

Preventing violence: Evaluating outcomes of parenting programmes

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GLOBAL CAMPAIGN FOR VIOLENCE PREVENTION
CAMPAGNE MONDIALE POUR LA PREVENTION DE LA VIOLENCE

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The context of this guidance

Violence is both a serious human rights violation and a major public health concern. It affects the general well-being, physical and mental health, and social functioning of millions of people (1); it also puts strain on health systems, lowers economic productivity, and has a negative effect on economic and social development (2). In particular, the number of children affected by violence each year is a major concern (3).

Child maltreatment affects children's physical, cognitive, emotional and social development. It can lead to the body's stress response system being overactive, which can harm the development of the brain and other organs, and increase the risk for stress-related illness and impaired cognition (the capacity to think, learn and understand) (4). Maltreatment is a risk factor for mental health, education, employment and relationship problems later in life. It also increases the likelihood of behaviour that is a risk to health, such as smoking, drinking heavily, drug use, over-eating and unsafe sex (5). These behaviours are, in turn, major causes of death, disease and disability, including heart disease, cancer, diabetes and suicide – sometimes decades later (5). Victims of maltreatment are also more likely to become perpetrators and victims of other types of violence later in life (6).

Child maltreatment negatively affects a country's economy, due to expenses relating to treating victims' health problems, welfare costs, lowered economic productivity and so forth (7). In the United States of America (USA), in 2010, the lifetime cost for each victim of non-fatal child maltreatment was estimated to be US\$ 210 012 (7). The many serious economic, physical and mental health consequences of child maltreatment mean that it makes sense to develop and implement effective prevention strategies.

Child maltreatment is more likely in families that have difficulties developing stable, warm and positive relationships (8). Children are at increased risk of being maltreated if a parent or guardian has a poor understanding of child development, and therefore has unrealistic expectations about the child's behaviour (8). This is also the case if parents and guardians do not show the child much care or affection, are less responsive to the child, have a harsh or inconsistent parenting style, and believe that corporal punishment (for example, smacking) is an acceptable form of discipline (1, 5). Strengthening parenting¹ therefore plays an important role in preventing child maltreatment.

One way of strengthening parenting is through parenting programmes. Although many parenting programmes do not specifically aim to reduce or prevent violence, those which aim to strengthen positive relationships through play and praise, and provide effective, age-appropriate positive discipline, have the potential to do so (9).

Parenting programmes to prevent violence usually take the shape of either individual or group-based parenting support. An example of individual parenting support is home visits, which involve trained home visitors visiting parents (typically only the mother) in their homes both during and after their pregnancy. The home visitor supports and educates parents so as to strengthen parenting skills, improve child health and prevent child maltreatment (10). Group-based parenting support, on the other hand, is typically provided by trained staff to groups of parents together. These programmes aim to prevent child maltreatment by improving parenting skills, increasing parents' understanding

¹ Throughout this document, parenting does not only refer to parenting by biological parents, but by all primary caregivers.

of child development and encouraging the use of positive discipline strategies (10).

Most parenting programmes that have proven to be effective at preventing violence have been developed and tested in high-income countries such as the USA and the United Kingdom. There is very little work on parenting programmes in low- and middle-income countries. However, there is evidence from low-resource settings that positive parent-child relationships and a positive parenting style can buffer the effects of family and community influences on children's development, including violent behaviour later in life (11, 12). From what is already known, there is good evidence to support promoting parenting programmes across different cultural and economic backgrounds.

Because we do not know enough about parenting programmes in low- and middle-income countries, evaluations of programmes are critical. First, we need to confirm that desired results are achieved in new contexts. Second, because of the lack of resources available to fund programmes in poorer countries, evaluations can prevent time and money from being wasted on programmes that do not work. Third, the results from outcome evaluations can be used to influence governments to fund parenting programmes.

This document was designed to help strengthen the evidence for parenting programmes aimed

at preventing violence in low- and middle-income countries. The intended audiences are:

- policy-makers;
- programme developers, planners and commissioners;
- high-level practitioners in government ministries, such as health and social development;
- nongovernmental organisations;
- community-based organisations; and
- donors working in the area of violence prevention.

After going through this document, you should:

- understand the need for solid evidence of a programme's effectiveness;
- know about the current literature on parenting programmes aimed at preventing violence; and
- understand the process of carrying out outcome evaluations of parenting programmes aimed at preventing violence.

This document has a related appendix on the World Health Organization's web site at www.who.int/violence_injury_prevention/publications/violence/parenting_evaluations/. The appendix contains a variety of evaluation resources, including links to useful publications and web sites, and names of evaluators who are experts in parenting programmes.

What is 'outcome evaluation' and why do we need it?

What is 'programme evaluation'?

Put simply, programme evaluation is a process which involves collecting, analysing, interpreting and sharing information about the workings and effectiveness of programmes (13). Different types of evaluation are appropriate at different stages of a programme – from the design stage, through to long-term follow-up of participants after the programme has ended (13). The earlier a programme is evaluated, the stronger the programme is likely to be.

Needs assessment

A programme is created so that it can tackle a particular problem. Understanding the nature of the problem and how common and widespread it is can help to make sure that the programme being developed meets the intended purpose, and whether there actually needs to be a programme. A needs assessment should be carried out when the programme is first thought of or when an existing programme is restructured, as it can identify what services are needed and how they should be provided.

Below is an example of how a needs assessment might be used. The programme in the example – Caring Families – is fictional and will be used as an example throughout this document.

Developing and assessing the programme theory

Once the need for a programme has been established, the next step is to develop a programme theory and assess it. All programme staff should work together to create the programme theory before the programme is developed. A programme theory is a blueprint that represents how the programme is supposed to work and acts as a guide to how the programme should be designed and delivered so that it achieves its desired effects. Creating a diagram can help produce the programme theory as it makes it easier to see the mechanisms through which the programme hopes to achieve its aims (see Annex on *Creating a diagram of programme theory*). By carrying out an assessment of this theory (that is, by checking whether current scientific evidence suggests that the individual elements of the programme, as suggested in the theory, are likely to make the programme a success),

EXAMPLE

The developers of Caring Families aim to tackle the problem of child maltreatment. Before designing the programme, they interviewed clients using their support centre to understand how many of the parents they helped were at risk of maltreating their children, and whether this came about because the parents did not understand:

- what was appropriate for different developmental stages of children; or
- that corporal punishment is not an effective discipline technique.

Because of the needs assessment, the developers could give sponsors and donors information about the numbers of parents they were likely to be able to help, and to design a programme that specifically met the needs of those parents.

EXAMPLE

Caring Families developed a programme theory, which clearly states the mechanisms through which the programme hopes to prevent child maltreatment. The programme implementers will teach parents what to expect of children at different stages of development, so that they do not place unrealistic demands on their children. They will also teach parents positive discipline techniques – such as reinforcing good behaviour through praise and ‘time outs’ – so parents do not resort to hitting their children. They will then check whether current scientific evidence suggests that these individual elements of the programme theory are supported by any evidence.

you can gain an understanding of whether or not the programme is likely to achieve its goal. Feedback from the assessment can be used to improve the programme.

Assessing the programme process

A feasible programme theory, based on evidence about what works, is not enough to make sure that the programme will be effective. The programme must also be delivered according to a set plan. The process of delivering the programme needs to be monitored to make sure it is in line with the planned process. The evaluation may investigate whether or not services are being delivered to the intended parents, how well the services are being delivered, and how resources for the programme are allocated. Process evaluation allows for necessary checks to be made before an outcome evaluation can be carried out. If the programme is not being delivered to the intended group, or not being delivered as planned, it will probably not meet its original goals and an outcome evaluation would be a waste of time.

Routinely monitoring the key elements of a programme – through careful record-keeping and regular reporting – is an important part of evaluations. Information from the monitoring is essential to an outcome evaluation, and can also be used to adapt the programme as time goes on.

Outcome evaluation

Outcome evaluation (also known as impact assessment or impact evaluation) investigates the degree to which a programme produces the intended changes to the problem. In other words, did the programme achieve its desired outcomes?

Although all evaluation types are important, this document focuses specifically on outcome evaluation because it is the only type of evaluation that can determine whether or not a programme is effective. There are various outcome evaluation methods, with the randomised controlled trial the “gold standard” – it is the approach most able to isolate whether the programme did have an effect. A randomised controlled trial allows a comparison to be made between groups – which are equivalent – who either received or did not receive the programme. There are also

EXAMPLE

The Caring Families team produced a programme plan that identified how they thought the programme should be delivered to have the maximum effect. The plan suggested, amongst other things that:

- the programme should be delivered over 12 three-hour sessions to high-risk parents of children aged three to eight years old; and
- programme staff should receive ongoing support and supervision.

Monitoring the programme might include:

- checking that parents attending the programme are actually ‘high-risk’, according to the definition they developed earlier, and have children in the defined age-group;
- keeping attendance registers to check whether parents are actually attending the programme; and
- watching programme staff delivering the programme, to make sure that they deliver all the content and that they do so effectively.

less rigorous methods, such as quasi-experiments, which – although less powerful – do produce useful information on programme effectiveness.

Reasons people are reluctant to have their programmes evaluated – and why evaluations are nonetheless important

When doing hands-on work with parents, programme staff may see that parents' behaviour changes after taking part in the programme. So it may be difficult to understand the importance of carrying out an outcome evaluation, especially given the significant resources that it requires (14). People working with parenting programmes may be reluctant to carry out an outcome evaluation because they:

- already have a sense that the programme is working;
- do not have time to carry out an evaluation;
- do not have the funds to carry out an evaluation; or
- are worried about getting negative results.

In this part of the guide we explain why some of these reasons may be preventing programmes from reaching their full potential.

Having a sense that the programme is working

Service providers may have a strong feeling that a programme is effective, based on positive feedback from the parents involved (14). Unfortunately, countless programme evaluations have shown that such opinions are often incorrect (14). Positive reactions to a programme may arise simply because parents like the people involved in the programme sessions, and this approval may not necessarily translate into changes in parents and their children (14). Donors also generally are attracted to hard evidence that a programme works, and so are more likely to fund those with outcome evaluations showing evidence of effectiveness.

Having no time to carry out the evaluation

A common reason for not performing an outcome evaluation is that it takes too much time (14). This may be especially true if staff are doing a lot of urgent work (which is typical of many child protection and family service agencies). As a result, the cost of slowing down for an outcome evaluation may seem unjustified (14). However, the cost of not performing an outcome evaluation may be even higher (14). Without one, it is impossible to tell whether a programme has very little impact, or even harmful effects. This may not only lead to a waste of re-

sources, it can also prevent parents from receiving programmes that can make a positive difference in their lives. Seldom do evaluations find absolutely no effect, but there are some cautionary tales from the public health literature: Healthy Families America, the original D.A.R.E. (Drug Abuse Resistance Education) programme and the 'Scared Straight' programme.

- Healthy Families America (<http://www.healthyfamiliesamerica.org/home/index.shtml>) is the most well-known programme of the Prevent Child Abuse America initiative. It is a home-visiting programme which serves families who are at risk of adverse childhood experiences, including child maltreatment. Despite being widely implemented in the USA for many years, there is no solid evidence that the programme is effective at preventing child maltreatment (15, 16, 17).
- For over 20 years, the original D.A.R.E. programme (<http://www.dare.com/home/default.asp>) was the most popular school-based drug abuse prevention programme in the USA. During this time, hundreds of millions of US\$ were used to run the programme (18). Evaluations found that students' knowledge, attitudes, and behaviour improved immediately after the programme, but faded away over time. By their late teens, there was no difference between students who took part in the programme and those who didn't (18). This is a very big problem, especially when considering the large sums of money invested. In response to continuous negative feedback, D.A.R.E. adopted the *keepin' it REAL* curriculum in 2009. This curriculum has led to a range of positive outcomes for youth, including reductions in alcohol use (19).
- The 'Scared Straight' programmes, which involve taking children at risk of offending on visits to prisons, aim to scare children in order to reduce the likelihood of them becoming offenders. Evaluations of these programmes show that they do more harm than no intervention at all, and actually increase rates of youth offending (20). Due to the increased rates of offending, and the resulting costs in policing, criminal justice and prison systems, in 2006 the 'Scared Straight' programmes were essentially costing taxpayers and victims approximately US\$ 14 667 per child on the programme (21). If the programme had been successful in achieving its goal of reducing rates of offending, it would have saved taxpayers' money rather than wasting it.

There is no doubt that an outcome evaluation takes a great deal of staff time. However, if a programme sets up efficient monitoring and evaluation procedures from the start, the process of preparing for and performing an outcome evaluation will take less time. Hiring an external evaluator is recommended because the evaluation is likely to be more objective and so more credible to outsiders, such as sponsors and donors (14); it also means that far less staff time will be spent on the evaluation.

Not having funds to carry out the evaluation

Funding shortages are often a major barrier to carrying out outcome evaluations. For many programmes, performing outcome evaluations can seem like an unnecessary cost, especially if it seems that the money would be better spent providing services. However, not carrying out evaluations can actually waste a lot of money – money that could have been better spent elsewhere, on better services. In order to do as much good as possible with available resources, programmes need to be evaluated early to check whether they are effective. By identifying effective programmes, and introducing them on a wide scale when funding is available, many more families can benefit from them. This is an important lesson for donors as well as programme staff, and funding to carry out evaluations should be included in budgets when applying for any grant or government support.

Being worried about getting negative results

Programme developers and managers often fear that if an outcome evaluation of their programme shows little benefit, it may reflect badly on the organisation and be harmful to the programme (14, 22). Although an outcome evaluation may indeed reveal that some aspects of the programme are not working as planned, it is extremely rare for programmes to be closed down because of the findings of an evaluation. Outcome evaluations provide an opportunity to refine and improve the programme that would not be possible if an evaluation were not carried out. Evaluation might also highlight aspects of the programme that are working better than expected, which may boost the morale of programme staff.

There are benefits to the organisation running the programme, but there are also benefits to the greater good. Making the results of an outcome evaluation public, whether those results are positive or negative, helps to build up a solid base of evidence (23). This means others can gain a better

understanding of what does and does not work in parent programmes, and may lead to existing programmes being improved and new high-quality ones being developed. For instance, from the established evidence base we know that parent guidance programmes that simply talk to parents are not as effective as those which give parents the opportunity to actively apply what they are learning through, for example, role-play and practice at home (9, 24). This helps us know how to approach the task of designing new parenting programmes.

Evidence from outcome evaluations is also an important tool for advocacy purposes and to convince policy makers to invest in initiatives to prevent violence. In the past, getting support and funding for violence prevention activities has been a challenge. However, with strong evidence of effectiveness, government leaders can be convinced of the benefits of widespread parenting programmes.

How do outcome evaluations show whether a programme is effective?

The goal of outcome evaluation is to estimate whether the programme caused changes in parenting – both whether there were changes, and whether it was the programme and not something else that caused them – and how big those changes were. To do this, the evaluation must assess the parents on the programme's key expected outcomes (for example, how confident they are in their parenting, and the level of child behaviour problems experienced), and estimate what the status would have been at that time if the parent had not taken part in the programme. The latter is known as the counterfactual and describes an impossible state of affairs – the parent cannot have taken part in the programme and have not taken part (25). Nonetheless, the causal effect of the programme is defined as the difference between what did happen at the end of the programme (factual) and what would have happened during the same period, to the same people, without the programme (counterfactual).

As the counterfactual is an impossible state of affairs, the difference between factual and counterfactual must be estimated in a roundabout way. The best way to estimate the causal effect (the difference between the factual and the counterfactual) is to compare a group which takes part in the programme (the intervention group) with another group that does not take part in it (the comparison group). However, it is critical to make sure that the characteristics of the people in the comparison group are as similar as possible to those of the

people in the intervention group. The best way to do this is to place people in the groups at random (known as random assignment). If a large enough number of participants is randomly assigned to the groups, the differences in characteristics between the groups are likely to be cancelled out and the groups should be equivalent on all characteristics – measured and unmeasured. If the intervention and comparison groups are not identical on all characteristics, differences between the two groups when the programme is over could be due to the differences in pre-existing characteristics rather than the effects of the programme.

The strength of the conclusions that can be drawn from an evaluation depends on the type of outcome evaluation carried out. The different types of outcome evaluation can be ordered according to the strength of the evidence they produce to estimate the causal effect. These types, in order from strongest to weakest, are:

- randomised controlled trials (true experimental designs);
- quasi-experimental designs;
- single group designs; and
- non-experimental designs.

These are briefly explained on the next few pages. Programme evaluators should choose the type of evaluation that allows for the strongest possible conclusions about causal effects. There are a number of factors that need to be considered when choosing the appropriate evaluation method, including how long the programme has been in place, the availability of financial and human resources, and the questions that need to be answered about the programme (26).

Randomised controlled trials

Randomised controlled trials, or true experiments, are often considered to be the ‘gold standard’ for outcome evaluation because they are best at estimating if the programme caused a difference and

how big this difference was. In randomised controlled trials, parents in the target population are randomly assigned to either the intervention group or the comparison group. This results in an intervention group that is equivalent to the comparison group before the programme starts. As only one group takes part in the programme, the evaluator can be reasonably sure that any difference between the groups after the programme is due to the effects of the programme and nothing else.

Through using random assignment and having a comparison group, randomised controlled trials typically have the highest ‘internal validity’ of all the types of evaluation. Internal validity refers to how much confidence people can have that it is the programme and not some other extraneous factor that caused the change. Threats to internal validity include history and maturation. History refers to any outside event that happened at the same time as the programme and which may have led to changes in the people taking part in the programme. Maturation, on the other hand, refers to how people naturally change over time, rather than as a result of the programme.

While the randomised controlled trial is the best type of evaluation to determine a programme’s effectiveness, it uses the most resources. As a result, it may not be viable for some programmes, especially those which are in low- and middle-income countries and have very limited resources. Nevertheless, programmes should carry out randomised controlled trials where possible. They are particularly important for programmes that aspire to be considered evidence-based and intend to scale up for widespread roll-out; only the randomised controlled trial can provide sufficient evidence that a programme is sound enough for scaling up. Randomised controlled trials are most suitable for programmes that have already shown to be promising through pilot studies (14).

Although the randomised controlled trial is the strongest type of evaluation, there are possible

EXAMPLE

To determine the effect that the Caring Families programme has on levels of child behaviour problems, compared to having no programme at all, an evaluator randomly assigns 100 people to the intervention group and 100 to the comparison group. A questionnaire was given to both groups before and after the programme, and again a year later. Analysis of the information gathered showed that the Caring Families programme led to significant reductions in the levels of child-behaviour problems, while there was no change in the comparison group; and that these changes were sustained for a year.

ethical dilemmas. Even if a programme has not yet gathered enough evidence to show that it is effective, if the programme is carefully designed there is undoubtedly the chance that it may be effective. Using a comparison group that does not get the programme can therefore deprive people of possible benefit. However, this can be overcome by a “wait-list” control group; that is, the comparison group does get the programme, although only after the trial is over. In a well-designed trial, that might be a year or more after the first group got the programme.

Quasi-experimental designs

Quasi-experimental evaluations have most of the same elements as randomised controlled trials. The main difference is that quasi-experiments do not involve randomly placing people in the intervention or comparison group. Because of this, the intervention group and comparison group are considered not to be equivalent at the start of the experiment.

If this type of evaluation is used, the evaluator needs to choose a comparison group that is as similar as possible to the intervention group. The relevant characteristics of the people in the comparison group need to match those of the people in the intervention group. This matching is done by pairing individuals who have identical characteristics considered to be relevant and important for the particular evaluation. Through this process, the two groups will probably have equivalent characteristics (27). A problem with matching is that if some of the important characteristics are overlooked in the matching process, the resulting groups may not actually be equivalent, and the evaluation results may be compromised (27).

An alternative to matching individuals is to use statistical controls, or make statistical adjustments for the differences between the groups that might otherwise lead to biased estimates of the effects of the programme (13). This means one has to be

sure to measure the things that might be important – which again is risky, as one might miss some important measures. As with matching people in the groups, one cannot be sure that statistical control during the analysis of data after the programme has been delivered would completely remove the bias due to non-random assignment to intervention and control groups (25). There is no way to know to what extent the differences, which are not controlled for, may produce misleading evaluation results (25).

Single group designs

Of the quasi-experimental methods of evaluation, single group designs are the least able to provide evidence of a causal effect. This is because they focus on a single group of parents who took part in the programme without making a comparison with an equivalent group that did not take part in the programme. An example of a single group design is the ‘pre- and post-test’ method. In this design, measures are simply taken from parents before and after they take part in the programme. By looking at the information gathered before and after the programme, the evaluator can gain an idea of the programme’s effect. While the information gathered may be useful for routine monitoring, it does not produce credible estimates of the change that is due to the programme alone. The estimates may be biased because they include the effects of other influences on the parents between the pre-test and post-test measurements (13).

Non-experimental designs

If, for some reason, it is not possible to use an experimental method of evaluation, a programme may benefit from a non-experimental alternative, such as a theory-based evaluation, or a series of single case studies. However, these methods are less robust in determining whether or not a programme is effective at achieving its aims.

There are two main types of non-experimental

EXAMPLE

The evaluation team wants to determine the effect the Caring Families programme has had on levels of child behaviour problems, compared to there being no programme at all. Random assignment is not possible. As an alternative, the evaluator places 40 parents from the programme in the intervention group, and chooses another 40 people for the comparison group, based on their similarity to parents in the intervention group. Both the intervention group and the comparison group receive a pre-test and post-test questionnaire. Although it may be possible to draw some tentative conclusions on the basis of this evaluation, there is a chance that some important characteristics may have not been matched. These characteristics may have been the cause of the changes, rather than the programme itself.

EXAMPLE

A single group of parents takes part in the Caring Families programme. The parents fill in a questionnaire before and after the programme to investigate whether the programme appears to cause changes in child-behaviour problems. An analysis of the questionnaires reveals that there are reduced levels of child-behaviour problems after the programme. The problem is that the evaluator cannot be sure that this reduction is due to the Caring Families programme, and not something else.

evaluations – theory-based evaluations and qualitative case study evaluations.

A **theory-based evaluation** focuses on the assumptions the programme is based on, as well as focusing on results, as experimental designs do (28). This type of evaluation examines the connections between the programme's context, mechanisms of change, and outcomes – ultimately 'testing' the programme theory the programme staff produced. The ability to test a programme theory depends on three factors (28):

- how well the theory is defined (it should be well-defined and agreed upon by various stakeholders);
- how well programme activities reflect the assumptions the theory is based on (there needs to be a clear match between theory and practice); and
- the resources available for the evaluation (a thorough evaluation will require a substantial amount of resources, in terms of both time and money).

Those who support theory-based evaluation see it as an attractive alternative to experiments (25). This is because it only involves an intervention group and not a comparison group, so may need fewer resources (25). Also, showing that there is a match between theoretical predictions and the information gathered suggests a causal effect without having to consider alternative explanations, which can typically take a long time (25). Lastly, it is often difficult to measure long-term outcomes (for example, reductions in youth violence may only be evident fifteen years after a programme for parents of young children is over), so confirmation of short-term outcomes (for example, reductions in harsh parenting) through theory-based evaluations can suggest that the programme is on the right track (25).

A **qualitative case study** is an 'intensive, holistic description and analysis of a single entity, phenomenon, or social unit' (29). For example, a case study may focus on the experiences of a particular group

of parents as they go through the Caring Families programme. This method of evaluation can help to identify possible causal effects, provide an understanding of the factors that may condition these effects, and answer a broader range of questions about the programme and how participants experience it, than would be possible with experimental designs (25).

Although case-study methods can reduce some uncertainty about the causal effects of a programme, solid conclusions cannot be drawn (25). The factors that shape the experience of a small group of parents in a parenting programme may not apply to larger samples of parents. Because there is no comparison group, it is difficult to determine whether changes are due to the programme or to other factors.

Summary of section 1

- Outcome evaluation can tell us how well a programme works (that is, whether the programme does in fact cause changes in parents' or children's behaviour, and how big those changes are).
- The results of outcome evaluation allow parenting programmes to be improved, and add to the evidence others can then draw from when choosing programmes or developing programmes of their own.
- Knowing whether or not a programme is effective ensures that parents are receiving programmes that actually work, and enables resources to be spent wisely.
- A randomised controlled trial allows for the strongest conclusions to be drawn about the effectiveness of a programme. However, due to economic, logistical, or ethical reasons, this method of evaluation may not always be feasible. Although another method may be more appropriate for the evaluation, it is important to remember that it will not provide the same degree of confidence in the findings.

The evidence: what do we know?

This section is made up of three parts. The first reviews evidence on the effectiveness of parenting programmes aimed at preventing violence. The second discusses the issues around adapting parenting programmes for cultures other than those they were originally developed for. The last part sets out the characteristics that are common to effective programmes.

Evidence of the effectiveness of parenting programmes

Evidence suggests that improving relationships between parents and their children, and teaching parenting skills, can be effective in preventing violence. Over the next few pages we will review evidence on preventing child maltreatment, behavioural problems in children and youth violence.

Preventing child maltreatment

Many parenting programmes have been developed to prevent child maltreatment, but few have been evaluated (16). Of the programmes that have been evaluated, evidence suggests that some may be effective at preventing child maltreatment (30, 31, 32) as well as improving aspects of family life that are likely to be associated with maltreatment (8), such as parental attitudes and parenting skills (33, 34).

Home-visiting programmes appear to be the most researched type of programme, when it comes to preventing child maltreatment and associated outcomes such as injuries. However, the only programme that has produced strong evidence of preventing child maltreatment is the Nurse Family Partnership (<http://www.nursefamilypartnership.org/>). In this programme, nurses visit the homes of low-income, first-time mothers during pregnancy and until the child is two years old. The programme

has shown positive results in three randomised controlled trials across various samples and regions in the USA (16). Results from one of these trials showed that during the second year of the child's life, children of parents in the intervention group had 32% fewer visits to the emergency department than those in the comparison group (35). Of those visits, there were 56% fewer for injuries and swallowing dangerous substances (35). By the 15-year follow-up, rates of child abuse were reduced by 48% compared with the children in the control group (36).

The evidence for the Nurse Family Partnership is promising. Several randomised controlled trials all point in the same very positive direction, suggesting that home-visiting can improve parenting and child safety. However, a major drawback of home-visiting programmes is that they can be expensive and may not be affordable for low- and middle-income countries. For example, the estimated total cost of the Nurse Family Partnership is around US\$ 4 500 a year for each person taking part in the programme (37). If a home-visiting programme is modified in any way to reduce cost (for example, by using community workers instead of highly-trained nurses), it may not be as effective, and so should be evaluated to check whether there is an effect.

Parent guidance programmes have also been shown to be effective in preventing child maltreatment (8). The success of the Triple P – Positive Parenting Program (www.triplep.net) in reducing rates of child maltreatment has been shown in a randomised controlled trial, which involved delivering Triple P professional training to the existing workforce, together with media coverage and communication strategies, across 18 randomly chosen counties in one state of the USA (32). The results showed that Triple P has preventative effects on

three population indicators of child maltreatment, namely substantiated cases of child maltreatment, child out-of-home placements, and child injuries from maltreatment. Although these findings are promising, more trials are needed (16). One randomised controlled trial alone does not provide strong enough evidence of effectiveness – there is always the possibility that these changes were found by chance. What is needed for greater certainty is several studies that all point in the same direction.

Preventing behavioural problems

Children with behavioural problems from an early age are at a higher risk of a range of negative outcomes, including violent behaviour later in life (9). It is encouraging that some parent guidance programmes have been shown to be effective at preventing these types of behavioural problems in children. For instance, a randomised controlled trial of the Incredible Years Parent Programme (<http://www.incredibleyears.com>) in Wales showed that the programme led to significant improvement in child behaviour, as well as in parents' mental health and positive parenting (38). The benefits also spread to the sibling nearest in age (38). The findings from other randomised controlled trials, including those conducted in Canada, Jamaica, and Norway also reflect the effectiveness of the Incredible Years in achieving positive outcomes.

Parent-Child Interaction Therapy (<http://pcit.phhp.ufl.edu/>) is another parent guidance programme, developed in the USA, that has been shown to reduce behavioural problems in children (39). The programme also led to improvements in children's behaviour and self-esteem (39).

Preventing youth violence

Programmes that reduce behavioural problems and promote positive parenting skills are targeting risk factors for later delinquent behaviour and violence, and so are likely to prevent them (40). Findings from the 19-year follow-up of a randomised controlled trial of the Nurse Family Partnership showed that girls whose mothers received the programme were less likely to enter the criminal justice system than girls in the comparison group, although there did not appear to be any effects for boys (41). This demonstrates that early intervention may prevent later problems.

Research on parenting programmes within low- and middle-income countries

The evidence of parenting programmes' effectiveness in preventing violence predominantly comes from high-income countries. A recent review did, however, find 12 individual studies from low- and middle-income countries that targeted a range of parenting outcomes, including parent-child interaction, parent attitudes and knowledge, and harsh parenting (42). These studies reported results that favoured the intervention groups over the comparison groups, which is very promising. For example, a study of a home-visiting programme in South Africa found that, when their babies were both six and 12 months old, mothers in the intervention group had significantly better relationships with their babies, compared with the comparison group (43). The programme was also associated with a higher rate of secure infant attachment at 18 months old. In a different study, in Pakistan, another parenting programme resulted in a significant increase in the knowledge of and positive attitudes about infant development among mothers in the intervention group when compared with the comparison group (44). This evidence suggests that parenting programmes can improve parenting in low- and middle-income countries (42), despite the likelihood that these parents are facing many other challenges such as poverty and difficult living environments. This being said, few of these evaluations measured actual violence as an outcome, which makes it difficult to draw conclusions about whether or not they would be successful in preventing violence.

In summary, the evidence suggests that parenting programmes that encourage safe, stable and nurturing relationships between parents and children can prevent child maltreatment and childhood aggression. It is less clear whether they can prevent violence in later life. However, by tackling risk factors for violence, it is likely that they have some effect in preventing them. In order to strengthen the evidence base, good-quality outcome evaluations of parenting programmes to prevent violence are needed, especially in low- and middle-income countries.

Adapting parenting programmes to other cultures

Since most evidence-based parenting programmes are in high-income countries, there is often debate as to whether the same programmes can be exported to low- and middle-income countries, or whether completely new programmes should be

developed within these countries. Using the same programme in low- and middle-income countries appears to be more popular, because evidence-based programmes are typically based on high-quality research and are, therefore, more likely to be effective and not result in unintended harm. Also, importing programmes may be less expensive than developing and evaluating new programmes for many different groups (45). However, we cannot assume that evidence-based programmes developed in one context will continue to be effective in other contexts (46). Various factors, including differences in levels of literacy, family structure, how children socialise, values and beliefs, poverty, and pressures such as HIV and AIDS, may affect a programme's effectiveness. This suggests that programmes may need to be adapted when they are introduced into a new setting.

Cultural adaptation is the process of adjusting a programme so that it reflects the cultural and socio-economic situation of those taking part in the programme, while keeping it true to the programme's core elements (45). A very useful step-by-step guide on adapting programmes can be found in the United Nations Office on Drugs and Crime's guide to implementing family-skills programmes for preventing drug abuse (<http://www.unodc.org/documents/prevention/family-guidelines-E.pdf>) (45).

When considering adapting a programme, an important question is how different the cultures need to be to warrant adaptation (47). This question is particularly relevant in countries that have many cultures – is it feasible to create an adaptation for each cultural group within a country? Generally speaking, cultural adaptation is likely to be necessary if there are poor outcomes when the programme is delivered as intended, as well as when there are poor participation levels or involvement (48).

Frameworks for culturally adapting evidence-based programmes emphasize four common concerns (49).

- The first concern is the need for a balance between staying true to the original programme and adapting it to reflect the differences within the new setting. To increase the chance that an imported programme will be effective in a new setting, the main features responsible for the programme's effectiveness must be kept, and extensive adaptations should be avoided.
- Secondly, a programme must have a solid programme theory that clearly specifies the under-

lying mechanisms through which the programme achieves its goals. This allows the programme developers to identify the main features that need to be kept.

- Thirdly, the adapted programme must be evaluated to make sure that it is effective in the new setting. Results of monitoring and evaluation should be used to improve the programme where possible, and may show that further adaptations are needed. If further adaptations are necessary, the adaptations must be based on theory and an understanding of the new target group.
- The fourth concern is that the adaptation process should take account of the country's readiness to implement the programme. Readiness refers to whether or not there is enough knowledge and expertise among the programme staff, adequate health and social services, and enough resources, including funding, staff and materials, to implement the programme in the new setting.

Aside from these concerns, affordability is another consideration when importing programmes into low- and middle-income countries. Many of these programmes are expensive – there are costs associated with materials, training and support – and many potential purchasers, such as governments and non-profit organisations, are unable to pay the high prices charged for these programmes (49). A potential strategy to tackle this issue is for programme developers to investigate whether cost waivers or reductions could be made available to promote the importing and cultural adaptation of programmes to these countries (42).

Clearly, it can be challenging to introduce a programme in a new setting. However, despite the significant challenges, programmes have been adapted and implemented in many different cultural contexts and maintained their effectiveness (50). It is vital that cultural adaptation is led by theory and research so that the adapted programme can maintain effectiveness as well as being appropriate and relevant for the new target group (45).

The main features of effective programmes

This part of section 2 sets out some general components which are common to many evidence-based programmes, using examples from the parenting literature (51). It then describes some specific components that are associated with effective parenting programmes. An understanding of these components can help with the development of programmes

that are likely to achieve positive outcomes, as well as improving existing programmes (52).

General components

Sound programme theory

Programmes are more likely to be effective if they have a solid programme theory (13). As discussed in section 1, a programme theory is the assumptions and expectations about how the programme should be designed and delivered so that it achieves its aims. It is critical that a programme theory be supported by some empirical evidence or be at least plausible. If it isn't, a programme will not be effective at achieving its aims, no matter how well it is implemented.

Clearly defined target population

Programmes are more likely to achieve their aims if they have a sound reason for targeting a particular group (53) such as the group's socio-economic status. This information should be gathered from a formal needs assessment, which identifies the prevalence, nature, and distribution of the problem to be tackled, and investigates whether or not there is a need for the programme (13).

Appropriately timed

Effective programmes are delivered at the time or stage when participants are likely to be most receptive to change (54). For instance, programmes for parents of young children can help families avoid behavioural problems in the children when they are older and establish good parent-child relationships (24).

Acceptable to participants

Programmes must be relevant and acceptable to the participants if they are to have positive effects (54). Parents are more likely to get fully involved in a programme and show improvements if they think that the aims of the programme match their goals for themselves and their children in their daily lives (23).

Sufficient sessions

Programmes are more likely to be effective if they involve participants for a sufficient amount of time (54). Typically, the number of hours of involvement will depend on the level of risk of the target population (24). Programmes with a longer duration tend to be more effective at tackling severe problems and high-risk groups. For less severe problems, positive outcomes may be achieved through 'light

touch' programmes, such as Selected Triple P (55). This programme consists of three 90-minute seminars, with each seminar delivered either as a stand-alone intervention, where parents take part in only that seminar, or as part of an integrated series, where parents attend all three seminars over several weeks (55).

Well-trained and well-supervised staff

Programmes are likely to be strengthened if they provide staff with sufficient training (54). Training should not only cover the content of the programme, it should also cover the skills needed to involve parents actively in the process of change. This includes the importance of empathy, being responsive to families, and respecting individual differences (56). Also, supervising and providing adequate support to staff increases the chance that they will deliver the programme as intended (45, 54).

Most evidence-based parenting programmes are delivered by professionals, which may not be an option within low- and middle-income countries. This is due to the likely shortage of trained professionals in these countries and the cost of professional staff. Evidence suggests that using 'paraprofessionals' (including community-development workers and trained lay people) can sometimes be an effective alternative to professionals (57).

Monitoring and evaluation

As discussed throughout this document, a programme is more likely to be effective, and continuously improved, if it incorporates monitoring and evaluation procedures throughout the duration of the programme.

Important components of parenting programmes

Some components are essential to effective parenting programmes aimed at preventing or correcting behavioural problems (9), which are also likely to be critical for programmes to prevent child maltreatment:

Opportunities for parents to practise new skills

Parents should get a chance to practise the skills that they learn through role-playing, video feedback and so on. Parents also need to practise new parenting behaviour in their own homes.

Teaches parenting principles, rather than prescribed techniques

Through learning principles of positive parenting – such as positive reinforcement and encouragement

– rather than specific responses to certain child behaviours, parents can decide what would work best for them and their children, and learn the skills required to respond positively and appropriately when new situations arise.

Teaches positive parenting strategies, including age-appropriate positive discipline

Programmes must include strategies to handle poor behaviour in a positive and age-appropriate way. Examples of these types of strategies include using time-outs and planned ignoring (which refers to purposefully ignoring a child's undesirable behaviour). Alongside these strategies, programmes should include strategies that aim to strengthen positive parent-child relationships through play and praise. This allows for lasting, positive changes in child behaviour.

Considers difficulties in the relationships between adults in the family

In order to achieve long-term improvements in families, difficulties in the relationships between the adults in the family must be considered. It may be beneficial for parents having relationship difficulties to attend a parent support programme that deals specifically with these issues.

Summary of section 2

- Evidence suggests that parenting programmes can be effective in preventing all forms of violence, but further research is needed to strengthen the evidence, particularly from low- and middle-income countries.
- Importing high-quality parenting programmes may be a more viable option for low- and middle-income countries than developing and testing new programmes.
- When importing programmes, important elements must be maintained but necessary cultural adaptations may be required.
- There are programme characteristics that are common to effective prevention programmes. If programmes incorporate these characteristics, they will be more likely to be effective.

Outcome evaluation: how do we do it?

This section begins with an outline of the main activities that need to be carried out before an outcome evaluation. It then discusses the steps that take place during the actual evaluation. This section does not provide specific guidance on how to carry out an evaluation, but it enables an understanding of the processes. Although outcome evaluation can only be carried out on programmes that are up and running, it is useful for staff involved in developing a programme, or in the early stages of implementing one, to think through how they will assess its effectiveness.

Activities before an evaluation

The activities that need to be carried out before an outcome evaluation are:

- evaluability assessment;
- budgeting for evaluation; and
- choosing an evaluator.

Evaluability assessment

Planning and carrying out a high-quality outcome evaluation takes time and money. If a programme is already running it is valuable to know whether or not it is ready for an outcome evaluation – in other words, is it ‘evaluable’?

A programme is likely to be evaluable if it (58):

- has a sound programme theory;
- actually serves the intended target population;
- has a clear and specified curriculum and is delivered as intended;
- has realistic and achievable goals;
- has the resources discussed in the programme design; and
- can provide the information necessary for an evaluation.

To establish whether a programme meets these requirements, the evaluator must determine (58):

- whether the programme has a sound programme theory by evaluating the programme’s history, design and operation. This involves collecting programme documents, and visiting sites where the programme is delivered;
- whether the programme serves the intended target group and whether the programme is delivered as intended by studying the programme in action. This is particularly important as it may be different to what the programme looks like in theory; and
- whether the programme can provide the necessary information for an evaluation by looking at current monitoring and evaluation procedures and deciding whether or not information provided is reliable, as well as whether any other information will be needed for the evaluation. It will also involve assessing the feasibility of carrying out an evaluation, in terms of available human resources and local capacity.

If a programme is not evaluable, the evaluator will typically direct programme staff to areas that need further development in order to make it evaluable (58). These will also be areas that are likely to strengthen the programme even before the evaluation, as well as improve its capacity to report accurately on its activities. Evaluability assessment can also improve a future evaluation by getting agreement, between the evaluator and programme staff, on what is important in the programme, anticipating problems that may arise during evaluation, and making sure that the overall process will run smoothly (58).

Assessments of evaluability can be carried out by a member of the programme staff who is expe-

rienced in evaluation. However, it is highly recommended that they are carried out by an external evaluator.

Budgeting for an evaluation

A portion of a programme's budget must be dedicated to monitoring and evaluation activities, including outcome evaluation. Although the funding set aside for an outcome evaluation is likely to change as details of the evaluation process become clearer, it should be considered as part of the initial planning process (59). Below are some of the expenses associated with an outcome evaluation (59):

- fees of the external evaluator and other evaluation staff (for example, fieldworkers who interview parents);
- evaluation team's travel expenses;
- communications (for example, phone calls, internet access);
- general supplies (for example, stationery);
- costs of producing items for collecting information (for example, questionnaires);
- printing and copying costs; and
- office space and other space for evaluation activities.

Programme managers may benefit from creating an evaluation budget which sets out the amount of time needed for the evaluation, as well as the costs and resources (59). The amount of time needed for an evaluation will depend on the questions that need to be answered, the available resources, as well as other external factors (59). Timing must be considered to ensure that the evaluation is feasible and will produce accurate, reliable and useful results.

Choosing an evaluator

Many monitoring and evaluation activities can and should be performed by programme staff on a regular basis. However, it is highly recommended that a programme uses an external evaluator to carry out outcome evaluations in order to increase the likelihood that the evaluation will be unbiased (14). Even if an evaluation is well-designed, if it is carried out by programme staff, the question will always arise as to whether staff were biased, knowingly or unknowingly, towards showing the programme in a positive light (14). Using an external evaluator makes sure that the results of the evaluation will be seen as credible. Also, an external evaluator may share different perspectives and knowledge that

could be helpful to the programme as a whole (13, 14).

There are different ways to choose an external evaluator. Programmes that have already been evaluated may be able to recommend an evaluator. Certain university departments (such as public health, psychology or social work) may be interested in evaluating parenting programmes (26). Some universities run initiatives that aim to connect university staff and students interested in evaluation with community organisations wanting evaluation services. People with evaluation expertise may be willing to consult programme staff or carry out an evaluation, but they typically expect some form of payment for their services (26). For instance, professional consultants will generally charge for their services, while a university department may want to publish the evaluation results (26).

Below is a list of some key characteristics necessary in an evaluator (26). The evaluator:

- must not be directly involved in developing or delivering the programme being evaluated;
- must not respond to any pressure from staff to produce certain findings;
- must be able to see beyond the evaluation to other programme activities;
- must be appropriate for the organisation and be able to listen carefully to the concerns about and goals of the evaluation.

As well as choosing the lead evaluator, a programme needs to assess its own staffing levels before starting an outcome evaluation. Local staff will be needed during the evaluation (for example, to co-ordinate the evaluation, conduct interviews and so on).

The outcome evaluation process

When a programme is evaluable, has a budget for an outcome evaluation, and has chosen an external evaluator, it is ready for the outcome evaluation process to start. According to the United States Centers for Disease Control and Prevention evaluation framework (<ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4811.pdf>) (60), the steps of the evaluation process are:

1. engage stakeholders;
2. describe the programme;
3. design the evaluation;
4. gather credible evidence;
5. justify conclusions; and
6. ensure lessons learnt are used and shared.

1. Engage stakeholders

The first step in the evaluation process is to engage evaluation stakeholders. These are the people or organisations that have an interest in the results of the evaluation and what the result will be used for. Stakeholders include, among others, donors, programme staff, government officials and people participating in the programme. Engaging stakeholders ensures that their views on the programme are understood. The evaluation can then reflect these views and the findings may be more acceptable to stakeholders. Once engaged, stakeholders may also provide various forms of help to the evaluation team during the evaluation process.

2. Describe the programme

Programme staff and other stakeholders should come up with an agreed description of the programme, in terms of the need for the programme, expected outcomes, programme activities, resources, the context of the programme, the programme theory and so on. This description should be based on the original programme planning and design where goals were set. Through this process, stakeholders can establish the main aims to be evaluated. Stakeholders must agree on the programme description, otherwise the evaluation is likely to be of limited use.

3. Design the evaluation

Choosing the evaluation design – At this point, the evaluation design needs to be chosen. This choice will depend on various factors, including how long the programme has been running, available resources and ethical considerations, such as whether it is appropriate to use a control group that does not get the programme. Programmes should choose the most scientifically rigorous evaluation design possible, bearing in mind these factors.

Choosing a sample – Once the design has been chosen, a ‘sample’ of parents needs to be chosen. A ‘sample’ refers to a subset of a whole group (for example, a subset of parents with children aged three to eight years) which is studied and whose characteristics can be generalized to the entire group of interest (27). Choosing the sample size is a complex activity and a statistician should be used to produce a ‘power calculation’, which indicates how many participants are needed in the evaluation in order to show the predicted improvement.

The goals of the evaluation will largely determine which parents or children are chosen to be including in the evaluation (61). For example, when

wanting to determine the general effectiveness of a programme, random samples of all parents who enter the programme during a specific time period should be chosen. Alternatively, if the objectives concern particular types of parent (for example, high-risk mothers), then random samples should be chosen to represent this specific group. If the objective is to compare one programme against another, then similar types of parent should be recruited from each programme. The method of choosing a sample should be described in the evaluation report so that others can understand the rationale for choosing certain parents for participation, as well as the potential biases which may stem from this (61).

Choosing and measuring outcomes – When choosing the outcomes to evaluate, a thorough review of the programme theory may be helpful as it most likely differentiates between short-term (parents know more about positive discipline), intermediate (parents use positive discipline strategies) and long-term outcomes (reduction in rates of child maltreatment). Careful discussion with stakeholders should go into choosing outcomes to be measured. It may be the case that outcomes were decided upon when applying for funding.

It is not usually necessary to measure all outcomes as some are more important than others. Also, very long-term outcomes are often the most difficult and expensive to measure, and it may not always be feasible to include them in the evaluation (13, 14). For example, Caring Families, which is for parents of children age three to eight years, has an aim that the children will be less likely to get arrested by the age of 20. However, it will be expensive and difficult to track these children for that long. It may be more feasible to measure short-term and intermediate outcomes, such as levels of child behaviour problems and the strength of the parent-child relationship.

An outcome evaluation is likely to be strengthened by using multiple measures. This counteracts possible weaknesses in one or more of the measures, to provide a more accurate picture of what the programme has achieved (13, 45). Unfortunately, the more measures that are used, the more expensive the evaluation will become (because translating the measures, if necessary, training staff in the measure and staff time for interviewing participants will all cost more), and the greater the probability that one or more of the measures will show a significant effect by chance.

There are three different types of measures –

Table 1. Examples of direct measures, proxy measures, and risk factors.

Direct measures	Proxy measures	Changes in risk factors
Reports from child-protection services	<ul style="list-style-type: none"> • Hospital admission rates • Visits to the emergency department (especially for accidents and injuries) • Child being placed in care outside the home 	<ul style="list-style-type: none"> • Parent-child attachment behaviour • Parental attitudes toward child • Use of positive discipline • Parental responsiveness • Parental stress

direct measures, proxy measures and changes in risk factors. Examples of each of these in the context of parenting programmes aimed at preventing violence are provided in Table 1 above.

Ideally, programmes should use direct measures, such as reports from child protection services, as they allow the most accurate conclusions to be drawn. However, a concern with this type of measure is that violence, especially against children, often goes unreported. So if the measure used is reports from child protection services, the problem may seem less severe than it really is.

Direct measures may not be suitable for some low- and middle-income countries where child-protection services may not exist or may not be well-developed. Proxy measures, such as visits to the emergency department, may also be a problem for the same reasons as using reports from child-protection services.

As an alternative, many outcome evaluations assess changes in risk factors, such as a parent's attitudes towards discipline. If risk factors are assessed, it is usually best to use measurement instruments that are standardised – this means that they have been designed to be administered, scored and interpreted in a set way. Using standardised instruments increases the validity of the evaluation, which means that the findings are more likely to be

credible (see Table 2). Many of these rely on 'self-reports' by parents, which may, however, be vulnerable to bias. Others are based on observing and coding the behaviours of parents and children while they work through various tasks in their home or in an observation room in a clinical setting. Two examples of observational instruments are the Home Observation for Measurement of the Environment (HOME) Inventory (62) and the Dyadic Parent-Child Interaction Coding System (DPCIS) (63).

If the instrument is in a different language than that which is spoken by the sample, there may be issues with translation. Incorrect translations may reduce the instrument's accuracy. So it is best to choose instruments that are in the same language as that used by the sample. If this is not possible, translation followed by back translation is a useful alternative.

Choosing and measuring outcomes requires planning and consideration. If appropriate outcomes and measurement methods are used, the findings of the evaluation are more likely to be credible and useful to stakeholders.

Follow-up – In order to determine whether or not the changes (if any) identified in participants were maintained over time, it is necessary to monitor the sample of parents for some time after the programme has ended. This is particularly impor-

Table 2. Examples of common standardized instruments.

Parenting/child behaviour	Example of associated measure	Child age (years)
Child behaviour problems	Eyberg Child Behavior Inventory (64)	2 to 16
Child maltreatment	Parent-Child Conflict Tactics Scale (65)	0 to 9 (version for parents) 10 to 18 (version for children)
Child mental health problems	Strengths and Difficulties Questionnaire (66)	4 to 16
Depression in children and adolescents	Mood and Feelings Questionnaire (67)	8 to 18
General parenting practices	Alabama Parenting Questionnaire (68)	6 to 18
Parenting satisfaction	Cleminshaw-Guidubaldi Parent Satisfaction Scale (69)	0 to 18
Parenting stress	Parenting Stress Index (70)	0 to 12

tant if the main aim of the programme is to reduce future risky behaviour from children. A number of the programmes endorsed as Blueprints for violence prevention programmes (<http://www.colorado.edu/cspv/blueprints/>) have recently been downgraded because they have not yet shown effectiveness over the long term.

4. Gather credible evidence

Information should be collected systematically and impartially. If the information gathered is credible, the findings of the evaluation are more likely to be useful, and recommendations that stem from the evaluation are strengthened. If there are any doubts about the quality of information and the conclusions drawn from it, programme staff should discuss these with experts in designing evaluations.

5. Justify conclusions

Once the evaluation findings have been compiled, stakeholders must agree that the conclusions are justified. To do this, the conclusions must be linked to the information gathered and judged against agreed values or standards set by the stakeholders. This will help to make sure that the evaluation is useful to (and used by) those running the

programme, and will help to validate the results. It is often useful to form an expert group as they can help to generate interest and local ownership of the results. This is vital in terms of following up the evaluation results to improve or expand a programme if the findings are positive.

6. Ensure lessons learnt are used and shared

Lessons learnt during an evaluation do not automatically translate into informed decisions and action. It is important that the evaluator, programme staff, donors and other stakeholders work together to make sure the findings of the evaluation are used appropriately. As discussed earlier, making the results of an outcome evaluation public, whether those results are positive or negative, helps to build the evidence base to which others in the field of parenting can refer. This may lead to existing parenting programmes being improved, and new high-quality programmes being developed.

These steps provide a framework for understanding the process of performing outcome evaluations. If these steps are completed successfully, it is likely that the evaluation will produce credible and useful findings that reveal the extent to which any changes in parents and children are due to the programme.

Conclusion

Violence against children violates their human rights and is a widespread public health problem. Parenting programmes have the potential to prevent child maltreatment as well as violence later in life. However, most of the evidence for this comes from high-income countries. We urgently need evidence from low- and middle-income countries where families may face more violence and related problems of poverty, illness, bereavement, intimate partner violence and so on. This evidence can only come from rigorously designed and evaluated programmes. Outcome evaluations are critical to this effort, and indeed critical to making sure that parents get effective programmes that make a positive difference, do no harm, and use scarce resources in the best way possible. Building the evidence is also a crucial step in figuring out which

programmes might be rolled out widely to make a difference to more than just the small group that typically receives a programme being tested. Outcome evaluation is also a valuable process for helping programmes identify where they can be improved, and what they are already doing well.

The large-scale implementation in low- and middle-income countries of parenting programmes with evidence of being effective in preventing violence is critical in any strategy to prevent interpersonal violence. We hope that this document will be a useful resource for increasing understanding of outcome evaluations of parenting programmes aimed at preventing violence, and will ultimately contribute to increasing the number of effective programmes delivered in low- and middle-income countries.

References

1. Krug EG et al., eds. *World report on violence and health*. Geneva, Switzerland, World Health Organization, 2002.
2. Violence Prevention Alliance & Education Development Centre. *Why invest in violence prevention?* Geneva, Switzerland and Newton, USA. VPA and EDC, 2011.
3. Pinheiro PS. *World report on violence against children*. Geneva, United Nations Secretary General's Study on Violence against Children, 2006.
4. National Scientific Council on the Developing Child. *Excessive stress disrupts the architecture of the developing brain: Working Paper #3*, 2005. Retrieved from www.developingchild.harvard.edu
5. Butchart A et al. *Preventing child maltreatment: a guide to taking action and generating evidence*. Geneva, World Health Organization and International Society for Prevention of Child Abuse and Neglect, 2006.
6. Fang X, Corso PS. Child maltreatment, youth violence, and intimate partner violence: developmental relationships. *American Journal of Preventive Medicine*, 2007, 33: 281–290.
7. Fang X et al. The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse and Neglect*, 2012, 36: 156–165.
8. World Health Organization. Preventing violence through the development of safe, stable and nurturing relationships between children and their parents and caregivers. *Violence prevention: the evidence*. Geneva, Switzerland, World Health Organization, 2009.
9. Hutchings J, Gardner F, Lane E. Making evidence-based interventions work. In C Sutton, D Utting, D Farrington (eds.), *Support from the start: working with young children and their families to reduce the risks of crime and anti-social behaviour* (pp. 69–79). Norwich, UK, Department for Education and Skills, 2004.
10. Mikton C, Butchart A. Child maltreatment prevention: a systematic review of reviews. *Bulletin of the World Health Organization*, 2009, 87: 353–361.
11. Conger RD et al. Economic stress, coercive family process, and developmental problems of adolescents. *Child Development*, 1994, 65: 541–561.
12. Costello EJ et al. Relationships between poverty and psychopathology: a natural experiment. *Journal of American Medical Association*, 2003, 290: 2023–2029.
13. Rossi PH, Lipsey MW, Freeman HE. *Evaluation: a systematic approach* (7th edition). Thousand Oaks, CA, Sage, 2004.
14. Jones LJ. *Guidelines for programs seeking funding in the new evidence-based culture: defining program theory, specifying outcomes, and planning for evaluation*. Durham, NH, Crimes Against Children Research Center [in press].

15. Reynolds AJ, Mathieson LC, Topitzes JW. Do early childhood interventions prevent child maltreatment? A review of research. *Child Maltreatment*, 2009, 14: 182–206.
16. MacMillan HL et al. Interventions to prevent child maltreatment and associated impairment. *Lancet*, 2008, 373: 250–266.
17. Chaffin M. Is it time to rethink Healthy Start/Healthy Families? *Child Abuse and Neglect*, 2004, 28: 589–595.
18. Birkeland S, Murphy-Graham E, Weiss C. Good reasons for ignoring good evaluation: the case of the drug abuse resistance education (D.A.R.E.) program. *Evaluation and Program Planning*, 2005, 28: 247–256.
19. Kulis S et al. Promoting reduced and discontinued substance use among adolescent substance users: effectiveness of a universal prevention program. *Prevention Science*, 2007, 8: 35–49.
20. Petrosino A, Turpin-Petrosino C, Buehler J. “Scared Straight” and other juvenile awareness programs for preventing juvenile delinquency. *Campbell Systematic Reviews*, 2004, DOI:10.4073/csr.2004.2.
21. Washington State Institute for Public Policy. *Evidence-based juvenile offender programs: program description, quality assurance, and cost*. Document number 07-06-1201, 2007. Retrieved from <http://www.wsipp.wa.gov/rptfiles/07-06-1201.pdf>
22. Louw J. Improving practice through evaluation. In D Donald, A Dawes, J Louw (eds.), *Addressing childhood adversity* (pp. 60–73). Cape Town, South Africa: David Philip Publishers, 2000.
23. Moran P, Ghatge D, van der Merwe A. *What works in parenting support? A review of the international evidence*. London, UK, Department for Education and Skills, 2004. Retrieved from <http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/RR574.pdf.pdf>
24. Huser M, Small SA, Eastman G. What research tells us about effective parenting education programs. *What Works, Wisconsin Fact Sheet*. Madison, WI, University of Wisconsin – Madison/Extension, 2008. Retrieved from http://whatworks.uwex.edu/attachment/factsheet_4parentinged.pdf
25. Shadish WR, Cook TD, Campbell, DT. *Experimental and quasi-experimental designs for generalised causal inference*. Boston, MA, Houghton Mifflin, 2002.
26. Valle LA et al. *Sexual and intimate partner violence prevention programs evaluation guide*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2007.
27. Bless C, Higson-Smith C, Kagee A. *Fundamentals of social research methods: an African perspective (4th edition)*. Cape Town, South Africa, Juta & Co Ltd, 2006.
28. Birckmayer JD, Weiss CH. Theory-based evaluation in practice: what do we learn? *Evaluation Review*, 2000, 24: 407–431.
29. Merriam SB. *Case study research in education: a qualitative approach*. San Francisco, CA, Jossey-Bass, 1988.
30. MacLeod J, Nelson G. Programs for the promotion of family wellness and the prevention of child maltreatment: a meta-analytic review. *Child Abuse and Neglect*, 2000, 24: 1127–1149.
31. Olds DL, Sadler L, Kitzman H. Programs for parents of infant and toddlers: recent evidence from randomized trials. *Journal of Child Psychology and Psychiatry*, 2007, 48: 355–391.
32. Prinz RJ et al. Population-based prevention of child maltreatment: the U.S. Triple P System Population Trial. *Prevention Science*, 2009, 10: 1–12.
33. Lundahl BW, Nimer J, Parsons B. Preventing child abuse: a meta-analysis of parent training programs. *Research on Social Work Practice*, 2006, 16: 251–262.

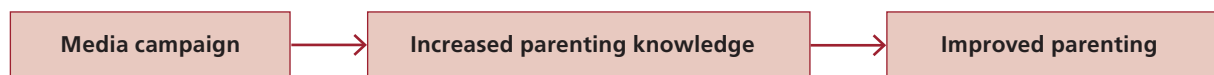
34. Barlow J, Simkiss D, Stewart-Brown S. Interventions to prevent or ameliorate child physical abuse and neglect: findings from systematic review of reviews. *Journal of Children's Services*, 2006, 1: 6–28.
35. Olds DL et al. Improving the delivery of prenatal care and outcomes of pregnancy: a randomized trial of nurse home visitation. *Pediatrics*, 1986, 78: 16–28.
36. Olds D et al. Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial. *Journal of the American Medical Association*, 1998, 280: 1238–1244.
37. Olds D. The Nurse–Family Partnership. In R Haskins, WS Barnett (eds.), *Investing in young children: new directions in federal preschool and early childhood policy* (pp. 69–77). Center on Children and Families at Brookings and the National Institute for Early Education Research, 2010. Retrieved from http://www.brookings.edu/~media/research/files/reports/2010/10/13%20investing%20in%20young%20children%20haskins/1013_investing_in_young_children_haskins_ch6.pdf
38. Hutchings J et al. Parenting intervention in Sure Start services for children at risk of developing conduct disorder: pragmatic randomised controlled trial. *British Medical Journal*, 2007, 334: 678–682.
39. Eisenstadt TH et al. Parent-Child Interaction Therapy with behavior problem children: relative effectiveness of two stages and overall treatment outcome. *Journal of Clinical Child Psychology*, 1993, 22: 42–51.
40. Farrington DP. Childhood risk factors and risk-focused prevention. In M Maguire, R Morgan, R Reiner (eds.), *The Oxford handbook of criminology (4th Edition)* (pp. 602–640). Oxford, UK: Oxford University Press, 2007.
41. Eckenrode J et al. Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19-year follow-up of a randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 2010, 164: 9–15.
42. Knerr W, Gardner F, Cluver L. Improving positive parenting skills and reducing harsh and abusive parenting in low- and middle-income countries: a systematic review. *Prevention Science*, 2013, DOI: 10.1007/s11121-012-0314-1.
43. Cooper PJ et al. Improving quality of mother-infant relationship and infant attachment in socioeconomically deprived community in South Africa: randomised controlled trial. *British Medical Journal*, 2009, DOI: 10.1136/bmj.b974.
44. Rahman A et al. Cluster randomized trial of a parent-based intervention to support early development of children in a low-income country. *Child: Care, Health & Development*, 2009, 35: 56–62.
45. United Nations Office on Drugs and Crime. *Guide to implementing family skills training programmes for drug abuse prevention*. Vienna, Austria, United Nations Office on Drugs and Crime, 2009.
46. Castro FG, Barrera M, Holleran Steiker LK. Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology*, 2010, 6: 213–239.
47. Barrera M, Castro FG. A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology Science and Practice*, 2006, 13: 311–316.
48. Lau AS. Making the case for selective and directed cultural adaptations of evidence-based treatments: examples from parent training. *Clinical Psychology: Science and Practice*, 2006, 13: 295–310.
49. Mikton C. Two challenges to importing evidence-based child maltreatment prevention programs developed in high-income countries to low- and middle-income countries: generalizability and affordability. In H Dubowitz (ed.), *World Perspectives on Child Abuse (10th Edition)*. Colorado, USA, International Society for Prevention of Child Abuse and Neglect, 2012.
50. Reid MJ, Webster-Stratton C, Beauchaine TP. Parent training in Head Start: a comparison of program response among African American, Asian American, Caucasian, and Hispanic Mothers. *Prevention Science*, 2001, 2: 209–227.

51. Wessels I. *Parenting programmes in South Africa: investigating design and evaluation practices*. Unpublished thesis, University of Cape Town, Cape Town, South Africa, 2012.
52. Kaminski JW et al. A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, 2008, 36: 567–589.
53. Thornton TN et al., eds. *Best practices of youth violence prevention: a sourcebook for community action*. Atlanta, GA, Centres for Disease Control and Prevention, National Centre for Injury Prevention and Control, 2000.
54. Nation M et al. What works in prevention: principles of effective prevention programs. *American Psychologist*, 2003, 58: 449–456.
55. Sanders MR, Prior J, Ralph A. An evaluation of a brief universal seminar series on positive parenting: a feasibility study. *Journal of Children's Services*, 2009, 4: 4–20.
56. University of Delaware. *Measuring the fit with best practices for parent education and support programs*. (n.d.). Retrieved from <http://ag.udel.edu/extension/fam/recprac/criteria.pdf>. Accessed 10 June 2011.
57. Day C et al. Evaluation of a peer led parenting intervention for disruptive behaviour problems in children: community based randomised controlled trial. *British Medical Journal*, 2012, DOI: 10.1136/bmj.e1107.
58. Justice Research and Statistics Association, Juvenile Justice Evaluation Center. (2003). *Evaluability assessment: examining the readiness of a program for evaluation* (Program Evaluation Briefing Series 6). Washington, DC, Justice Research and Statistics Association, 2003. Retrieved from <http://www.jrsa.org/pubs/juv-justice/evaluability-assessment.pdf>
59. W.K. Kellogg Foundation. *W.K. Kellogg Foundation Evaluation Handbook*. W.K. Kellogg Foundation, 1998. Retrieved from www.wkkf.org/knowledge-center/resources/2010/W-K-Kellogg-Foundation-Evaluation-Handbook.aspx
60. Centers for Disease Control and Prevention. Framework for program evaluation in public health. *Morbidity and Mortality Weekly Report*, 48 (No. RR-11), 1999. Retrieved from <http://www.cdc.gov/eval/framework/index.htm>
61. World Health Organization. *Workbook 7: Outcome Evaluation*. World Health Organization, United Nations International Drug Control Programme, and European Monitoring Center on Drugs and Drug Addiction, 2000.
62. Caldwell BM, Bradley, RH. Using the HOME inventory to assess the family environment. *Pediatric Nursing*, 1988, 14: 97–102.
63. Eyberg SM, Robinson EA. *Dyadic parent-child interaction coding system*. Parenting Clinic, University of Washington, Seattle, WA, 1981.
64. Eyberg SM, Ross AW. Assessment of child behavior problems: the validation of a new inventory. *Journal of Clinical Child Psychology*, 1978, 7: 113–116.
65. Straus MA et al. Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: development and psychometric data for a national sample of American parents. *Child Abuse and Neglect*, 1998, 22: 249–270.
66. Goodman R. The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry*, 1997, 38: 581–586.
67. Angold A et al. The development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. *International Journal of Methods in Psychiatric Research*, 1995, 5: 237–249.

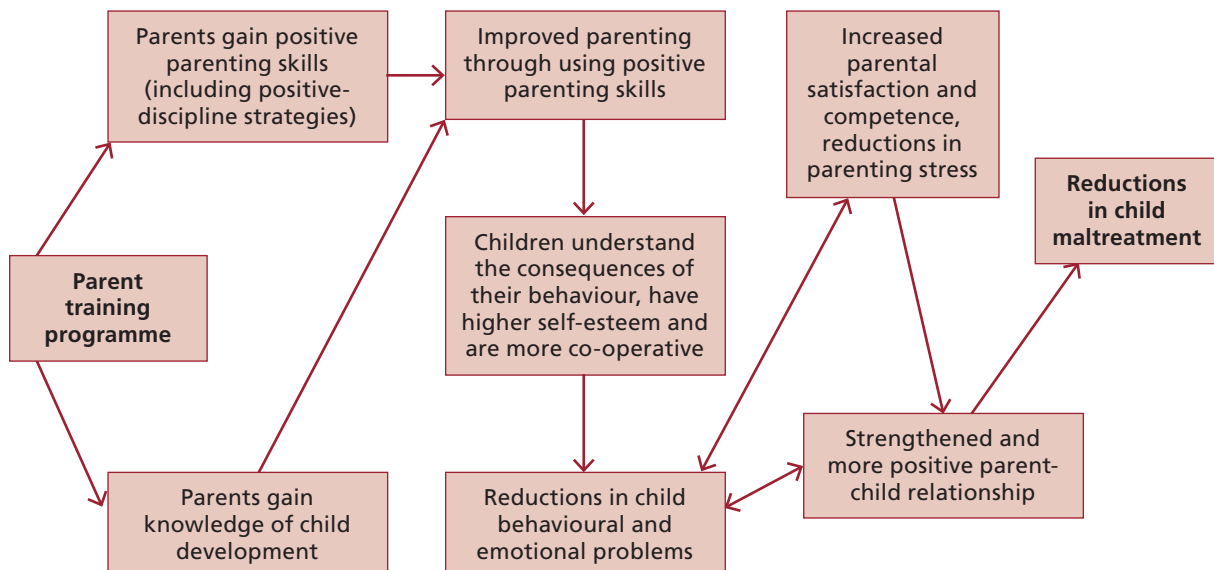
68. Frick PJ. *The Alabama Parenting Questionnaire*. Unpublished rating scale. University of Alabama, Tuscaloosa, AL, 1991.
69. Guidubaldi J, Cleminshaw HK. The development of the Cleminshaw-Guidubaldi Parent Satisfaction Scale. *Journal of Clinical Child Psychology*, 1985, 14: 293–298.
70. Abidin RR. *Parenting Stress Index Manual*. Charlottesville, VA, Pediatric Psychology Press, 1983.

Creating a diagram of programme theory

Here is an example of a simple programme theory diagram for a media campaign on positive parenting skills. The campaign aims to increase parents' knowledge of positive parenting in order to improve parenting behaviour.



For more complex programmes, the programme theory is likely to have several mechanisms through which it hopes to achieve its aims. The programme theory diagram below is for the Caring Families programme, which aims to reduce child maltreatment rates. Through taking part in the programme, parents learn about child development and gain parenting skills (including skills in positive discipline). Through this programme, parenting is likely to be more positive, which may lead to children having higher self-esteem, being more co-operative, and being more aware of the consequences of bad behaviour; in turn, children are less likely to develop behavioural and emotional problems. As a result, parents may feel less stressed and more satisfied and competent as parents. All of this together may lead to a better parent-child relationship, and to further reductions in children's behavioural and emotional problems, and so reduce the likelihood of child maltreatment.





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