse home visiting programme developed in the US that aims to improve the health, well-being and self-sufficiency of low-income first time mothers and their children. Visitations include prenatal health advice and support, child development education, and life coaching for the mother (www.nursefamilypartnership.org).

Triple P (Positive Parenting Programme): An Australian programme adapted for use internationally, including in the UK. It offers different levels of support ranging from level one (providing information) to level five (addressing severe childhood problems). It aims to create stable and supportive families that can deal effectively with problematic child behaviour and other family problems (www.triplep.net).

Incredible Years: A parental (as well as teacher and child) intervention that aims to increase social competence, improve family relationships and prevent/treat childhood aggression. Delivery methods include role-playing, group discussions and video presentations. The program was developed in the US, but has been adapted for use in other countries, including in the UK (www.incredibleyears.com).

1.3 Family therapy

Family therapy aims to identify family problems, increase communication and interaction, and improve family conflict resolution style and function (1). Therapy is most commonly used with children exhibiting problematic behaviours or at risk of developing them (e.g. displaying bullying behaviour). However, it has also been used with violent juvenile offenders to reduce subsequent criminal activity (18). In the short term, family therapy can reduce violent behaviour and anger (19-21) as well as delinquency (22). Longer term effects have also been reported. For example, in the US, family therapy provided to adolescent offenders aged 12 to 17 years of age was associated with lower recidivism rates, fewer arrests and

fewer days of confinement in adult detention facilities around 13 years later (18).

2. Youth support

A number of programmes focus specifically on youths, developing the social skills needed to form healthy relationships with peers, improving academic performance, reducing truancy, and offering general guidance and advice. These are usually, but not always, school-based interventions

2.1 Social development programmes

Social development programmes develop children's social skills and competencies to enable positive relationships to be formed with peers (1). Programmes include: anger management: social problem solving: conflict resolution and negotiation; assertiveness; active listening; knowledge about healthy relationships; and empathy. They are normally school-based, and use a range of delivery methods, such as group discussion, role play, team-building activities, brainstorming, and media (e.g. video). Programmes are usually delivered universally but are sometimes targeted at high-risk groups (e.g. children displaying aggressive or shy tendencies). They are often combined with other prevention strategies, such as improving the whole school culture or environment (23), providing academic tutoring (24) or improving parent-child interaction (25), to provide a more comprehensive intervention.

Although social development curricula are widely used throughout the UK, the majority of evaluated programmes

are US based. Here, there is good evidence that they can have positive effects on a number of violence-related outcomes. These include: prosocial attitudes (e.g. displaying empathy [26]); beliefs that violent behaviour is acceptable (27); intention to use non-violent strategies (27); aggressive behaviour (23,28-31); problem behaviour (32) school delinquency (33); violent behaviour (29,34,35); bullying behaviour (30,36) and bullying victimisation (31,37).

Two well evaluated initiatives are the PATHS programme (Promoting Alternative Thinking Strategies) and Second Step. In the US, PATHS has been associated with improved classroom atmosphere, lower peer-rated aggression, hyperactivity and disruptive behaviour (38). Positive outcomes of the PATHS programme have also been reported for school children in the UK (39). Participation in Second Step has been associated with reductions in aggressive or problematic behaviours, as well as increases in prosocial behaviours (40-42).

Social development programmes: some examples

PATHS (Promoting Alternative Thinking Strategies): A US programme targeting children (aged four to 12) that has been adapted for use in other countries, including in the UK. An extended programme is available for high-risk children. Six volumes of lessons are delivered over five years and structured into three major units: 1) readiness and self-control; 2) feelings and relationships; and 3) interpersonal cognitive problem-solving (43).

Second Step: This US based programme uses a classroom curriculum to develop social and emotional skills including empathy, communication, problem solving, anger management and impulse control. There are three programmes that target children at different ages: preschool and kindergarten; grades one to five (ages five to 11); and middle school (12+) (www.cfchildren.org).

2.2 Academic enrichment programmes

Academic enrichment programmes provide study support and recreational activities for school children outside of normal school hours. They develop and improve children's academic performance, school involvement and school attendance. Additionally, they offer opportunities for developing new skills, such as foreign languages, sports and crafts. Academic enrichment programmes sometimes form part of wider, multi-component interventions to prevent violence that incorporate, for example: family support; mentoring; adult learning; health services; community policing; and criminal justice interventions (see also section on multi-component interventions [44,45]). For this reason it is sometimes difficult to tease out the beneficial effects of academic enrichment alone. Internationally, evaluations of programmes been mixed. Some report have

improvements or even negative effects (46). Others report improvements only in those who consistently attend (47). However, research from the UK suggests that programmes can be effective when they are targeted in disadvantaged areas. Here, they have been found to increase numeracy. literacy and school attendance, and improve exam pro-school attitudes and (48).characteristics are important for high-quality, successful programmes. These include: strong leadership and commitment within schools; provision of a broad range of different age-appropriate activities; and delivery by welltrained staff (40,45,49,50). Generally, however, further research is needed to establish the effectiveness of these programmes on violent behaviour.

2.3 Wilderness challenge programmes

Wilderness challenge programmes are outdoor intervention programmes that offer young people adventurous activities such as rock climbing, canoeing, trekking, or building outdoor shelters. These activities are designed to facilitate personal growth, through developing personal and interpersonal skills, challenging self concepts, and building self esteem and confidence. Activities vary widely between programmes, and some incorporate a therapeutic element, such as individual counselling, family therapy or group therapy. Wilderness challenge programmes can be effective in reducing levels of anti-social and delinquent behaviour among participants (51). Those that offer more challenging activities and include a therapeutic component are most effective

2.4 Mentoring

Mentoring involves pairing an adolescent with an older youth or adult, who can provide social, emotional and academic assistance and guidance. The mentor acts as a positive role model, providing a sense of connectedness (1). Although research is lacking, there have been some positive evaluations of both adult and peer mentoring programmes in the US (52,53). For instance, the Healthy Kids Mentoring programme was developed for 4th grade school children (ages nine to ten) to encourage self-esteem and improve school, peer and family connections. The programme ran for five months and comprised four components: relationship building: self-esteem enhancement: goal setting: and academic assistance. Members of the community (ranging from high-school students to senior citizens) were trained to become mentors and met with the school children twice a week for 90 minutes a session. At the end of the programme, those receiving mentoring sessions were significantly less likely to have bullied a peer, to have physically fought with a peer, and to have felt depressed, in the last 30 days (53).

2.5 Psychotherapy

Psychotherapy is an umbrella term used for a number of treatments that address emotional and behavioural problems through spoken conversation with a therapist. Components differ, but can include activities such as problem solving strategies, skills training, behavioural analysis and modification of dysfunctional beliefs. Among young people with conduct problems (e.g. displaying anti-social behaviour), cognitive behavioural therapy has been effectively used to reduce problematic behaviour (54,55).

3. Modifying environments

One approach to preventing youth violence is through altering physical and social environments that encourage aggressive or violent behaviour.

3.1 Modification of the school environment

School environments can be modified to make violence or bullying behaviour unacceptable. This can include, for example, changing school policies, strengthening school rules, and eliminating interventions that do not fit with school values (e.g. using sarcasm or criticising pupils in view of others [56]). School modification is rarely implemented alone and is usually combined with other components to provide a holistic programme (e.g. classroom curriculum for students and information for parents [57]). Although results have been inconsistent, some programmes report positive benefits in terms of aggressive and bullying behaviour (57,58). For instance, one US programme aimed to create a peaceful school learning environment through a variety of strategies based on zero tolerance for bullying. Other components included a discipline plan for modelling appropriate behaviour and a mentoring program for adults and children. The programme was evaluated in an elementary school (ages six to 11) over a four year period, and was associated with significant reductions in discipline referrals (including those for physical aggression) and increases in academic achievement (58). Other programmes have reported positive impacts on self-reported bullying behaviour, anti-social behaviour and bullying victimisation (57).

3.2 Managing nightlife environments

A range of interventions have been implemented in the UK and elsewhere to modify and manage licensed premises and surrounding environments to reduce alcohol-related problems such as violence. Measures have included: improving venue management and staff practice (e.g. training in serving alcohol responsibly); implementing good codes of practice; enforcing licensing legislation; and improving safety outside venues through late night transport. street lighting, or surveillance cameras (CCTV). Internationally, a number of well-evaluated projects have reported beneficial effects on violent or aggressive behaviour. For instance:

- In Sweden, the STAD (Sweden against alcohol and drugs) project reported a 29% decrease in police recorded violent crimes over the intervention period compared to a control area (59). The project was estimated to have saved 39 Euros for every one Euro invested (60);
- In Australia, the Queensland Safety Action project was associated with observed reductions in arguments (28%), verbal abuse (60%) and threats (41%) in drinking premises over the course of the intervention. Characteristics that best explained the reduction in violence were found to be improved comfort (e.g. availability of seating), availability of public transport, less overt sexual activity and fewer highly drunk men (61);
- In the US, implementation of a five-year community action trauma prevention programme was associated

with reductions in self reported alcohol use, assault injuries observed in emergency departments, and road traffic crashes (62).

4. Reducing availability of alcohol

The use of alcohol is strongly associated with youth violence (63), with many acts of violent behaviour carried out in or around drinking venues. Consequently, one method of preventing youth violence has been to reduce the availability of alcohol, either through regulating alcohol sales or through increasing alcohol prices (64). Internationally, there is some good evidence for the restriction of alcohol sale times in reducing levels of crime among the general population (e.g. violent crime, Brazil [65]; crime in general, Australia [66]). There is less evidence for the use of extended hours (to avoid all customers exiting bars at the same time) such as those implemented in England and Wales (67). Moreover, in Australia, venues with extended licensing times have been associated with increased levels of assaults, related to greater levels of alcohol consumption (68). There have been few studies measuring the effects of alcohol price increases on violent behaviour. However, estimations of the effects have been made using economic modelling techniques. For instance, a 10% increase in the price of beer has been estimated to reduce the number of college students involved in violence each year by 4% (69).

Managing nightlife environments: some examples

STAD (Sweden against alcohol and drugs) project: This 10 year community project in Stockholm aimed to reduce alcohol-related problems in licensed premises. A range of organisations participated in regular partnership meetings to raise awareness of alcohol-related problems and gain support for prevention work. Interventions included responsible service training for bar staff, training of door supervisors in issues such as conflict management, house policies for licensed premises and increased enforcement of licensing legislation (59).

Queensland Safety Action Project: This project aimed to make nightclubs and other drinking venues safer using a problem-focused approach based on analysis of drinking environments, venue customers, and management practices. Interventions included: community mobilisation; codes of practice for licensed premises; increased enforcement of licensing laws; and environmental safety measures (e.g. lighting and public transport) (61).

Community Alcohol Trauma Prevention: In the US, a community alcohol trauma prevention trial was conducted over a five year period. The project involved five prevention components: mobilising communities to support interventions; responsible beverage service; reducing under age access to alcohol; increasing actual and perceived risks associated with drink driving; and restrictions on local access to alcohol e.g. controls on outlet density (62).

5. Enforcement of legislation

Implementing and enforcing legislation on violent offences can be a deterrent for those engaging in youth violence, and sends clear messages that violence is not tolerated within society. Programmes that increase or reinforce criminal justice responses are therefore an essential part of violence prevention. Although more high-quality research is needed. one good example of a programme that aimed to strengthen criminal justice responses to youth violence is Operation Ceasefire in Boston, US. This programme was developed as a response to gang violence, and in particular, high levels of young homicide victims in the city. The programme used a multi-agency approach that involved organisations such as police, departments of probation and parole, district attorney. department of youth services, and gang outreach and street workers. Two main elements were developed: 1) a law enforcement attack on illicit firearms traffickers supplying youth with guns; and 2) deterring violent behaviour among the city's youth through out-reach services and community groups that delivered a clear message that violence would not be tolerated. Here, if gang members became involved in violence, the agencies involved in the project would coordinate a range of measures, including stricter probation and parole enforcement, stiffer plea bargains, sterner prosecutorial attention and request stronger bail terms. Despite lacking a control group for comparison, evaluation of Operation Ceasefire was found to be associated with decreases in youth homicide, firearms assaults and police service callouts for gunshots (70). The Operation Ceasefire model has been used to develop similar initiatives in the UK, but effects on violent behaviour are currently unknown.

6. Multi-component interventions

Many programmes combine more than one approach to violence prevention, known as multi-component interventions. Although such programmes are usually more costly to implement, they are able to address a range of risk factors for violent behaviour at the one time. Some effective multi-component programmes have already been discussed (e.g. preschool enrichment programmes). Additional, well-evaluated multi-component programmes have also been associated with reductions in violence or aggressive behaviour. For instance:

- Participation in the Minneapolis primary-care initiative was associated with decreases in aggressive behaviour, delinquent behaviour and attention problems, as well as lower rates of bullying, physical fighting and fight-related injuries nine months after programme enrolment (71);
- Participation in the CASASTART programme was associated with lower engagement in violent crime, lower drug use and less association with delinquent peers one year after the end of the programme (44,72);
- Participants in the Seattle multi-component intervention reported fewer violent delinquent acts compared to controls at age 18 (73).

In the UK, Full Service Extended Schools are being implemented nationally. These are multi-component programmes that offer a variety of services such as study

support, after-school clubs, childcare, parent and family support, access to specialist services, and community access to adult learning, ICT and sport facilities. Although further high-quality evaluations are needed, the national rollout of the Full Service Extended Schools programme reported positive impacts on children's academic achievements, and there was some evidence of a reduction in conduct problems and aggression among at-risk pupils (45).

Multi-component interventions: some examples

Minneapolis primary-care initiative: Targeted US youths (aged seven to 15) seen at an outpatient paediatric practice and their parents. Two approaches were used: identifying, preventing and treating mental health problems among youths through screening and referral to mental health services; and the promotion of healthy parent-child relationships using a telephone-based positive parenting programme (71).

CASASTART (National Center on Addiction and Substance Abuse [CASA] Striving Together to Achieve Rewarding Tomorrows [START]): This US, school-centred programme targets high-risk eight to 13 year olds. It uses intensive case management of children, working with schools, criminal justice agencies and community-based health and social services. It provides social support, family services, educational services, mentoring, incentives, community policing and criminal/juvenile justice interventions, along with after-school recreational activities (72).

Seattle multi-component intervention: A school-based intervention combining teacher training, parent education and social competence training for children (aged six to 11). Teacher training built skills in classroom management, interactive teaching and cooperative learning. Parent education offered training in child behaviour management and advice on supporting their child's academic achievement. Social competence training covered social problem solving, co-operative learning, and resisting social influence (73).

7. Summary

A wide variety of programmes have been developed to address and prevent aggressive and violent behaviour among children and youths. There is some good evidence for the effectiveness of:

- Preschool enrichment, parenting programmes and family therapy;
- Some youth support initiatives, such as social development programmes, wilderness challenge programmes and cognitive behavioural therapy;
- Interventions to modify school environments and manage nightlife environments (e.g. improving venue management and providing training for bar staff);
- Restricting the availability of alcohol;
- Multi-component interventions that address a range of risk factors at the one time.

Although research is generally lacking, other interventions with positive benefits reported include youth mentoring schemes and enforcement of legislation. Further research is needed around the use of academic enrichment programmes, which have received mixed evaluations.

All references are included in the online version of this document, available from:

www.preventviolence.info and www.cph.org.uk

References

- Krug EG et al, eds. World report on violence and health. Geneva: World Health Organization, 2002.
- Roe S, Ashe J. Young people and crime: findings from the 2006 offending crime and justice survey. Home Office Statistical Bulletin 09/08. Available from: http://www.homeoffice.gov.uk/rds/pdfs08/hosb0908.pdf, accessed 07 August 2009.
- 3. McVeigh C et al. *Violent Britain: people, places and public health.* Liverpool: Centre for Public Health, 2005.
- Hay DF et al. Mothers' antenatal depression and their children's antisocial outcomes. Child Development, 2010, 81(1):149-165.
- Walker A et al. Crime in England and Wales 2008/09. Volume 1. Findings from the British Crime Survey and police recorded crime. Home Office Statistical Bulletin 11/09. Available from: http://www.homeoffice.gov.uk/rds/ pdfs09/hosb1109vol1.pdf, accessed 07 August 2009.
- Ofsted. TellUs3 national report. Available from: http://www.ofsted.gov.uk/ content/download/7828/79182/file/Tellus3%20National%20Report.pdf, accessed 07 June 2010.
- Melhuish E et al. Effects of fully-established Sure Start Local Programmes on 3-year-old children and their families living in England: a quasi-experimental observational study. The Lancet, 2008, 372:1641-1647.
- 8. Love JM et al. The effectiveness of Early Head Start for 3-year old children and their parents: Lessons for policy and programs. *Developmental Psychology*, 2005, 41:885-901.
- Reynolds AJ et al. Long term effects of an early childhood intervention on educational achievement and juvenile arrest: a 15 year follow up of low income children in public schools. *Journal of the American Medical* Association, 2001, 285(18):2339-2346.
- Schweinhart L et al. Lifetime effects: the High/Scope Perry Preschool Study through age 40. Ypsilanti, Ml: High/Scope Press, 2005.
- World Health Organization. Preventing child maltreatment: a guide to taking action and generating evidence. Geneva: World Health Organization, 2006.

- 12. Pinheiro PS. World report on violence against children. Geneva: ATAR Roto Presse SA, 2006
- Dretzke J et al. The clinical effectiveness of different parenting programmes for children with conduct problems: a systematic review of randomised controlled trials. Child and Adolescent Psychiatry and Mental Health, 2009, 3:7.
- Bodenmann G et al. The efficacy of the Triple P-Positive Parenting program in improving parenting and child behaviour: a comparison with two other treatment conditions. Behaviour Research and Therapy, 2008, 46:411-427.
- Larsson B et al. Treatment of oppositional defiant and conduct problems in young Norwegian children. European Child and Adolescent Psychiatry, 2009, 18:42-52.
- Olds D et al. Long-term effects of nurse home visitation on children's criminal and antisocial behavior. *Journal of the American Medical Association*, 1998, 280(14):1238-1244.
- Cabinet Office. Nurse Family Partnership. Available from: http://webarchive. nationalarchives.gov.uk/+/http://www.cabinetoffice.gov.uk/social _exclusion_task_force/family_nurse_partnership.aspx, accessed 8 June, 2010.
- Schaeffer CM, Borduin CM. Long-term follow up to a randomized clinical trial of Multisystemic therapy with serious and violent juvenile offenders. *Journal of Consulting and Criminal Psychology*, 2005, 73:445-453.
- Nickel MK et al. Anger, interpersonal relationships and health-related quality
 of life in bullying boys who are treated with outpatient family therapy: a
 randomized, prospective, controlled trial with 1 year of follow-up. *Pediatrics*,
 2005, 116:e247-e254.
- Nickel MK et al. Influence of family therapy on bullying behaviour, cortisol secretion, anger, and quality of life in bullying male adolescents: a randomized, prospective, controlled study. Canadian Journal of Psychiatry, 2006, 51:355-362.
- Nickel MK et al. Bullying girls changes after brief strategic family therapy: a randomized, prospective, controlled trial with one-year follow-up. Psychotherapy and Psychosomatics, 2006, 75:47-55.

- Santisteban DA et al. Efficacy of a brief strategic family therapy in modifying Hispanic adolescent behavior problems and substance use. *Journal of Family Psychology*, 2003, 17:121-133.
- Flannery DJ et al. Initial behavior outcomes for the PeaceBuilders universal school-based violence prevention program. *Developmental Psychology*, 2003,39(2):292-308.
- The Conduct Problems Prevention Research Group. Evaluation of the first 3
 years of the fast track prevention trial with children at high risk for adolescent
 conduct problems. *Journal of Abnormal Child Psychology*, 2002, 30:19-35.
- Stanton B et al. Randomized trial of a parent intervention. Archives of Pediatrics and Adolescent Medicine, 2004, 158:947-955.
- 26. Esbensen F et al. How great is G.R.E.A.T.? Results from a longitudinal quasiexperimental design. *Criminology and Public Policy*, 2001, 1(1):87-118.
- Bosworth K et al. Preliminary evaluation of a multimedia violence prevention program for adolescents. American Journal of Health Behavior, 2000, 24:268-280.
- Grossman DC et al. Effectiveness of a violence prevention curriculum among children in elementary school. A randomized controlled trial. *Journal of the American Medical Association*, 1997, 20:1605-1611.
- 29. Shapiro JP et al. Evaluation of the Peacemakers program: school-based violence prevention for students in grades four through eight. *Psychology in the Schools*, 2002, 39:87-100.
- DeRosier ME. Building relationships and combating bullying: effectiveness of a school-based social skills group intervention. *Journal of Clinical Child* and Adolescent Psychology, 2004, 33:196-201.
- Hirschstein MK et al. Walking the talk in bullying prevention: teacher implementation variables related to initial impact of the Steps to Respect program. School Psychology Review, 2007, 36:3-21.
- 32. Farrell A et al. Evaluation of the Responding In Peaceful and Positive ways (RIPP) seventh grade violence prevention curriculum. *Journal of Child and Family Studies*, 2003, 12:101-120.
- Flay BR et al. Effects of 2 prevention programs on high-risk behaviors among African American youth. A randomized trial. Archives of Pediatrics and Adolescent Medicine, 2004, 158:377-384.

- O'Donnell L et al. Violence prevention and young adolescents' participation in community and youth service. *Journal of Adolescent Health*, 1999, 24:28-37.
- 35. Gardner SP, Giese K, Parrott SM. Evaluation of the Connections: Relationships and Marriage curriculum. Family Relations, 2004, 53:521-527.
- Stevens V, De Bourdeaudhuij, Van Oost P. Bullying in Flemish schools: an evaluation of anti-bullying intervention in primary and secondary schools. *British Journal of Educational Psychology*, 2000, 70:195-210.
- Baldry AC, Farrington DP. Evaluation of an intervention program for the reduction of bullying and victimization in schools. *Aggressive Behaviour*, 2004. 30:1-15.
- Conduct Problems Prevention Research Group. Initial impact of the Fast Track prevention trial for conduct problems: II. Classroom effects. *Journal of Consulting and Clinical Psychology*, 1999, 67:648-657.
- Curtis C, Norgate R. Evaluation of the promoting alternative thinking strategies curriculum at key stage 1. Educational Psychology in Practice, 23(1):33-44.
- Grossman J et al. Multiple choices after school: findings from the Extended-Service Schools initiative. Philadelphia: Public/Private Enterprises, 2002.
- Holsen I, Smith BH, Frey KS. Outcomes of the social competence program "Second Step" in Norwegian elementary schools. School Psychology International, 2008, 29:71-88.
- Schick A, Cierpka M. Faustlos: evaluation of a curriculum to prevent violence in elementary schools. *Applied and Preventive Psychology*, 2005, 11:157-165.
- 43. Elliott DS et al. Blueprints for violence prevention book ten: Promoting Alternative Thinking Strategies. Boulder, CO: University of Colorado at Boulder, 1998.
- Murray LF, Belenko S. CASASTART: a community-based, school-centered intervention for high-risk youth. Substance Use and Misuse, 2005, 40:913-933.
- 45. Cummings C et al. Evaluation of the Full Service Extended Schools initiative: final report. London: Department for Education and Skills, 2007.

- 46. James-Burdumy S et al. When schools stay open late: the national evaluation of the 21st Century Community Learning Centers program: Final report. U.S. Department of Education / Institute of Educational Sciences. Available from http://www.mathematica-mpr.com/publications/pdfs/21 stfinal.pdf, accessed 9 June 2010.
- Goldschmidt P, Huang D. The long-term effects of after-school programming on educational adjustment and juvenile crime: a study of the LA's BEST after-school program. Los Angeles, CA: University of California, 2007.
- MacBeth J, Kirwan T, Myers K. The impact of study support: a report of a longitudinal study into the impact of participation in out-of-school-hours learning on the academic attainment, attitudes and school attendance of secondary school students. London: Department for Education and Skills, 2001.
- 49. Muijs D. Leadership in full-service extended schools: communicating across cultures. *School Leadership and Management*, 2007, 27:347-362.
- Vandell DL, Pierce KM. Dadisman K. Out-of-school settings as developmental context for children and youth. Advances in Child Development and Behavior, 2005, 33:43-77.
- Wilson SJ, Lipsey MW. Wilderness challenge programmes for delinquent youth: a meta-analysis of outcome evaluations. *Evaluation and Program Planning*, 2000, 23:1-12.
- 52. Sheehan K et al. Adapting the gang model: peer mentoring for violence prevention. Pediatrics, 1999, 104:50-54.
- King KA et al. Increasing self-esteem and school connectedness through a multidimensional mentoring program. *Journal of School Health*, 2002, 72:294-299.
- 54. Koegl J et al. Evaluation of a targeted cognitive-behavioural program for children with conduct problems – the SNAP Under 12 Outreach project: service intensity, age and gender effects on short and long term outcomes. Clinical Child Psychology and Psychiatry, 2008, 13(3):419-434.
- 55. van der Weil N et al. Effective treatments of school-aged conduct disordered children: recommendations for changing clinical and research practices. *European Child and Adolescent Psychiatry*, 2002, 11:79-84.

- Curwin RL, Mendler AN. As tough as necessary: countering violence, aggression and hostility in our schools. Alexandria, VA: Association for Supervision and Curriculum Development, 1997.
- Olweus D, Limber SP. Bullying in school: evaluation and dissemination of the Olweus Bullying Prevention Progam. *American Journal of Orthopsychiatry*, 2010, 80:124-134.
- 58. Twemlow SW et al. Creating a peaceful school-learning environment: a controlled study of an elementary school intervention to reduce violence. *American Journal of Psychiatry*, 2001, 158:808-810.
- Wallin E, Norström T, Andréasson S. Alcohol prevention targeting licensed premises: a study of effects on violence. *Journal of Studies on Alcohol*, 2003, 64:270-277.
- Månsdotter AM et al. A cost-effectiveness analysis of alcohol prevention targeting licensed premises. European Journal of Public Health, 2007, 17:618-623.
- Homel R et al. Making licensed venues safer for patrons: what environmental factors should be the focus of interventions? *Drug and Alcohol Review*, 2004, 23:19-29.
- Holder HD et al. Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *Journal of the American Medical Association*, 2000, 284:2341-2347.
- 63. World Health Organization. *Youth violence and alcohol*. Geneva: World Health Organization, 2006.
- 64. World Health Organization. *Preventing violence by reducing the availability and misuse of alcohol*. Geneva: World Health Organization, 2009.
- 65. Duailibi S et al. The effect of restricting opening hours on alcohol-related violence. *American Journal of Public Health*, 2007, 97:2276-2280.
- Douglas M. Restriction of the hours of sale of alcohol in a small community: a beneficial impact. Australian and New Zealand Journal of Public Health, 1998, 22:714-719.
- 67. Hough M et al. The impact of the Licensing Act 2003 on levels of crime and disorder: an evaluation. London: Home Office, 2008.

- Chikritzhs T, Stockwell T. The impact of later trading hours for Australian public houses (hotels) on levels of violence. *Journal of Studies on Alcohol*, 2002, 63:591-599.
- 69. Grossman M, Markowitz S. Alcohol regulation and violence on college campuses. In Grossman M, Hsieh CR, eds. Economic analysis of substance use and abuse: the experience of developed countries and lessons for developing countries. Cheltenham: Edward Elgar, 2001.
- Braga AA et al. Problem-oriented policing, deterrence, and youth violence: an evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinguency*, 2001, 38:195-224.
- Borowsky IW et al. Effects of a primary care-based intervention on violent behaviour and injury in children. *Pediatrics*, 2004, 114:e392-e399.
- SAMSHAs national registry of evidence-based programs and practices.
 Available from www.nrepp.samhsa.gov/programfulldetails.asp?PROGRAM ID=121, accessed 8 June 2010.
- Hawkins JD et al. Preventing adolescent health-risk behaviours by strengthening protection during childhood. Archives of Pediatrics and Adolescent Medicine. 1999. 153:226-234.

This booklet is one of 11 reviews presenting a public health overview for the non-specialist. They have been produced with funding from the Government Office North West (GONW). Other booklets in this series cover: falls in older people, sports injuries, road traffic accidents, childhood injuries, burns, child maltreatment, intimate partner violence, sexual violence, elder abuse, and self harm and suicide.

Produced by:

UK focal point for violence and injury prevention Centre for Public Health Faculty of Health and Applied Social Sciences Liverpool John Moores University Henry Cotton Campus (3rd Floor) 15-21 Webster Street Liverpool, L3 2ET, UK

Telephone: +44(0) 151 231 4510

Fax: +44(0) 151 231 4552

www.preventviolence.info www.cph.org.uk

Published: September 2010

ISBN: 978-1-907441-85-1 (print version) ISBN: 978-1-907441-86-8 (web version)







