South African
CRIME QUARTERLY
No. 51 | Mar 2015

- Early intervention: a foundation for lifelong violence prevention
- The impact of parenting on child behaviour and mental health
- Violence prevention and early childhood development
- Addressing sexual and intimate partner violence in South Africa
- The strengths and limitations of randomised controlled trials
- Violence prevention programmes: considerations for selection and implementation
The Institute for Security Studies is an African organisation which aims to enhance human security on the continent. It does independent and authoritative research, provides expert policy analysis and advice, and delivers practical training and technical assistance.

© 2015, Institute for Security Studies

Copyright in the volume as a whole is vested in the Institute for Security Studies, and no part may be reproduced in whole or in part without the express permission, in writing, of both the authors and the publishers.

The opinions expressed do not reflect those of the Institute, its trustees, members of the Advisory Council or donors. Authors contribute to ISS publications in their personal capacity.

ISBN 1991-3877

First published by the Institute for Security Studies,
P O Box 1787, Brooklyn Square 0075
Pretoria, South Africa

www.issafrica.org

SACQ can be freely accessed on-line at

Editor
Chandré Gould  e-mail cgould@issafrica.org

Editorial board
Professor Ann Skelton, Director: Centre for Child Law, University of Pretoria
Judge Jody Kollapen, High Court of South Africa
Dr Jonny Steinberg, Research Associate, Centre for Criminology, Oxford University
Dr Jamil Mujuzi, Faculty of Law, University of the Western Cape
Associate Professor Catherine Ward, Department of Psychology, University of Cape Town
Associate Professor Dee Smythe, Director of the Centre for
Law and Society, University of Cape Town
Professor Bill Dixon, Professor of Criminology, School of Sociology
and Social Policy, University of Nottingham, UK
Professor Rudolph Zinn, Department of Police Practice, University of South Africa
Associate Professor Lukas Muntingh, Project Coordinator, Civil Society Prison Reform Initiative,
Community Law Centre, University of the Western Cape

Cover
Mother and child at Stellenbosch University’s Prevention Research for
Community, Family and Child Health assessment centre in Khayelitsha, 2014
© Claire Greenspan

Production  Image Design 071 883 9359
Printing  Remata
## Contents

**SA Crime Quarterly**  
No. 51 | March 2015

### Editorial

**Violence can be prevented** ........................................................................................................................................... 3

### Commentary

**Early intervention** ........................................................................................................................................................ 5

A foundation for lifelong violence prevention  
*Sarah Skeen, Mark Tomlinson, Catherine L Ward, Lucie Cluver and Jamie M Lachman*

### Research articles

**Spare the rod and save the child** ....................................................................................................................................... 9

Assessing the impact of parenting on child behaviour and mental health  
*Catherine L Ward, Chandré Gould, Jane Kelly and Katya Mauff*

**Calling for a comprehensive approach** ........................................................................................................................ 23

Violence prevention and early childhood development  
*Joanne Phyfer and Lorenzo Wakefield*

**Programmes for change** .................................................................................................................................................. 31

Addressing sexual and intimate partner violence in South Africa  
*Nwabisa Jama Shai and Yandisa Sikweyiya*

### Theoretical contributions

**Improving the efficiency of evidence-based interventions** .......................................................................................... 43

The strengths and limitations of randomised controlled trials  
*Mark Tomlinson, Catherine L Ward and Marguerite Marlow*

**Violence prevention programmes** ................................................................................................................................... 53

Considerations for selection and implementation  
*Anik Gevers and Elizabeth Dartnall*

---

**Editorial policy**

*South African Crime Quarterly* is an inter-disciplinary peer-reviewed journal that promotes professional discourse and the publication of research on the subjects of crime, criminal justice, crime prevention and related matters, including state and non-state responses to crime and violence. South Africa is the primary focus of the journal but articles on the above-mentioned subjects that reflect research and analysis from other African countries are considered for publication, if they are of relevance to South Africa.

*SACQ* is an applied policy journal. Its audience includes policymakers, criminal justice practitioners and civil society researchers and analysts, including academics. The purpose of the journal is to inform and influence policymaking on violence prevention, crime reduction and criminal justice. All articles submitted to SACQ are double-blind peer-reviewed before publication.
Violence permeates and profoundly affects almost every aspect of our lives in South Africa. It poses a significant threat to the overall health and well-being of our nation and has a negative impact on development. Major strides are being made internationally in how to best respond to provide services for survivors of violence, particularly in the field of gender-based violence.¹ There is, however, an urgent need to complement what is being done in the field of response with primary prevention programming.

Violence can be prevented. Limited evidence on what works to prevent violence before it occurs and the capacity to develop and deliver evidence-based programmes have been major barriers to the prevention agenda – but this is changing. South Africa is leading the way in building evidence for the primary prevention of violence in low- and middle-income countries, particularly in the area of gender-based violence. Promising practices in stopping violence before it starts, based on clear theoretical frameworks, informed by local practices and rooted in risk factors that drive the violence, are available for adaptation and potential scale-up in South Africa.² This special edition of SACQ is dedicated to the violence prevention efforts currently underway in the country.

Violence prevention generally falls into three categories: primary, secondary and tertiary. Simply put, primary prevention of violence includes programmes that aim to prevent violence before someone is harmed, while secondary and tertiary prevention are those programmes that intervene early, or follow after violence has occurred, aiming to prevent its recurrence. Primary prevention programmes usually engage with all people, whereas secondary and tertiary prevention programmes work with high-risk groups, victim-survivors or perpetrators.

In this edition of SACQ we focus on primary prevention programmes – those programmes aiming to address the factors that increase the risk of someone perpetrating or becoming a victim of violence. It is important to highlight that all forms of prevention (primary, secondary and tertiary) are important, and in many instances are connected.

Understanding what drives violence is a critical aspect of primary prevention programmes. Violence against women, for example, is fundamentally about gender inequality, and is to a great extent related to gender norms and relationship factors. Men's use of violence is also related to beliefs about masculinity, i.e. being tough, sexual performance and being dominant over women. Men's experiences of violence, particularly in childhood, are strongly associated with their perpetration of violence against women as adults.³

An increasing body of literature shows us that there are linkages between different forms of violence. It is therefore not surprising that in some instances different forms of violence share the same risk factors.⁴ This research has implications for intervention and prevention programmes: firstly, several risk factors are rooted in childhood and thus violence prevention efforts must begin in childhood; and secondly, the linkages between different forms of violence suggest that targeting key shared risk factors may strengthen the impact of violence prevention programmes.

By intervening early we can profoundly influence the life trajectory of children and invest in a long-term and long-lasting violence prevention effort. In their commentary, Sarah Skeen and colleagues note that early intervention sets a strong foundation for lifelong violence prevention. Compelling research by Cathy Ward and colleagues on the connections between parenting, childhood aggression and mental health shows how parenting stress, parents’ relationship difficulties and their mental health problems have a direct impact on the behaviour of their
children, thus concluding that interventions supporting parents are essential in violence prevention. Parenting programmes that help parents develop safe and secure attachments with their children, promote positive discipline strategies with their children, and implement mental health promotion and adaptive coping strategies in their lives can inoculate against the contagion of violence throughout lives and across generations. This is further supported by Joanne Phyfer and Lorenzo Wakefield. In their article they argue for increased intersections between the delivery of early childhood development services and the primary prevention of violence in South Africa, but note the lack of a policy framework for the nationwide scale-up of evidence-based programmes.

Evidence-based programmes are those programmes that are well designed; thoughtful; build on what has been done before and has been found to be effective; informed by a theoretical model (risk/protective factors); guided by formative research and successful pilots; and are multi-faceted and address several causal factors. South Africa is home to some of the few sexual and intimate partner violence prevention programmes that have been rigorously tested and found effective in a low resource setting. A summary of these is discussed in the article by Nwabisa Jama-Shai and Yandisa Sikwewlya. The challenge for us as a country is to scale up what we know to be effective.

Other programmes yet to be adapted and tested in South Africa, but worthy of our attention, include programmes from the African region such as the SASA! Programme, which engages with communities to change gender social norms, and Safe Homes and Respect for Everyone (SHARE), which aims to prevent intimate partner violence by transforming community attitudes about women’s status and the acceptability of violence against women. Both these programmes have been rigorously evaluated and found impactful.

Policymakers must ensure that their violence prevention policies and programmes are evidence based. To do this, they need to understand what constitutes good evidence, be prepared to invest time and resources in rigorous evaluations of programmes, and work with researchers to keep abreast of the field, thus ensuring that public funds are spent on what is currently understood to be effective.

Mark Tomlinson and colleagues argue that evaluation of programmes should be an essential part of public investment. They provide guidance on what is viewed as best evidence and what type of evidence we should use to make decisions on where to invest precious public funds.

South Africans are at the forefront of the field of primary prevention of violence in low- and middle-income countries, with several effective or promising programmes for prevention being developed and tested in the country. More work and resources are needed to build capacity and scale up these evidence-based programmes. We have the tools – now we need the political will, resources and strategies to take these programmes to scale to move toward a safe and vibrant South Africa for all.

Elizabeth Dartnall and Anik Gevers (Guest editors)

Notes

2 WHO and the London School of Hygiene and Tropical Medicine, Preventing intimate partner and sexual violence against women: taking action and generating evidence, 2010.
Early intervention

A foundation for lifelong violence prevention

Sarah Skeen, Mark Tomlinson, Catherine L Ward, Lucie Cluver and Jamie M Lachman*

skeen@sun.ac.za

http://dx.doi.org/10.4314/sacq.v51i1.1

High levels of violence affect every family in South Africa. Exposure to violence starts early, in both the home and community. There are high levels of physical abuse of children, and the national under-five homicide rate is more than double that of other low- and middle-income countries. Rates of violence are particularly high in poorer communities in the country, and many children already made vulnerable by poverty are also at risk from increased exposure to violence.

This is concerning, given the far-reaching consequences of violence. Children affected by violence run the risk of experiencing long-lasting effects on their health and developmental outcomes. For example, harsh physical abuse during childhood has been linked to increased rates of depression and attempted suicide. Affected children are also more likely to engage in harmful use of substances and risky sexual behaviour, and become HIV-infected.5 Perhaps most concerning is evidence of a cycle of violence: a child exposed to violence is more likely to engage in violent behaviour, rape and intimate partner violence during later life, bully other children, engage in youth violence and delinquency, and become an abuser, while also being more at risk of abuse or victimisation as an adult.10

Risk for violence perpetration is complex and driven by broader societal and cultural drivers, community factors, relationships with family and peers, and individual characteristics.11 There is very little research from South Africa and other low- and middle-income countries on violence and its link with childhood experiences. In high-income settings, however, it has been shown that key predictors of violent behaviour include early childhood factors such as hyperactivity and parental attachment, parenting problems and family conflict.12 We also know that the effects of violence exposure are likely magnified in unstable and volatile family contexts, and that many of the risk factors for early violence also predict intimate partner and sexual violence.14 Finally, we have a growing understanding of the relationship between early negative experiences and brain development, and how chronic ‘toxic stress’ may lead to difficulties in self-regulation, poor control of emotions, and aggressive behaviour in later life.15

This evidence suggests that primary prevention initiatives for violence perpetration should start early – during pregnancy and in early childhood. Indeed, the World Health Organization recognised the development of nurturing relationships between infants and their caregivers as the first ‘best buy’ in violence prevention.16 Having early secure and caring relationships is central to the development of a range
of social skills that lay the groundwork for successful interpersonal relationships in later life. While there are limited evaluated early intervention programmes for violence prevention, there is some evidence from South Africa that home-based interventions can promote secure child attachment and better mother-child interaction. For example, the Thula Sana project, which took place in Khayelitsha, showed that home-visiting by lay health workers during pregnancy and the first six months after birth promoted maternal sensitivity and resulted in higher rates of secure infant attachment.

However, given the complex, multi-layered causality of violent behaviour, focusing solely on early interventions is unlikely to have a sustained impact on preventing violence, particularly in countries of extremely high burden such as South Africa. Early intervention should not be seen as a magic bullet, and should rather form part of a suite of interventions across the lifespan. Multiple sectors and stakeholders should be involved in the development and implementation of evidence-based policies and programming that promote non-violent conflict resolution, gender equality and poverty reduction. There are several examples of primary prevention initiatives to guide the development of these interventions. After infancy, parent training programmes show promise for helping parents reduce behavioural problems (including aggression) in young children (under age 10), although evidence for programmes that work for older children is growing.

There is evidence that school-based programmes can prevent interpersonal violence among children and youths of schoolgoing age. Teaching young children and adolescents life skills (particularly for non-violent conflict resolution) has a strong evidence base for preventing violence. Schools that emphasise academic achievement also help to prevent violence and other risk behaviours. After-school activities for children and adolescents that promote skills and are well-supervised are key interventions that allow for positive youth development. Interventions that reduce misuse of alcohol and other substances are critical, as are community-based programmes that address key risk factors.

Early intervention provides the foundation for preventing violence in South Africa. It is crucial that children are given the opportunity to thrive in safe and nurturing environments throughout their childhood. Perhaps activist Frederick Douglass said it best: ‘It is easier to build strong children than to repair broken men.’

Notes


Parenting has a considerable impact on children’s behaviour and mental health. Improving child health and behaviour requires an understanding of the relationship between parenting practices; contextual factors such as parental mental health, intimate partner violence, substance abuse and poverty; and children’s behaviour. In this article the authors report the findings of a survey of parenting and child behaviour in a small rural South African community. The findings show that corporal punishment, the stress of parenting and parental mental health are significantly associated with both children’s internalising (depression and anxiety) and externalising (rule-breaking and aggression) symptoms. Intimate partner violence in the home was also associated with children’s externalising symptoms. These findings imply that parent support and training, and an increase in services to address intimate partner violence and mental health problems, should be prioritised as part of a national violence reduction strategy.

Parenting can have profound effects on children’s mental health and behaviour. Harsh, cold and inconsistent parenting increases the risk that children will develop both externalising disorders (behavioural problems such as aggression)¹ and internalising disorders (anxiety and depression).² Both types of disorder can have serious, lifelong consequences for the individual, family and society, since they affect survival, ability to succeed at education, and employability.³ In light of the high levels of violence, HIV infection, substance misuse and skills shortages in South Africa, preventing these problems is critical.⁴ Inconsistent discipline, poor monitoring and supervision, and harsh punishment (including corporal punishment) all increase the risk that children will develop a disorder:⁵

- Inconsistent discipline has been linked to aggression and other problem behaviours.⁶

When parents make and apply rules for...
children inconsistently, children find it difficult to understand the link between their behaviour and its consequences.\(^7\)

- Failing to monitor a child’s or adolescent’s whereabouts, companions and activities is a very strong predictor of behavioural problems, probably because it removes the opportunity for parents to teach children how to manage their own behaviour and to choose friends wisely.\(^8\)

- Corporal punishment has been shown in a number of studies to increase risk for behavioural problems.\(^9\)

The specifics of these interactions are likely to change as children age. For instance, harsh parenting of a young child may be more likely to include spanking while harsh parenting of a teenager may include more psychological abuse – but harsh, inconsistent discipline at any age has been shown to promote bad outcomes.

On the other hand, positive parenting – when parents are warm and affectionate and have positive interactions with their children – promotes good outcomes for children.\(^10\)

Many parents face a number of stressors that can undermine positive parenting. Single parenting, for instance, reduces social support for parents, and is likely to be associated with economic stress.\(^11\) Poverty affects parenting in a number of ways, largely through increasing the stress of parenting. Parents living in poverty are more likely to be depressed, which increases the likelihood of harsh, inconsistent parenting.\(^12\) They are also less likely to have the social support that may ease the stress of parenting,\(^13\) and are less likely to be warm towards their children or to monitor them sufficiently.\(^14\) Both single parenting and poverty are widespread in South Africa,\(^15\) as are other, related, problems – intimate partner violence, mental health problems and substance misuse\(^16\) – all of which make parenting more difficult. For instance, intimate partner violence increases the stress of managing parenting tasks, both because of the effect it has on the parent victim and because children’s behavioural problems may increase when they are exposed to violence in the home, as they may model the abuser’s behaviour.\(^17\) In addition, children of parents who are mentally ill may be affected both through direct exposure to distressing symptoms and through disruptions to parenting.\(^18\) Substance abuse also affects parenting, as it may reduce inhibitions in parents, making them more likely to be abusive to their children.\(^19\)

Several studies have explored parenting and children’s related problems in South Africa. One study has found that violence at home is associated with both the severity and early age of onset of offending,\(^20\) and another identified inadequate parenting in populations of young South African offenders.\(^21\) Poor parental supervision has been found to be associated with adolescent antisocial behaviour, while parental support has been found to protect against such behaviour.\(^22\)

A study of a Johannesburg birth cohort found that corporal punishment was associated with children’s behavioural difficulties, and contextual stressors were affecting parenting of young children.\(^23\) Finally, conflict between parents has been identified as affecting both externalising and internalising symptoms in South African children, both directly and via parenting.\(^24\)

However, these studies either focus on young offenders, or have not been replicated elsewhere in South Africa, or do not examine both contextual stressors and parenting, or only examine one outcome in children (typically aggression). We sought, therefore, to explore parenting, and its association with children’s externalising and internalising disorders, in an entire South African community.

**Methods**

This study was conducted in a small township in the rural Western Cape. The research process consisted of four phases: a door-to-door community audit conducted in June/July 2012; two surveys of all households in which there were children aged six to 18; and focus group discussions with community members after Survey 2. The community audit showed that there were 304 households in the township with children between the ages of six and 18. This age group was chosen as the measures of parenting and of child behaviour that we were using were all valid for this group.

Survey 1 was conducted in August 2012 and Survey 2 in March 2013. In this article, we report only on
Survey 2, as focus group data indicated that it had greater validity.

Participants

We surveyed one caregiver in each household. Each caregiver was asked to answer questions only about the youngest child in the home aged between six and 18.

The study was approved by the Research Ethics Committee of the Faculty of Humanities at the University of Cape Town. Each caregiver gave informed consent for participation. Provision was made for participants to get help from local child protection agencies in the event that we identified a parent as abusive.

Measures

Parenting was assessed using the Alabama Parenting Questionnaire, designed to assess the kinds of parenting that can either reduce or increase the risk of aggression in children.25 Each response was assessed on a 5-point scale, so that parents were able to choose one of the answers ‘never’, ‘seldom’, ‘sometimes’, ‘often’, or ‘always’. The Parenting Stress Index was used to assess how stressful the caregiver found the task of parenting.26 This scale has clinical cut-offs for the total score and one of the three subscales, Parent-Child Dysfunctional Interactions; the latter cut-off allows one to identify parents at risk of abusing their children.

Children’s externalising (aggressive and rule-breaking behaviour) and internalising (anxiety and depression) were assessed using the Child Behavior Checklist.27 Parents were asked to respond to a statement about their child’s behaviour (e.g., ‘argues a lot’) by choosing one of three options: ‘not true’, ‘somewhat or sometimes true’, or ‘very true or often true’. Children’s behaviour could then be assessed to determine whether it fell into a clinical range (a range that indicates that the attention of a mental health professional is necessary). The Child Behavior Checklist has been found to be reliable in a wide range of countries.28

Contextual variables that might affect parenting were also explored. These included the 28-item version of the General Health Questionnaire, an assessment of the caregiver’s own anxiety and depression, which was used as a continuous score in the analyses but which also allows identification of clinical cases (i.e., that a mental health professional would be very likely to diagnose the respondent with a psychiatric disorder).29 The Alcohol, Smoking and Substance Involvement Test (ASSIST)30 assessed caregivers’ substance misuse; scores were used as a continuous variable in the analysis, but the ASSIST allows categorisation of scores into low- or no-risk, moderate risk or high-risk use of a particular substance; these scores correspond, respectively, to those who need no intervention for substance misuse, those for whom a brief intervention is appropriate, and those who need an intensive intervention.31 Thirty-two items from the Revised Conflict Tactics Scale (CTS-2) were used to assess the caregiver’s experience of intimate partner violence,32 and used as a continuous variable in the analysis. A variable indicating whether the caregiver was a single parent was also included.

Poverty was measured using a modified asset index approach, constructed using multiple correspondence analysis. In addition to a household inventory of assets,33 the following were included: sources of household income, employment status of respondent, and a hunger scale that explored whether family members had ever gone to bed hungry through lack of food.34 The first dimension of the multiple correspondence analysis was used as the poverty variable, explaining 51% of the variability in the data. Higher values of the composite measurement are indicative of greater wealth.

Other demographic variables included in the analysis were the child’s age and gender, the caregiver’s relationship to the child, and how many other children there were in the household. Questionnaires were translated into Afrikaans and isiXhosa, with translations checked by back-translation.

Procedure

To conduct the survey, we selected as fieldworkers community members associated with a respected non-profit organisation that provides youth development activities to the community’s children. Fieldworkers were trained in ethics and in interviewing skills. All questionnaires were administered as
interviews by fieldworkers because we expected a low level of literacy among caregivers. Interviews took about two hours, and were conducted in private. A small incentive (some biscuits) was provided to each caregiver interviewed. Fieldworkers provided respondents with a list of local organisations that provide support around parenting, intimate partner violence and substance misuse.

Five focus group discussions were held with 20 caregivers who had also completed the survey. Community members were recruited to participate in these through an announcement at a public meeting, and flyers were distributed throughout the community, inviting anyone who had been interviewed to attend. Only women volunteered to participate. A small incentive was offered: all participants were given a R50 voucher for a local clothing store. Three themes were explored in these discussions: what it had been like to complete the questionnaires; what methods of discipline were primarily used in the community; and what stressors affected parenting in the township. Participants gave separate informed consent to participate in the focus group discussions.

Data analysis

The focus group discussions were transcribed and analysed using thematic analysis. Thematic analysis involves identifying, analysing and reporting specific patterns (themes) across participants, where a theme refers to a coherent pattern that captures something important in relation to the research questions of the study.35

Before embarking on the quantitative analyses, the data was checked to see whether it met the requirements for regression. Cronbach’s alphas for the Alabama Parenting Questionnaire subscales were very low, and Rasch analysis of the Alabama Parenting Questionnaire data (using the eRm module in R) revealed that the 5-point response options appeared to have been confusing for parents. For instance, it appeared that the distinctions between ‘never’ and ‘seldom’ had been difficult to make. We therefore collapsed the scores so that ‘never’ and ‘seldom’ became one response, and ‘often’ or ‘always’. Cronbach’s alphas for the recoded parental involvement and positive parenting subscales were 0.860 and 0.873 respectively. However, Cronbach’s alphas for poor monitoring and supervision, inconsistent discipline, and corporal punishment all remained below 0.7. For this reason, the first of these two subscales were not used in analyses and we treated corporal punishment as individual items. Mild forms of corporal punishment – spanking and slapping – were grouped separately from the third corporal punishment item, which dealt with beating a child with an object. For the purposes of regression analyses, these were recoded as dummy variables – ‘always spanks or slaps’ and ‘sometimes spanks or slaps’, as a form of punishment.

Cronbach’s alphas for all other scales were above 0.8. Both scales representing children’s behaviour (internalising and externalising) were very skewed, so logarithmic transformations were used to improve the normality of the distributions. All the variables (except the two corporal punishment variables) were centred before being entered into the analysis. In all cases, except corporal punishment and gender, variables were used in their continuous form in the analyses.

Model building was done as follows (using SPSS v22): first the bivariate relationships between each variable and each of the children’s behaviour were investigated, using Pearson correlations. Once relationships had been identified in significant bivariate models, regression was used to explore, in separate models, the relationships between parenting (the subscales of the Alabama Parenting Questionnaire) and child behaviour (internalising or externalising), as well as the effects of the contextual variables (poverty, the stress of parenting, parental mental health, parents’ experiences of intimate partner violence, and parents’ substance misuse). In each case, the child’s age and gender were retained in the models, as these typically have strong relationships to children’s externalising or internalising behaviour.36

In terms of the parenting variables, positive parenting, parental involvement and harsh corporal punishment (“You hit your child with an object”) were not found to
be significantly associated with either child externalising or internalising behaviour and so were excluded from the final models. We then ran a model with only the contextual variables (keeping child age and gender as constants) to see whether they were predictive of child outcomes: poverty, parental substance use and single parenthood were not significant predictors of child externalising and internalising behaviour and so were also excluded from the final models. At each stage where variables were removed from the models, models with and without those variables were compared using appropriate statistics (AIC, BIC and adjusted R-squared).

Next, the enter method of regression was used to develop a final model that explored relationships between all the variables that had been significantly associated with children’s outcomes in the earlier models. Variables were entered into the regression model in the following blocks: first child age and gender, followed by parenting, followed by the contextual variables. Since 64 of the 220 respondents did not answer the questions about intimate partner violence, we ran one model for externalising behaviour that included intimate partner violence (and therefore reflected the subsample that answered these questions), and another that did not (and therefore reflected the full sample). Only one model was used to explore internalising behaviour, as bivariate analyses showed no relationship between intimate partner violence and internalising disorders.

The total number of cases included in each model was 220, and missing data were excluded, using listwise deletion. Influential outliers were excluded from all models. Influential outliers were identified by plotting Cook’s distance against the standardised residual; this identified those cases that may influence models so much that the models then apply only to those individuals, rather than to most people in the township. In the externalising model that included intimate partner violence, one outlier was excluded; in the externalising model that excluded intimate partner violence two were excluded; and in the model for internalising disorders four cases were excluded.

Results

Description of the sample

In 71 homes we did not find a child in the age group 6–18, and in those cases the household was excluded. Fifteen caregivers surveyed in Survey 1 could not be followed in Survey 2 (six refused to participate and nine were not available), and two new caregivers were identified, leaving us with a sample of 220 caregivers and their children. The sample included 217 Afrikaans- and three isiXhosa-speaking caregivers.

Of the children included in the sample, 106 (49.8%) were female and 107 (50.2%) male; in seven cases, caregivers did not report either age or gender. Because this data was missing, these cases were excluded from the analyses. In terms of ages reported, children included in the study covered the full possible age range, from six to 18, with a mean reported age of 10.5 (standard deviation 3.2). Of the 216 caregivers who reported their relationship to the child, the majority (195; 90.3%) were the biological parent of the child. The remaining 21 caregivers were step-parents, grandparents and adoptive or foster parents. Most (187; 86.6%) households included one, two or three children, although some reported up to six children. The majority of caregivers (163; 75.5%) reported that another adult in the household assisted with childcare, although 59 (25.7%) reported that they were single. Nearly half (87; 40.3%) of the children’s fathers were unemployed, and of those who were employed the majority (63; 54.3%) did unskilled manual labour. Similarly, 123 (56.9%) of the children’s mothers were employed, 70 (59.3%) as domestic workers.

In Survey 2 we had 213 children for whom we were able to collect data on the Child Behavior Checklist. The possible range for scores on the externalising subscales was 0–64, and on the internalising subscales 0–74. Parents reported a maximum score of 56 for externalising (with a mean of 7.6 and a standard deviation of 8.4), and a maximum score of 47 for internalising (mean of 5.5, standard deviation of 6.4). These scores were broken down by gender, and by whether children were in need of attention from a mental health professional (Table 1). In total,
13 (6.1%) of the children fell into the borderline clinical range for internalising disorders (a range where the attention of a mental health professional may be helpful) and 26 (12.2%) of the children into the clinical range (a range that indicates that a mental health professional is likely to diagnose a formal mental health disorder). Slightly more children suffered from externalising disorders: 20 (9.4%) fell into the borderline clinical range, and 27 (12.7%) into the clinical range. Some children met criteria for the borderline or clinical range for both internalising and externalising disorders, so that a total of 21 children (9.9%) were identified as falling into either the borderline or clinical ranges for both disorders. If attention was restricted only to those who met the narrow criterion of being in the clinical range for either externalising or internalising disorders, 44 children (20.7%) were likely to have diagnosable mental health problems.

Table 1: Children’s internalising and externalising symptoms, as assessed by the Child Behavior Checklist, by gender

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Mean (std. dev)</th>
<th>Number (%) in borderline clinical or clinical ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Externalising:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls (n=107)</td>
<td>0–33</td>
<td>6.4 (7.0)</td>
<td>Borderline clinical: 9 (8.4% of girls)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 9 (8.4% of girls)</td>
</tr>
<tr>
<td>Boys (n=106)</td>
<td>0–56</td>
<td>8.8 (9.5)</td>
<td>Borderline clinical: 11 (10.4% of boys)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 18 (17.0% of boys)</td>
</tr>
<tr>
<td><strong>Internalising:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls (n=107)</td>
<td>0–35</td>
<td>5.5 (6.0)</td>
<td>Borderline clinical: 3 (2.8% of girls)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 11 (10.3% of girls)</td>
</tr>
<tr>
<td>Boys (n=106)</td>
<td>0–47</td>
<td>5.5 (6.8)</td>
<td>Borderline clinical: 10 (9.4% of boys)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 15 (14.2% of boys)</td>
</tr>
</tbody>
</table>

On the Alabama Parenting Questionnaire, parents reported, on average, involvement with their children a little more than ‘sometimes’; positive parenting ‘often’; and corporal punishment between ‘never’ and ‘sometimes’ (see Table 2 for details). Parents’ reports on the Parenting Stress Index indicated that most parents did not find parenting particularly stressful (see Table 2 for details). However, over one-fifth of parents reported that they found dealing with their child difficult, and almost one-fifth that they were very stressed by parenting their child. Over one-fifth of parents reported such high levels of stress that they were in the clinical range for this; and one-fifth reported such high levels of dysfunctional interactions with their children that they could be regarded as being at risk of abusing their children. However, 68 (32.2%) of parents reported never spanking their children as a punishment, while 58 (27.5%) reported always using spanking or slapping as a punishment.

Contextual variables that could affect parenting – parents’ mental health, experiences of intimate partner violence, and substance misuse – are
reported in Table 3. Most parents reported good mental health, but using the clinical cut-off of a score of 5, as suggested by the developers of the 28-item General Health Questionnaire for identifying those with a diagnosable mental health problem,19 19 parents (8.6%) fall into this category.

Only 169 parents answered the questions about intimate partner violence. On average, reported rates were very low, with the majority of parents (111; 47.6%) reporting no violence between them and their partners. The most frequent forms of violence that were reported included shouting and yelling between partners, partners insulting or swearing at each other, stomping out of the house during an argument, and pushing, shoving or slapping each other. However, some experiences of extreme violence were reported, in each case by only one person. These included one partner choking the other, one partner threatening the other with a knife or a gun, or one partner beating the other up.

In terms of substance misuse, tobacco was the most frequently reported substance used, followed by alcohol. Of the 215 parents who reported alcohol use, 49 (22.8%) reported using it at risky levels. Two parents (1%) also reported risky levels of use of sleeping pills, and 97 parents (45.2%) reported using tobacco at moderate or highly risky levels. Of the drugs that parents reported using, only alcohol is likely to be associated with difficulties in parenting,38 and so only their reported alcohol use was used in further analyses.

**Focus group results**

The focus group discussions explored three areas: stressors affecting parenting in the township; what is was like to complete the questionnaires; and methods of discipline used in the community. Data from these discussions showed that several stressors appeared to affect parenting in the township community, including low income, infidelity of intimate partners, and feeling unsupported (both emotionally and financially) by one’s partner. For instance, one participant noted that in the community there were ‘vaders wat nie support wil betaal nie. Hier is baie single moeders’ [fathers that do not want to pay child support. Here there are a lot of single mothers]. The participants felt that this lack of emotional and financial support from fathers had a negative effect on their parenting.

The discussions also showed that some community members were concerned about how their personal information would be used after being surveyed. For example, one participant noted: ‘Ek was ‘n bietjie bekommend’ [I was a bit worried]. This concern may have contributed to higher reports of positive parenting and parental involvement – community members who feared what would be done with their survey information may have wished to create a good impression through emphasising their parenting abilities. It also may have inhibited some participants in answering certain questions, particularly those pertaining to their use of corporal punishment, their experiences with domestic violence, and their substance use and misuse. Indeed, participants from several groups reported that these questions could have made community members feel uncomfortable.

As one participant said: ‘Hulle sal nie daai vrae...’

**Table 3: Contextual variables that may affect parenting**

<table>
<thead>
<tr>
<th></th>
<th>Possible range</th>
<th>Reported range</th>
<th>Mean (std. dev)</th>
<th>Number (%) achieving clinical caseness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poverty (n=233)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parents’ mental health (n=100)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parents’ reports of intimate partner violence (n=169)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parents’ reports of substance misuse (n=215)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tobacco | 118 (54.9%) | 87 (40.5%) | 10 (4.7%) |
Alcohol | 166 (77.2%) | 40 (18.6%) | 9 (4.2%)  |
Sleeping pills | 213 (99.1%) | 1 (0.5%) | 1 (0.5%)  |
beantwoord nie, ek glo nie. Hulle sal stil bly’ [They would not answer those questions, I don’t believe. They would keep quiet].

This discomfort, coupled with the concern about what would be done with personal information, may have contributed to the under-reporting in the survey of corporal punishment, substance use and domestic violence in this community. The discussion by the focus group participants seemed to indicate that there were far more parents who used corporal punishment when disciplining their children, who used substances, and who experienced domestic violence, than might have been reported in the survey. When discussing forms of discipline one focus group participant said: ‘Hier is hope wat die kinders slaan’ [Here there are many who hit their children]. When talking about drinking and drug use one community member noted: ‘Hier is baie mense wat drink’ [here there are many people who drink], and another reported: ‘Die plek is besmet van dwelms’ [This place is infested with drugs]. And when discussing domestic violence, one participant noted: ‘Dit gebeur maar baie’ [It happens a lot].

Parenting and contextual variables and their effects on children

Bivariate relationships between the variables and children’s behaviour are presented in Table 4. Relationships reported here are Pearson’s correlations, with the exception of the corporal punishment variables where we used regressions that included only one variable as a predictor. Corporal punishment (slapping, spanking or hitting the child with an object), stress of parenting, intimate partner violence and parents’ alcohol misuse were all positively associated with externalising symptoms. Positive parenting, slapping or spanking, stress of parenting, and parents’ mental health were all positively associated with internalising symptoms. Neither child age nor child gender was significantly associated with externalising or internalising symptoms. In the model that included intimate partner violence, it was significantly associated with externalising symptoms. In both the models that included and excluded intimate partner violence, spanking or slapping (whether always or sometimes), stress of parenting, and parental mental health were all associated with externalising symptoms. With the exception of intimate partner violence, the same variables were associated with children’s internalising symptoms.

Discussion

In summary, our community-wide survey found that spanking and slapping, stress of parenting, and parental mental health are significantly associated with both children’s internalising and externalising symptoms. In addition, intimate partner violence in the home was associated with externalising symptoms in the subsample that responded to this question. The child’s age and gender, positive parenting, parents’ involvement with their children, the caregiver’s status as a single parent, poverty and parental substance misuse were not significantly

<table>
<thead>
<tr>
<th></th>
<th>Externalising symptoms</th>
<th>Internalising symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive parenting</td>
<td>r=.016, p=.822</td>
<td>r=.178, p=.010</td>
</tr>
<tr>
<td>Parental involvement</td>
<td>r=-.121, p=.08</td>
<td>r=.026, p=.704</td>
</tr>
<tr>
<td>Hits child with an object</td>
<td>F=4.158, p=0.170</td>
<td>F=1.624, p=0.200</td>
</tr>
<tr>
<td>Slaps or spanks child with a hand</td>
<td>F=21.114, p=0.000</td>
<td>F=17.445, p=0.000</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>r=.483, p=.000</td>
<td>r=.507, p=.000</td>
</tr>
<tr>
<td>Parents’ mental health</td>
<td>r=.595, p=0.000</td>
<td>r=.465, p=.000</td>
</tr>
<tr>
<td>Parents’ exposure to intimate partner violence</td>
<td>r=.395, p=.000</td>
<td>r=.283, p=.000</td>
</tr>
<tr>
<td>Parents’ alcohol misuse</td>
<td>r=.163, p=.018</td>
<td>r=.135, p=.052</td>
</tr>
</tbody>
</table>
Table 5: Final model showing the relationship of parenting and contextual variables to children’s externalising symptoms

<table>
<thead>
<tr>
<th>Model 1, including intimate partner violence ((R^2=0.385))</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>Unstandardised Beta</th>
<th>Std. error</th>
<th>Standardised Beta</th>
<th>Unstandardised 95% confidence interval for Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.531</td>
<td>0.058</td>
<td>9.091</td>
<td>0.000</td>
<td>0.416–0.647</td>
<td></td>
</tr>
<tr>
<td>Child's gender</td>
<td>0.110</td>
<td>0.060</td>
<td>0.120</td>
<td>1.835</td>
<td>0.068</td>
<td>-0.008–0.228</td>
</tr>
<tr>
<td>Child's age</td>
<td>0.010</td>
<td>0.009</td>
<td>0.072</td>
<td>1.079</td>
<td>0.282</td>
<td>-0.008–0.028</td>
</tr>
<tr>
<td>Always spans or slaps when child does something wrong</td>
<td>0.288</td>
<td>0.077</td>
<td>0.281</td>
<td>3.752*</td>
<td>0.000</td>
<td>0.136–0.439</td>
</tr>
<tr>
<td>Sometimes spans or slaps when child does something wrong</td>
<td>0.182</td>
<td>0.071</td>
<td>0.196</td>
<td>2.566*</td>
<td>0.011</td>
<td>0.042–0.322</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>0.09</td>
<td>0.002</td>
<td>0.318</td>
<td>4.404*</td>
<td>0.000</td>
<td>0.005–0.013</td>
</tr>
<tr>
<td>Intimate partner violence</td>
<td>0.023</td>
<td>0.006</td>
<td>0.136</td>
<td>2.197*</td>
<td>0.029</td>
<td>0.002–0.040</td>
</tr>
<tr>
<td>Parent's mental health</td>
<td>0.034</td>
<td>0.016</td>
<td>0.148</td>
<td>2.110*</td>
<td>0.037</td>
<td>0.002–0.65</td>
</tr>
</tbody>
</table>

*Significantly associated with externalising symptoms

<table>
<thead>
<tr>
<th>Model 2, excluding intimate partner violence ((R^2=0.374))</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>Unstandardised Beta</th>
<th>Std. error</th>
<th>Standardised Beta</th>
<th>Unstandardised 95% confidence interval for Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.527</td>
<td>0.051</td>
<td>10.317</td>
<td>0.000</td>
<td>0.426–0.628</td>
<td></td>
</tr>
<tr>
<td>Child's gender</td>
<td>0.050</td>
<td>0.051</td>
<td>0.056</td>
<td>0.994</td>
<td>0.322</td>
<td>-0.050–0.151</td>
</tr>
<tr>
<td>Child's age</td>
<td>0.010</td>
<td>0.008</td>
<td>0.074</td>
<td>1.298</td>
<td>0.196</td>
<td>-0.005–0.026</td>
</tr>
<tr>
<td>Always spans or slaps when child does something wrong</td>
<td>0.333</td>
<td>0.065</td>
<td>0.334</td>
<td>5.095*</td>
<td>0.000</td>
<td>0.204–0.462</td>
</tr>
<tr>
<td>Sometimes spans or slaps when child does something wrong</td>
<td>0.213</td>
<td>0.061</td>
<td>0.233</td>
<td>3.477*</td>
<td>0.001</td>
<td>0.092–0.334</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>0.010</td>
<td>0.002</td>
<td>0.366</td>
<td>5.742*</td>
<td>0.000</td>
<td>0.007–0.013</td>
</tr>
<tr>
<td>Parent's mental health</td>
<td>0.036</td>
<td>0.012</td>
<td>0.186</td>
<td>2.998*</td>
<td>0.003</td>
<td>0.012–0.060</td>
</tr>
</tbody>
</table>

*Significantly associated with externalising symptoms

Table 6: Final model showing the relationship of parenting and contextual variables to children’s internalising symptoms \((R^2=0.408)\)

<table>
<thead>
<tr>
<th>Model 2, excluding intimate partner violence ((R^2=0.374))</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>Unstandardised Beta</th>
<th>Std. error</th>
<th>Standardised Beta</th>
<th>Unstandardised 95% confidence interval for Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.479</td>
<td>0.047</td>
<td>10.162</td>
<td>0.000</td>
<td>0.386–0.572</td>
<td></td>
</tr>
<tr>
<td>Child's gender</td>
<td>0.009</td>
<td>0.007</td>
<td>0.067</td>
<td>1.195</td>
<td>0.234</td>
<td>-0.006–0.023</td>
</tr>
<tr>
<td>Child's age</td>
<td>-0.044</td>
<td>0.047</td>
<td>-0.052</td>
<td>-0.940</td>
<td>0.348</td>
<td>-0.136–0.048</td>
</tr>
<tr>
<td>Sometimes spans or slaps when child does something wrong</td>
<td>0.214</td>
<td>0.056</td>
<td>0.251</td>
<td>3.826*</td>
<td>0.000</td>
<td>0.104–0.324</td>
</tr>
<tr>
<td>Always spans or slaps when child does something wrong</td>
<td>0.222</td>
<td>0.061</td>
<td>0.234</td>
<td>3.659*</td>
<td>0.000</td>
<td>0.102–0.342</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>0.012</td>
<td>0.002</td>
<td>0.455</td>
<td>7.139*</td>
<td>0.000</td>
<td>0.008–0.015</td>
</tr>
<tr>
<td>Parent's mental health</td>
<td>0.012</td>
<td>0.010</td>
<td>0.136</td>
<td>2.197*</td>
<td>0.029</td>
<td>0.002–0.040</td>
</tr>
</tbody>
</table>

*Significantly associated with internalising symptoms
associated with children’s symptoms. Based on the self-report of caregivers, the study also found that more than one-fifth of children living in the township would benefit from mental health treatment, as would more than one in 11 caregivers.

**Children’s mental health**

In a large study assessing children’s problems across 31 countries, including Ethiopia (the only African country included in the study), the means for both internalising and externalising were both 6.2, and did not differ significantly by age and gender. In the current study, children’s mental health appears to follow similar patterns. It is not unusual that there were children who were in the clinical range for both internalising and externalising disorders: depression, for instance, is strongly related to behavioural problems, particularly in boys.

The high rate of mental health problems among the township’s children is cause for concern. This township is rural, and rates of mental health disorders tend to be lower in rural settings. In 2012, 54.6% of South African children lived in urban areas and may therefore have higher rates of mental health symptoms than children in the township where the survey was conducted. What is most interesting about children in this township, and what is likely to generalise to other areas of South Africa, is the relationship between children’s symptoms, the parenting they receive, and the contextual stressors that also may affect these symptoms. This points the way both to interventions for those children who are currently suffering these problems and to interventions that may prevent them from occurring in other children.

The effects of parenting on children’s mental health and behaviour

Positive parenting and parental involvement are protective factors that are both consistently identified in the literature as reducing youth externalising and internalising disorders. It is therefore surprising that they were not identified as playing this role in the township where the survey was conducted. Parents did report high levels of positive parenting and involvement, alongside the use of corporal punishment. It may be that because most township parents reported using these positive strategies, these variables did not discriminate between children who had disorders and those who did not. This high rate of reporting of positive strategies may indeed reflect what parents were doing, or may reflect an element of social desirability in their responses to the questionnaire – that they gave answers they thought would show them in the best light, rather than accurate ones (as suggested by the focus group discussions). In addition, our difficulties with the psychometric properties of the Alabama Parenting Questionnaire may have meant that these variables did not accurately measure these strategies in the township. Future research should seek a measure that is robust for use in this context, seek methods that do not only rely on parent self-report (for instance, observational methods), and explore whether these parenting behaviours are protective in South African communities such as this township.

The strong association between slapping and spanking, and both externalising and internalising disorders, is also in line with the literature from around the world. Slapping and spanking are widely used in the township as a strategy for disciplining children. While it has been proposed in the literature that in such contexts corporal punishment may have weaker associations with children’s behaviour, our data suggest otherwise, as has been found in other contexts where it is also widespread, such as Tanzania and Colombia.

Our study reports on cross-sectional data, and as such we cannot infer that corporal punishment causes children’s mental health and behavioural symptoms. While that is likely, based on the empirical literature, it is also possible that children’s behaviour elicits corporal punishment from parents, and that corporal punishment increases as that behaviour becomes more difficult for parents. Nonetheless, corporal punishment is not an effective strategy for managing child behaviour, and whether elicited by children’s behaviour or not, only increases the risk that the child will develop either externalising or internalising symptoms. The findings do suggest that strategies to reduce the use of corporal punishment and increase the use of positive discipline could have a positive impact on child behaviour and mental health.
Our data identifies the stress of parenting as having a significant role to play in children’s symptoms, and this is underscored by one-fifth of the parents reporting that they had such dysfunctional interactions with their children that they were at risk of abusing their children. Together with the association between corporal punishment and child behaviour, this suggests that parents in the township who found parenting stressful may well have resorted to corporal punishment rather than more effective child management strategies. It also suggests that parenting programmes that teach effective parenting techniques may be helpful in reducing stress through changing parent behaviour and giving parents a sense of success in their parenting, hence reducing children’s symptoms.55

Contextual factors, parenting and children’s behaviour

Contextual factors influence whether parents find parenting stressful or not. Since our study found that neither being a single parent nor poverty was associated with children’s behaviour, it appears that these did not play a role in this context – possibly because the experiences in the township are quite normative.

That substance misuse was not found to be associated with children’s behaviour is most likely because it was under-reported: our focus group data suggests that this is highly likely to be the case. Parental substance misuse is typically associated with poor behaviour in children,56 and future studies of parenting in similar contexts should investigate ways to improve reporting on this important matter.

There is a robust literature pointing to the associations between intimate partner violence and mental health, and parenting and child behaviour.57 Our data show that these relationships also hold in this South African township – and since intimate partner violence appears to have been under-reported in our work, the relationships may be even stronger than we were able to detect in this sample.

Implications

Our study has several limitations: it is cross-sectional, and therefore conclusions about the direction of causality cannot be drawn. It also appears that there was a strong social desirability bias that led to under-reporting of contextual factors such as substance misuse and intimate partner violence, which may well undermine parenting and affect children’s behaviour. However, it does establish that there is a connection between contexts of parenting, parenting behaviour, and children’s mental health and behaviour in this rural South African community, and that rates of children’s problems in this community are high.

In terms of parents’ mental health and experiences of intimate partner violence, our data implies that intimate partner violence and mental health interventions need to be made more widely available in communities. For instance, clinic visits (for children’s or parents’ illnesses or for other routine matters such as immunisation) should be used as an opportunity to screen parents for these problems, and refer them for help. Similar approaches have shown positive results for intimate partner violence in the developed world.58 In the mental health domain, recent analyses suggest that it is both possible and affordable to deliver services in rural areas, using a tiered model where mental health professionals supervise community health workers.59

One possible direct implication for parenting might be a ban on corporal punishment in all contexts, including the family, an approach which appears to have been successful in both Sweden60 and Germany.61 However, there are two reasons not to propose this approach for South Africa. Firstly, South Africa has many good violence prevention policies, but at present enforcement is wholly inadequate.62 While the Swedish ban on corporal punishment carries no criminal sanctions63 and was explicitly intended to change the norm around parenting in Sweden rather than to punish parents who hit their children, it is an open question as to whether such sanction-free legislation would have a similar effect in South Africa. Secondly, deeper examination of the context in which the ban was introduced in Sweden reveals that it was the culmination of a 70-year cultural shift towards making children’s rights to physical integrity more explicit in Swedish law and central in national life.64 While South Africa has been moving to protect children’s rights in policy, for instance, through the Children’s Act 2005 (Act No. 38
of 2005), many South Africans appear to hold patriarchal views that objectify children rather than prioritise their nurturance and development. A focus on achieving a cultural shift away from corporal punishment and towards the use of positive discipline is likely to have a better chance of success than a legislative ban on the use of corporal punishment.

Indeed, our data suggests an alternative approach: equipping parents with effective skills that reduce the stress of parenting, improve children's behaviour and buffer children against adversity. Some parenting programmes have demonstrated effect in these areas, and although the data is equivocal about the relationship between parent training and parents' mental health, some studies suggest that parent training can have positive effects on parents' mental health. Several such programmes are currently in development in South Africa. In addition, the policy around child protection and family intervention seeks to enable an increase in parenting support and training; what is needed now is to ensure that programmes offered to parents work and are based on evidence; and to develop an effective strategy and system for reaching parents that need this support.

**Acknowledgements**

This project, and hence this publication, was supported by a grant from the Open Society Foundation for South Africa (OSF-SA), for which we are very grateful. We also thank the many fieldworkers who collected our data, and the residents of the township who so willingly answered our many questions.

To comment on this article visit [http://www.issafrica.org/sacq.php](http://www.issafrica.org/sacq.php)

**Notes**


5. In this article use of the term 'parent' refers to primary caregivers notwithstanding their biological relationship to the child, e.g. members of the extended family, foster parents or adoptive parents.


29 P Goldberg and VF Hillier, A scaled version of the General Health Questionnaire, Psychological Medicine, 9, 1979, 139–45.

30 R Humeniuk et al, Validation of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), Addiction, 103:6, 2008, 1039–47.


37 DP Goldberg and VF Hillier, A scaled version of the General Health Questionnaire, Psychological Medicine, 9, 1979, 139–45.


40 Ibid.


54 Ibid.
64 Ibid.
68 J Barlow et al, Group-based parent training programmes for improving parental psychosocial health, Cochrane Database of Systematic Reviews, 6, 2012.
Calling for a comprehensive approach

Violence prevention and early childhood development

Joanne Phyfer and Lorenzo Wakefield*

joanne@cjcp.org.za
Lorenzo@apcof.org.za

http://dx.doi.org/10.4314/sacq.v51i1.3

Violence and violent crime are significant social problems in South Africa. Yet currently these problems are only addressed as or after they occur, with the state and civil society missing valuable opportunities to prevent violence before it happens. This article focuses on the intersection between early childhood development services and primary violence prevention interventions. It encourages a developmental approach to violence prevention by promoting healthy physical and social development and preventing direct and indirect exposure to violence during early childhood. The article outlines the extent to which this approach is currently reflected in South Africa’s policy framework and proposes areas of intervention based on local and international literature.

Violence is a significant problem in South Africa and an early childhood development (ECD) approach to violence prevention offers a useful new avenue through which to combat this problem.¹ However, the policy framework currently informing both the implementation of violence prevention and ECD services in South Africa is not integrated. This is problematic, as it means that while services are provided, the importance of early childhood as a site where initial exposure to violence frequently occurs is not fully comprehended and addressed in policy.² As a result, services do not take advantage of the valuable opportunity to optimise the impact of early childhood interventions by including components that seek to prevent violence. Despite being a matter of public health, crime and violence prevention is often perceived as being the responsibility of the criminal justice system; an assumption that fails to recognise how the capacity for violent and criminal behaviour develops over time.³ Addressing the determinants of violence from birth offers an exciting new way to influence the life path of at-risk individuals so that they will be less likely to be future victims or perpetrators of violence.⁴

South Africa has high levels of violence and this impacts negatively on the capacity of individuals to thrive.⁵ Homicide, for example, occurred at a rate of 32.2 per 100 000 people in 2013–14, five times the 2013 global average.⁶ Crime takes place at high rates and is often excessively violent, while women and children are also exposed to high degrees of violence in the home and their communities.⁷ One study, for instance, found that 60 cases of child rape and 13 cases of child abuse were reported in South Africa every day in 2009.⁸ Consistent exposure to violence

* Joanne Phyfer is a researcher at the Centre for Justice and Crime Prevention. Lorenzo Wakefield is a research fellow with the Consortium on Crime and Violence Prevention. This consortium was established by the African Policing Civilian Oversight Forum (APCOF) and the Centre for Justice and Crime Prevention (CJCP).
is hugely detrimental to wellbeing, particularly when exposure occurs at a young age, and early experiences of violence increase the chances of future violence perpetration and revictimisation.9

The high levels of violence in South Africa and the high rates at which children are exposed to violence are therefore not unrelated. It suggests a cycle of violence, where early exposure to violence informs high rates of violence perpetration in the teenage years and adulthood.10 Combatting violence in South Africa therefore requires intervention as early as possible, when the foundations of healthy development can be more significantly enhanced.

Early childhood interventions can play a vital role, promoting not only physical, psychological, emotional and social wellbeing but also preventing violence.11 Critical to this approach is prevention of exposure to direct and indirect violence in early childhood, so that the child is not harmed and violence does not become normalised for the child.12 Promoting development and preventing violence are considered to be interrelated, and reducing any shared risk factors of both violence and developmental difficulties may work to decrease these two negative outcomes overall.13

This article argues that the widespread provision of ECD services, which have been prioritised in South Africa as legislated in the Children’s Act,14 and recognised by the Department of Social Development (DSD) as essential to achieving the goals of the National Development Plan,15 should include the integration of services that focus on preventing exposure to violence. It is widely accepted that ECD interventions:

• Reduce child mortality
• Prevent developmental delay through intensive early intervention and responsive community-based programmes
• Decrease the drain on national resources by reducing school grade repetition and social welfare expenditure
• Build social capital (through enhancing academic performance and strengthening community networks, social infrastructure and service delivery)

However, excluding violence prevention from this scope misses a valuable opportunity to further enhance wellbeing from a young age and potentially decrease the rates of crime and violence in South Africa in the long term. Currently, ECD services consist of basic health provision and early stimulation through the use of registered ECD centres supported by the DSD; however, the reach of these programmes is limited, as for example approximately only 900 000 children of the almost 6 million between the ages of zero and five currently access the DSD’s ECD services.17 There is a need to include programmes that seek to prevent exposure to violence at an early age into the range of services, as well as enhance the capacity and content of current services. Currently, this kind of approach to ECD is not mandated by government policy; ECD services are addressed and conceptualised rather narrowly by policy.

Overview of national policies

A framework of policies is needed to support and guide ECD and violence prevention interventions.18 While there are currently some progressive provisions on ECD in legislature, for example within the Children’s Act, there remain significant gaps in the link between violence prevention policies and ECD in South Africa. For example, there is currently no national strategic plan for violence prevention and response. There is also very little funding available for prevention initiatives in South Africa, despite the prioritisation of ‘prevention and early intervention’ in the Children’s Act.19 The following section will outline the policies relevant to ECD and violence prevention, and go on to discuss the extent to which a developmental approach to violence prevention is addressed within these policies.

The 1996 National Crime Prevention Strategy

The National Crime Prevention Strategy (NCPS) of 1996 was the first national strategy in the new democratic South Africa that approached the prevention of crime in a developmental manner, promoting an inter-sectoral perspective that included:
The criminal justice system
Reducing crime through environmental design
Public values and education
Trans-national crime

The 2001 White Paper on ECD
In 2001, the then Department of Education (DoE) adopted the White Paper on Early Childhood Education, which defined the purpose of an ECD approach as being ‘to protect the child’s right to develop his or her full cognitive, emotional, social and physical potential’. This policy was progressive in its definition of ECD because it acknowledged that ECD should not only ensure early stimulation but also provide a comprehensive approach to the early development of children.

The 2011 Integrated Social Crime Prevention Strategy
The Integrated Social Crime Prevention Strategy (ISCPS), adopted by the DSD, provides for various mechanisms to break the cycle of violence, including early childhood interventions. These interventions are acknowledged to prevent crime and violence and as having the potential to improve the accessibility, transparency and responsiveness of the criminal justice system. The ISCPS states that ‘through providing stimulation, nutrition, protection and care, and health services to our children during the critical stages of their development, we make significant contributions to a safe[r] society.’ The ISCPS therefore conceptualised ECD through a safety lens and as a form of violence prevention.

The 2012 National Development Plan
The National Development Plan (NDP) is the government’s agenda for development until 2030. There are two important areas for intervention relating to ECD and violence prevention in the document: ‘improving education, training and innovation’ and ‘building safer communities’. The ‘improving education, training and innovation’ chapter of the NDP discusses ECD in general terms, encouraging a holistic approach to development. The ‘building safer communities’ chapter contains two relevant points for the incorporation of ECD services and primary prevention of violence:

- An integrated approach to safety and security that requires coordinated activity across a variety of departments, the private sector and civil society
- Equal protection for all vulnerable groups, including women, children and rural communities

The 2015 draft ECD policy
In February 2015 the DSD published a comprehensive, evidence-based draft ECD policy for public comment. It promotes a comprehensive ECD package with provision for funding frameworks and human resources, and proposes a national, government-run ECD Centre to oversee the implementation of such services. In addition, the policy identifies clear goals for scaling up ECD services and indicators for monitoring, implementation and impact.

Discussion of policies and recommendations
Each of the policies outlined above addresses ECD and violence prevention in general terms, either through the comprehensive conceptualisation of ECD services or through the acknowledgement of the importance of safety at every age. However, none expressly links these two fields or conceptualise what a developmental approach to violence prevention should entail.

Changing social norms
For example, the NCPS approaches crime prevention from a developmental standpoint and includes a focus on public values and education, but does not articulate specifically how crime can be prevented through interventions in early childhood. The ‘pillar’ of public values and education would have been the ideal place in which to integrate ECD provisions with safety and violence prevention. However, this component of the NCPS was never implemented, and was arguably too broad and poorly defined.

The sphere of public values is critically in need of intervention, as many of the attitudes and violent behaviours that have an impact on children’s
wellbeing are condoned by social norms. Corporal punishment, for example, is highly normalised in South Africa, but this practice has a negative effect on a child’s wellbeing in a number of ways that include decreasing the quality of the relationship between parent and child, and increasing childhood aggression.27 Another norm that is common globally is the idea that children are possessions of their parents, rather than individuals with agency and rights of their own.28 This justifies overlooking children’s rights, ascribing them instead with very low social status, which may increase their risk of maltreatment or neglect.29 Advocating for the more respectful treatment of children, as well as promoting positive discipline techniques, works to decrease the social acceptability of certain types of violence against young children.

The degree to which violent and aggressive forms of masculinity are celebrated in South Africa also calls for interventions to change public values.30 Hegemonic forms of masculinity promote the idea that men need to be tough, in control and superior; attributes that are easily, and therefore frequently, demonstrated through displays of aggression.31 Not only does this result in the exposure of young children to domestic violence, it also teaches children, and particularly male children, that being a man requires aggression. Changing norms around how men construct their gender identity in South Africa therefore has the potential to substantially decrease levels of violence. Critical to this is normalising caring and respectful forms of masculinity.32 Developing policy that seeks to integrate ECD and violence prevention therefore must involve some consideration of the impact of these social norms and efforts to change public perceptions around violence and violence against children. As it stands, none of the policies outlined does so.

Including violence prevention in a comprehensive approach to ECD

The policies outlined above do not, by and large, consider violence prevention as part of a comprehensive approach to ECD. For example, while the White Paper on ECD conceptualises ECD holistically, it does not explicitly make a case for ECD as a violence prevention strategy. Similarly, the ISCPS considers the intersections between ECD and violence prevention to a greater extent than other policies but does not do this comprehensively. Furthermore, no documents measure the implementation of the ISCPS and the impact that ECD might have on sustainable primary prevention of violence in relation to this strategy.

In its chapter on improving education, training and innovation, the NDP does not conceptualise ECD through the lens of primary prevention of violence and therefore does not contain any proposals to ensure the sustainable prevention of violence through the delivery of ECD services. The section on an integrated approach to safety and security in the NDP focuses on addressing the root causes of crime such as poverty and inequality, and although it acknowledges that a developmental approach to crime and violence prevention is needed, it does not conceptualise this in terms of ECD services. Finally, while the draft ECD policy suggests screening mothers for domestic violence and acknowledges the role of the child protection system, it does not speak to ECD as a sustainable form of violence prevention. This is problematic, as an essential component in a comprehensive approach to ECD is one that involves the prevention of violence.

Considering this, it is important to discuss what a comprehensive approach to violence prevention at an ECD level should include. While current state-provided ECD services focus on health and cognitive stimulation, as noted in the ISCPS, a specific focus on support for and education of parents and caregivers is lacking. Parents have an important role to play in the healthy cognitive and social development of their children, as they model the behaviour from which young children learn.33 Exposure to direct and indirect violence in the home causes stress and fear that negatively affects children’s cognitive development, and also works to normalise violence as a means of problem solving.34 Many caregivers and parents struggle to meet the health, care and educational needs of young children because they are overwhelmed with responsibilities and have limited access to resources.35 Providing social and educational support to a highly stressed parent can be extremely helpful in decreasing the
likelihood of abuse and neglect, and improving the social interaction between parent and child. This can involve educating parents about positive discipline techniques, fostering healthy attachments between parents and children, providing nutritional and health support, and providing guidance on early cognitive stimulation. These services can be provided through home-visiting programmes or group meetings. According to one report, 65 such programmes currently exist in the country, far too few to meet the needs of the population. There is therefore a need for increased parental support as a mechanism through which to promote early childhood wellbeing, and a strategic framework that guides such interventions.

Measuring progress

Developing policies to guide violence prevention interventions at an ECD level is worthwhile for a number of reasons, not least because it will provide a framework against which to measure the impact of interventions on the rate of violence perpetrated against children, and its effects on their wellbeing. Developing suitable indicators for measuring the efficacy of interventions will assist in developing an evidence base from which to establish an effective approach.

According to the DSD’s 2013 annual report, there are currently approximately 18 000 registered ECD centres in the country, with the possibility that there are many more that are unregistered. Although there are many formal and informal ECD programmes available, their efficacy in preventing violence in the long term has not been widely tested in the South African setting. A number of parenting programme evaluations have been conducted internationally, indicating an improvement in the quality of parents’ relationships with their children and the prevention of child maltreatment and childhood aggression.

One systematic review of home visitation programmes found that child maltreatment was reduced by an average of 39%. A study reviewing evaluations in low- and middle-income countries found that home visiting benefited cognitive development, while another found that parenting interventions improved parent–child interactions and parent knowledge. There is thus evidence that parenting programmes can successfully promote children’s well-being and prevent some violence or maltreatment.

A parenting programme focusing on infancy in Khayelitsha is one of the few to be evaluated in South Africa. The evaluation explored how providing support and guidance to women during pregnancy and six months after birth affected the infant’s attachment to the mother and maternal depression rates. The intervention increased the likelihood of a secure attachment between infant and mother, a critical factor in promoting violence prevention.

The long-term impact of parenting interventions on preventing violence later in life is unclear. A longitudinal study found that an effective parenting programme prevented girls from taking up criminal and violent behaviour later in life, but this same effect was not found in boys. The study found that boys in the programme were as likely as those who did not participate in the programme to be involved in crime or violence.

While these evaluations suggest that ECD interventions to reduce violence can be effective, there is a need to expand the evidence base for this, particularly in terms of the unique dynamics of the South African environment. Only once ECD as a primary form of violence prevention has been conceptualised in South Africa, will we be able to conduct evaluations on what works and what does not. ECD has been shown to be an effective means through which to prevent violence in low-, middle- and high-income countries. This should be the rationale for more policy guidance on this issue.

Conclusion

Initiating violence prevention interventions from early childhood may be a critical factor to break the widespread cycles of violence in South Africa. There is currently very little policy guidance on the integration of ECD and primary prevention of violence, despite the prioritisation of both these issues. That said, interest in this intersection is growing, as is evident in the DSD’s work to develop a policy that focuses on ECD as a form of violence prevention. The negative impact of exposure to
violence and constrained development during early childhood has been established, and interventions relating to parenting support in particular have been shown to effectively improve children's outcomes. The development of policy and interventions to meet the needs of South African children is vital for the prevention of violence in the short and long term.

Notes


5 M Bandeira and C Higson-Smith, Responding to the smoke that calls: principles of community-level interventions for the prevention of collective violence, Centre for the Study of Violence and Reconciliation, 2011, 5.


8 G Ismail, N Taleep and S Suffla, Child maltreatment prevention through positive parenting practices: Information sheet, MRC-UNISA Safety & Peace Promotion Research Unit, January 2012.


11 L Richter, Foreword, in L Berry et al (eds), South African child gauge, Cape Town: Children's Institute, University of Cape Town, 2013, 7.

12 ECD+ workshop preceding the WHO's 6th Milestones in the Global Campaign for Violence Prevention Meeting, Meeting Report, Mexico City, Mexico, 12 November 2013.

13 Ibid.


16 N Albino and L Berry, Early childhood development services in South Africa: what are the next steps?, in L Berry et al (eds), South African child gauge, Cape Town: Children's Institute, University of Cape Town, 2013, 78.


22 Ibid., note 11, 24.

23 This is contained in chapter 9 of the NDP.

24 This is contained in chapter 12 of the NDP.


28 F Bruce, Preventing violence against children: a view from the Oak Foundation, Early Childhood Matters, 2011, 56.
29 Ibid.
32 M Miedzian, Boys will be boys: breaking the link between masculinity and violence, New York: Lantern Books, 2002, xxvii.
34 A Lieberman and I Harris, Babies remember: restoring healthy development to young children exposed to trauma, Early Childhood Matters, November 2012, 48.
35 F Bruce, Preventing violence against children: a view from the Oak Foundation, Early Childhood Matters, 2011, 58.
36 Ibid.
38 C Ward and I Wesseels, Rising to the challenge: towards effective parenting programmes, in L Berry et al (eds), South African child gauge, Cape Town: Children’s Institute, University of Cape Town, 2013, 64.
Programmes for change

Addressing sexual and intimate partner violence in South Africa

Nwabisa Jama Shai and Yandisa Sikweyiya*

nwabisa.shai@mrc.ac.za
yandisa.sikweyiya@mrc.ac.za

http://dx.doi.org/10.4314/sacq.v51i1.4

South Africa has a number of locally evaluated interventions that have been designed to prevent sexual and intimate partner violence before it occurs. This article describes such programmes that have been evaluated and found to be promising or effective. Seven locally evaluated primary prevention interventions are described, along with the evidence regarding their level of effectiveness. These interventions include mother-child, parent-teen, individual and group-based interventions. All of these interventions are developed based on evidence and primary prevention principles: a sound theory of change, cultural relevance, participatory methods and evaluation through randomised controlled trials.

Sexual and intimate partner violence in South Africa

According to the World Health Organization (WHO), intimate partner violence (IPV) is the most common form of gender-based violence (GBV). It includes physical, sexual and emotional abuse and controlling behaviour by a current or former intimate partner or spouse, and can occur in heterosexual or same sex couples. Sometimes referred to as partner or domestic violence, IPV is a violation of human rights and a public health concern of which ‘the overwhelming global burden is borne by women’. The WHO estimates that 30%, or one in three women will experience sexual or physical IPV in their lifetime.

Consistent with this estimate, studies report that girls have a two- to threefold risk of sexual abuse compared to boys. While there is some evidence to show that men can and do suffer violence in intimate heterosexual relationships, ‘the prevalence and frequency of IPV against men is highly disputed, with different studies coming to varying conclusions, and many countries having no data at all’. On the other hand, evidence indicates that violence against women and girls is mostly perpetrated by male intimate partners or ex-partners.

Sexual violence is one of the common forms of violence women experience in heterosexual intimate relationships, and has also been reported in women’s same-sex relationships, though to a lesser extent.

Sexual violence is defined as ‘a completed or attempted sex act against the victim’s will, involving a victim who is unable to consent or to refuse, abusive sexual contact, and non-contact sexual abuse, including sexual harassment’, and may be...
perpetrated by a current or previous partner or non-partner.9

Global statistics indicate that at least 20% (one in five) women have been sexually or physically assaulted by a man or men, not necessarily partners, in their lifetime.10 In Ethiopia and Zimbabwe, 26% to 59% of women have been forced to have sex by intimate partners.11 In South Africa, 24.6% to 37.7% of adult women have experienced sexual and/or physical IPV in their lifetime,12 and 31% in their most recent marriage or cohabiting relationships.13

Sexual and intimate partner violence (SIPV) is known to have injurious effects on the physical, mental and sexual health of victims.14 Victimisation by an intimate partner increases women’s health risk behaviours, including alcohol abuse, smoking and non-medical use of sedatives or analgesics.15 A recent systematic review found that ‘women who experienced IPV were less likely to report that their male partners used condoms than women who did not’.16 The degree of harm to the victim may range from mild to severe, including death.17 Other adverse health effects on victims include physical injuries, gynaecological disorders, negative pregnancy outcomes, sexually transmitted infections and mental health problems,18 including post-traumatic stress disorder, severe emotional distress and suicidal thoughts.19 These health impacts have been reported in several studies.20

South Africa has one of the highest rates of SIPV globally.21 This violence has a profound impact on survivors, their families and their communities. There is an urgent need for South Africa to identify and implement effective programmes for the primary prevention of SIPV.

The purpose of this article is to identify and describe programmes that have been evaluated and found to be promising or effective in reducing SIPV in South Africa.

Social determinants of SIPV

Research has identified the factors associated with IPV through the ecological model.22 The ecological model conceptualises that all forms of IPV, including SIPV, result from a confluence of individual, relationship, societal and political factors, driven by pervasive patriarchal norms that promote the use of violence as an acceptable practice in intimate relationships.23 Literature from South Africa similarly describes social factors associated with different forms of GBV,24 pointing to multiple social norms. These include the notion that SIPV is a private matter between the couple in the relationship;25 social norms that promote male control of women and male sexual entitlement; as well as men’s inequitable gender attitudes, risk-taking and antisocial behaviour.26 Ideals of femininity that promote women’s subordination to men27 and expectations on women to acquiesce to male partners’ sexual desire and needs28 play an important role in SIPV. Having less power in relationships also increases women’s vulnerability to forced sex with intimate partners.29 In turn, these factors have been attributed as reasons for low levels of reporting of SIPV.30

Childhood adversity and child sexual abuse is associated with adulthood perpetration of violence or victimisation.31 Attachment – the bond between the primary caregiver (e.g. mother) and child – is integral to how children form later relationships with peers, partners and their own children.32 When attachment is poor due to a negligent or violent relationship with the primary caregiver, the ability to have healthy relationships is disrupted, sometimes for generations, and the risk of perpetrating violence is increased.33 Studies on why some men perpetrate severe forms of violence such as child sexual abuse and intimate femicide suggest that the nature of the relationship men had with their primary caregiver(s) influenced perpetration in adulthood.34 Therefore, challenging these social constructions of gender, gender inequities and parenting practices is central to preventing SIPV before it happens.

Public health approaches to primary prevention of SIPV

Many approaches have been employed in response to SIPV in South Africa, most particularly progressive legislative, judicial and health policies that promote basic human rights and equality. Currently, services provided by government and non-governmental sectors are mainly reactionary in nature as they focus on enforcing the law and ensuring that justice is done, or on restorative justice and providing care
and support to victims. These efforts are considered to be secondary prevention because they come into effect after violence has already occurred. Primary prevention involves efforts to address the underlying causes of SIPV in order to prevent such violence from occurring in the first place.35

A review of the literature and work currently underway in South Africa identified the following seven South African interventions that have been evaluated and found effective, or are currently undergoing evaluation and look promising. The interventions are briefly described below.

Programmes were identified using the following criteria, based on those developed by Whitaker and colleagues:36

• The programme targets sexual and/or intimate partner violence perpetration or victimisation.

• The programme is being evaluated or was evaluated using a study design that included a comparison or control group in an experimental or quasi-experimental design.

• The programme evaluation measured at least one SIPV-related outcome.

• The programme was found promising or effective in reducing SIPV.

**Thula Sana**

Thula Sana is a home-visiting intervention aimed at promoting mothers’ engagement in sensitive, responsive interactions with their infants. It targets pregnant women and mothers of infants aged 0–2 years from low-resource environments. Implementation takes place through home visits twice during pregnancy, then weekly for eight weeks postpartum, thereafter fortnightly for the next two months, and then monthly for two months, resulting in a total of 16 visits over a six-month period. The first evaluation of this programme consisted of a randomised controlled trial (RCT) (1999–2003) to test the efficacy of the intervention. The results at follow-up indicated that mothers in the intervention group were significantly more sensitive and less intrusive in their interactions with their infants. The intervention was also associated with a higher rate of secure infant attachments at 18 months, compared to the control groups. Where social adversity was not extreme, there was also a significant benefit of the intervention in terms of child cognitive outcomes.37 These findings are promising due to the association between poor attachment and later perpetration of violence.38

A follow-up study of the cohort of the same mothers and children, now aged 12–13 years, is currently underway to assess the long-term outcomes on adolescent aggressive behaviour and child growth and cognitive functioning, school attainment and the home environment.39 While the initial findings of the efficacy of this intervention were positive, the only limitation is the lack of measurement of sexual violence in the current RCT. Measuring violent sexual behaviour and experiences would provide invaluable evidence of the links between improvements in attachment and parenting skills and later behaviour.

**The Sinovuyo Caring Families Programmes**

Sinovuyo focuses on reducing the risk of child maltreatment for children from high-risk families among children aged 2–9, and pre-teens and teenagers aged 10–17 years. This is a group-based programme that aims to improve caregiver–child relationships through active social learning (role play, home exercises, modelling, experiential activities, group discussion and problem solving), and caregiver mental health through mindfulness-based stress reduction techniques and social support. The child programme addresses emotion regulation and positive behaviour management approaches over 12 weeks. A parent–teen programme, based on similar principles, is implemented in separate groups of parent and adolescents, with some joint sessions.

A pilot evaluation of the programme for parents of 2–9 year-olds found improvements in positive parenting behaviour (parenting knowledge, skill and competence, discipline and supervision of children, and caregiver mental health and social support) in the intervention group, compared with the control group.40 The programme is being tested in a bigger RCT; post-test data collection is still in progress and so no outcome data is yet available.41 While data analysis is ongoing, preliminary results of the
teenage programme piloted in the rural Eastern Cape showed reductions in parents’ use of violent and abusive discipline and in adolescent rule-breaking and aggressive behaviour.42 Similar to the Thula Sana programme, should these participants be followed over the long term, the new studies would do well to include sexual violence measures to establish the impact on SIPV.

**PREPARE**

PREPARE is an HIV-prevention programme aimed at reducing sexual risk behaviour and IPV among adolescents. This school-based intervention comprises 21 lessons focused on developing individuals’ motivation and skills, with a focus on gender and power, relationships, assertiveness and communication, decision-making, risk-taking, violence, self-protection and support. Another component of the programme aims to create a supportive school environment by working with students, teachers, parents and the police to conduct a participatory school safety audit, develop a safety plan, create a climate of zero tolerance towards violence, and strengthen links with local support services.43 This intervention was initially intended to be implemented during the life orientation class in schools, but in the end it was implemented as an after-school programme. An RCT was conducted in the Western Cape to test its effectiveness and found significant reductions in IPV among young teenagers.44

**Skhokho Supporting Success**

Skhokho Supporting Success is a multi-faceted programme that aims to prevent IPV among young teenagers. The components of the programme engage high school learners directly in classroom sessions and after school workshops; high school educators and school staff through skills building workshops; and parents or caregivers of young teenagers through weekend workshops. These components seek to engage the various participant groups in gender transformative interventions that strengthen relationship-building skills (e.g., communication and conflict resolution, supportive styles of interaction, positive discipline strategies and risk-minimisation strategies), encourage adaptive stress management and mental health promotion, and foster values-based decision-making. While the classroom sessions are facilitated by educators teaching Grade 8 life orientation classes, the other workshops have external facilitators.45

The programme is currently being evaluated in Gauteng in a cluster RCT with 18-month follow-up. The results of the programme impact will be available in early 2016. While this evaluation is still underway, anecdotal evidence from pilot testing of the intervention in Gauteng and the Western Cape suggest high levels of acceptance of the programme and high rates of attendance and participation in both the parent and educator workshops. Parents reported that the new techniques of positive discipline helped reduce their stress levels and that they experienced improved communication with their teenage children and teenage behaviour post intervention. Teenagers appreciated open discussions with parents and reported less harsh discipline by parents.46

**Stepping Stones**

Stepping Stones, a participatory community-based intervention for preventing HIV and strengthening relationship skills, has been rigorously evaluated in an RCT in the Eastern Cape. Stepping Stones is a workshop series designed to promote sexual health, improve psychological well-being and prevent HIV. Workshops are held with two or more peer groups drawn from a single community. The workshop series consists of 10 sessions held with separate peer groups. Stepping Stones was found effective in reducing HIV risk factors such as genital herpes and perpetration of IPV.47 At 24 months’ follow-up, men from the intervention arm reported a 38% reduction in perpetration of SIPV. This same effect was not found among women.48 The qualitative findings of this study suggested that the lack of significant impact on women’s self-reported experiences of IPV (compared to men) may have been influenced by their limited power in relationships, as well as by external sources such as economic independence.49
Stepping Stones and Creating Futures

A third adaptation of Stepping Stones\textsuperscript{50} was combined with a locally developed livelihoods strengthening intervention called Creating Futures.\textsuperscript{51} This intervention is a peer-facilitated group intervention comprising 11 three-hour sessions in single-sex groups of about 20 people, and draws from sustainable livelihoods theory and practice.\textsuperscript{52}

A quasi-experimental study tested the combined effectiveness of livelihood strengthening and reducing HIV risk behaviour and different forms of IPV among young people residing in informal settlements. The combined intervention was tested in a shortened interrupted time series design with one year follow-up.\textsuperscript{53} This evaluation found that there was a significant reduction in women’s experience of SIPV in the three months prior, but this effect was not observed among men. Gender attitudes and controlling behaviour were measured, using scales that have been tested in other studies in South Africa.\textsuperscript{54} Findings show that both men and women significantly improved their gender attitudes, and men significantly reduced their controlling practices in their relationships. This change in social norms is important when considering their association with SIPV. Further evaluation of the impact of this combined intervention on reducing SIPV is planned to start in 2015.

**IMAGE**

The Intervention with Microfinance for AIDS and Gender Equity (IMAGE) was the first to combine a training programme on poverty, gender inequalities, IPV and HIV/AIDS with group-based microfinance. The programme was tested in an RCT and was delivered to adult women during fortnightly loan repayment meetings.\textsuperscript{55} A participatory learning approach was used, with two phases. The first phase comprised 10 one-hour training sessions on gender roles, cultural beliefs, relationships, communication, domestic violence and HIV. The second phase was a wider community mobilisation approach to engage both youth and men in the intervention. After two years there was a significant reduction in past year SIPV experienced by women in the intervention arm. There were improvements in women’s economic wellbeing and their empowerment indicators (self-confidence, financial confidence, challenging gender norms, autonomy in decision-making, perceived contributions to the household, communication within the household, relationship with partner, social group membership and participation in collective action).\textsuperscript{56}

Table 1: Promising and effective primary prevention interventions

<table>
<thead>
<tr>
<th>Intervention name</th>
<th>Intervention aim</th>
<th>Target</th>
<th>Implementation method</th>
<th>Evaluation design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thula Sana</td>
<td>Promote mothers’ engagement in sensitive, responsive interactions with their infants</td>
<td>Pregnant women and mothers of infants aged 0–2 years from low-resource settings</td>
<td>Home visits take place twice during pregnancy, and then occur weekly for 8 weeks postpartum, fortnightly for the next 2 months, and then monthly for 2 months, with 16 visits in total</td>
<td>An RCT to assess the efficacy of an intervention designed to improve the mother–infant relationship and security of infant attachment in a South African peri-urban settlement with marked adverse socioeconomic circumstances Measurement periods: 6, 12, 18 months post-partum</td>
<td>Significant benefit to the mother-infant relationship Mothers in the intervention group were significantly: • More sensitive (6 months: mean difference=0.77 (SD 0.37), t=2.10, P&lt;0.05, d=0.24; 12 months: mean difference=0.42 (0.18), t=−2.04 , P&lt;0.05, d=0.26) • Less intrusive (6 months: mean difference=0.68 (0.36), t=2.28, P&lt;0.05, d=0.26; 12 months: mean difference=−1.76 (0.86), t=−2.28, P&lt;0.05, d=0.24) The intervention was also associated with a higher rate of secure infant attachments at 18 months (116/156 (74%) v 102/162 (63%); Wald=4.74, odds ratio=1.70, P&lt;0.05)</td>
</tr>
<tr>
<td>Intervention name</td>
<td>Intervention aim</td>
<td>Target</td>
<td>Implementation method</td>
<td>Evaluation design</td>
<td>Outcomes</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------</td>
<td>--------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Thula Sana</strong> (continued)</td>
<td></td>
<td></td>
<td></td>
<td>A current study aims to follow up with the mothers and children enrolled in the previous RCT in 2012–2014 – 12–13 year-old children</td>
<td>To assess: • Aggressive behaviour at this stage of their development • Child cognitive functioning and school attainment • Child emotional/behavioural functioning • The home environment, child health and growth, family functioning • Neural functions implicated in self-regulation and the stress response</td>
</tr>
<tr>
<td><strong>The Sinovuyo Caring Families Programme</strong></td>
<td>Improve the parent–child relationship, emotional regulation, and positive behaviour management approaches</td>
<td>Young children, covers the 2–9 years age group</td>
<td>Social learning and parent management training</td>
<td>A quasi-experimental study to test the effectiveness of the intervention</td>
<td>Improvements in positive parenting behaviour in the group that received the programme, as compared with a group of parents who did not receive the programme • High attendance rates (75%) • High participant satisfaction • Culturally acceptable and faithfully implemented by the paraprofessional community facilitators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teens aged 10–17 years</td>
<td>Social learning and parent management training principles, with group-based parent, adolescent, and joint parent-adolescent sessions. Utilises a collaborative learning approach, with activity-based learning, role-play and home practice</td>
<td>A quasi-experimental study, the findings of which have been taken into a bigger RCT</td>
<td>Reductions in parents’ use of violent and abusive discipline, and in adolescent rule-breaking and aggressive behaviour</td>
</tr>
<tr>
<td><strong>PREPARE</strong></td>
<td>Reduce sexual risk behaviour and intimate partner violence, which contribute to the spread of sexually transmitted diseases (STIs)</td>
<td>Young adolescents (12–14 years)</td>
<td>Draws on psychological and behaviour change theory to identify the individual and social determinants that underpin sexuality, intimate partner violence and sexual violence</td>
<td>An RCT to evaluate the effects of the intervention on sexual risk behaviour and intimate partner violence, and to assess the extent to which norms, attitudes and experiences of IPV influence sexual risk behaviour</td>
<td>Significant reductions in IPV among young teenagers</td>
</tr>
<tr>
<td><strong>Skhokho Supporting Success</strong></td>
<td>Prevent IPV among young teenagers</td>
<td>High school learners aged 13–14 years</td>
<td>Classroom sessions facilitated by educators teaching Grade 8 life orientation classes; high school educators and school staff through skill-</td>
<td>Qualitative pilot evaluation of the effectiveness of the intervention in strengthening parent–child relationships and prevent IPV among teens</td>
<td>Parents reported: • The new techniques of positive discipline helped reduce their stress levels</td>
</tr>
<tr>
<td>Intervention name</td>
<td>Intervention aim</td>
<td>Target</td>
<td>Implementation method</td>
<td>Evaluation design</td>
<td>Outcomes</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td>--------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| Skhokho          | Supporting Success | building workshops; and parent–child weekend workshops facilitated by external facilitators, with teens and their parents or caregivers attending separate sessions and engaging in dialogues at the end of each day’s workshop | Currently underway is a cluster RCT with 18-month follow-up among learners in 2014–2015 | Teenagers reported:  
• Appreciation of open discussions with parents  
• Less harsh discipline by parents |
| Stepping Stones   | Promote sexual health, improve psychological well-being and prevent HIV | Community-based programme, peers of teens and young adults | Community cluster RCT to test the effectiveness of the programme in reducing HIV, HSV2 incidence, and improved gender relations and sexual behaviour, over two years | Reduction of about 33% in the incidence of HSV-2 (0.67, 0.46 to 0.97; P=0.036); that is, Stepping Stones reduced the number of new HSV-2 infections over a two-year period by 34.9 (1.6 to 68.2) per 1 000 people exposed  
Significantly improved the number of reported risk behaviours in men: lower proportion of men reporting perpetration of IPV across two years of follow-up  
Less transactional sex and problem drinking at 12 months |
| Stepping Stones/ Creating Futures | Reduce HIV risk behaviour and victimisation and perpetration of different forms of IPV and strengthen livelihoods | Young people (18 years and older) residing in informal settlements | Stepping Stones and Creating Futures draw from the social learning theory; employ participatory approaches e.g. drama role-playing, group work and discussions, and critical reflection; and engage separate gender groups, but combine these for peer group sessions at intervals during programme implementation. Creating Futures mainly draws from sustainable livelihoods theory and practice | A proof of concept study using a shortened interrupted time-series design with two data collection points at baseline that were two weeks apart, follow-up interviews 28 weeks and 58 weeks post-baseline | Significant reduction in women’s experience of SIPV in the prior three months – 30.3% to 18.9% (p = 0.037)  
Significant improvement in gender attitudes among both men (50.8 vs. 52.89, p= 0.007) and women (53.7 vs 55.29, p=0.01)  
Significant reduction in controlling practices in their relationships among men – more equitable relationships at 12 months follow-up (19.4 vs 21.74, p<0.001) |
vicarious trauma, burnout and compassion fatigue, and ensure sustained high-quality implementation.

All interventions described in this article use a manualised intervention and importantly, participatory workshop methods rather than didactic approaches. User-friendly, structured yet flexible manuals ensure high rates of fidelity to the programme and limit deviations that may compromise the intended outcomes of it. A participatory approach allows participants to engage in critical reflection and dialogue about their own experiences, ideas and beliefs, as well as those of others in their communities. This approach facilitates personal transformation and integration of new knowledge and skills into their daily lives and their identities.

Intervention evaluations provide indications of acceptability to participants, efficacy of implementation, and effectiveness in changing desired outcomes (e.g., behaviour, attitudes and quality of relationships). An in-depth discussion of intervention evaluation is presented in the Tomlinson et al. article in this issue.

Primary prevention – stopping the violence before it starts – remains the most effective strategy available to us in addressing the epidemic of SIPV in South Africa. The interventions identified in this article have been shown to be effective or promising in reducing SIPV perpetration and/or victimisation. They provide an incredible platform of evidence for developing a SIPV primary prevention policy and comprehensive programme for South Africa.

### Discussion and conclusion

The primary prevention interventions described above were developed based on evidence-informed theoretical frameworks and cultural relevance, and are notable for their efforts to prevent SIPV before it occurs. They address a spectrum of the ecological model, from parenting programmes that strengthen relationships between mothers and infants (Thula Sana), parents and teenagers (Sinovuyo and Skhokho Supporting Success) and educators and learners, to individual or peer group-based programmes that engage men and women on gender norms and positive relationships (Skhokho Supporting Success, Prepare, and Stepping Stones) and livelihood strengthening skills (IMAGE and Stepping Stones/Creating Futures).

All of these programmes address the social determinants of violence. Some programmes also promote communication, problem-solving, conflict resolution and parenting skills, as well as other elements that may be protective against violence. Facilitators are usually adults with a high school qualification and community work experience, who are provided with training (and on-going support and supervision) on the programme content, facilitation skills, non-judgmental interactions and community relations. It is essential that facilitators buy into and support the ideology of the primary prevention interventions and are supported through a transformative process promoted by the intervention before they begin facilitating it. Furthermore, ongoing support for facilitators is important to prevent


30 L Artz, An examination of the attribution of domestic violence cases within the criminal justice system in post-apartheid South Africa, Belfast: Queen's University, 2008; R Jewkes et al, He must give me money; he mustn’t beat me: violence against women in three South African provinces, CERSA (Women’s Health), Medical Research Council, 1999; RK Jewkes, JB Levin and LA Penn-Kekana, Gender inequalities, intimate partner violence and HIV preventive practices: findings of a South African cross-sectional study, Social Science & Medicine, 56, 2003, 125–134; M Machisa et al, The war at home, Johannesburg: GenderLinks, 2011.


24 C Mathews, Impact evaluation of Prepare among school going adolescents in the Western Cape, Cape Town: Gender and Health Research Unit, Medical Research Council, 2015. (Email communication, 6 March 2015).

23 CL Ward et al, Parenting for lifelong health: from South Africa to other low- and middle-income countries, Cape Town: Department of Psychology and Safety and Violence Initiative, University of Cape Town, 2014.

22 CL Ward et al, Parenting for lifelong health: from South Africa to other low- and middle-income countries, Cape Town: Department of Psychology and Safety and Violence Initiative, University of Cape Town, 2014.


17 DJ Whitaker et al, Effectiveness of primary prevention efforts for intimate partner violence, Partner Abuse, 4:2, 2013, 175–195.


13 CL Ward et al, Parenting for lifelong health: from South Africa to other low- and middle-income countries, Cape Town: Department of Psychology and Safety and Violence Initiative, University of Cape Town, 2014.

12 CL Ward et al, Parenting for lifelong health: from South Africa to other low- and middle-income countries, Cape Town: Department of Psychology and Safety and Violence Initiative, University of Cape Town, 2014.


10 CL Ward, Status of the Sinovuyo programme evaluation (RCT), Department of Psychology and Safety and Violence Initiative, University of Cape Town, (Email communication with Nwabisa Jama Shai and Y Sikweyiya 19 February 2015).

9 CL Ward et al, Parenting for lifelong health: from South Africa to other low- and middle-income countries, Cape Town: Department of Psychology and Safety and Violence Initiative, University of Cape Town, 2014.


6 DJ Whitaker et al, Effectiveness of primary prevention efforts for intimate partner violence, Partner Abuse, 4:2, 2013, 175–195.


2 CL Ward et al, Parenting for lifelong health: from South Africa to other low- and middle-income countries, Cape Town: Department of Psychology and Safety and Violence Initiative, University of Cape Town, 2014.

1 CL Ward, Status of the Sinovuyo programme evaluation (RCT), Department of Psychology and Safety and Violence Initiative, University of Cape Town, (Email communication with Nwabisa Jama Shai and Y Sikweyiya 19 February 2015).


48 Ibid.


Improving the efficiency of evidence-based interventions

The strengths and limitations of randomised controlled trials

Mark Tomlinson, Catherine L Ward and Marguerite Marlow*

markt@sun.ac.za

http://dx.doi.org/10.4314/sacq.v51i1.5

Globally, randomised controlled trials (RCTs) are increasingly seen as the gold standard of programme evaluation, representing the best way to determine whether new interventions are effective – but they are not without limitations. In this article, we discuss the phases of scientific discovery and the research standards that are necessary before scaling up interventions. We also outline the core characteristics of RCTs, such as randomisation, efficacy and effectiveness, and discuss the benefits of using the RCT as the standard of intervention evaluation. We discuss how ‘realist’ evaluation contributes to what policymakers need to know in order to make a decision about an evaluation and alternatives to the RCT, such as stepped wedge, regression discontinuity, non-randomised cohort, and time series designs.

Evidence-based medicine aims to make clinical practice more scientific and empirically grounded in order to achieve safer, more consistent and cost-effective care.¹ It helps ensure that interventions are backed by evidence of sufficient quality to justify investment in implementation and scale-up. Since its introduction in the 1970s, the term ‘evidence-based intervention’ has moved from being an intellectual curiosity to a central component in conversations about health or behavioural interventions. There have been substantial successes with evidence-based medicine and policy development, but they are not without critics.²

* Mark Tomlinson and Marguerite Marlow are with the Department of Psychology, Stellenbosch University. Catherine Ward is with the Department of Psychology and the Safety and Violence Initiative, University of Cape Town.
such as randomisation, efficacy and effectiveness, and discuss the benefits of using the RCT as the standard of intervention evaluation. Finally, we will juxtapose this with a discussion of the limitations of RCT and how other methods can be used as a way of testing interventions.

**How and why is evidence built?**

**Efficacy and effectiveness**

If policymakers propose to invest in a violence prevention intervention (a parenting programme, a life skills curriculum, reducing access to alcohol) then one of the central questions should be: does that intervention achieve the outcomes that are expected of it, so that it will be a worthwhile investment of taxpayers’ money? The purpose of an efficacy trial is to answer precisely that question: did the intervention make a difference, and how sure can we be that it was the intervention (and not something else) that made the difference? This is a question of **internal validity** (see Table 1 for a summary of definitions). Internal validity is the extent to which bias and confounding variables that may unintentionally affect the results are kept to a minimum in the conduct of a trial. Efficacy trials emphasise internal validity, and answer the question: ‘Does this intervention work under optimal conditions?’

Effectiveness trials, by contrast, answer a different question: ‘Does this intervention work under “real world” conditions?’

Efficacy and effectiveness exist on a continuum. Taking part in research often involves procedures and commitments that are different from routine practice. It may not be possible for an intervention delivered under carefully controlled research conditions to be replicated under routine conditions. This presents a challenge to evaluating the impact of large-scale public health programmes. Limitations associated with how study participants are selected, participant characteristics and trial management may also affect the relevance and feasibility of interventions based on RCT research. For these reasons, there is debate about the use and relevance of RCTs, especially in non-medical fields.

<table>
<thead>
<tr>
<th>Table 1: Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control group</strong></td>
</tr>
<tr>
<td><strong>Effectiveness</strong></td>
</tr>
<tr>
<td><strong>Efficacy</strong></td>
</tr>
<tr>
<td><strong>External validity</strong></td>
</tr>
<tr>
<td><strong>Internal validity</strong></td>
</tr>
<tr>
<td><strong>Intervention group</strong></td>
</tr>
<tr>
<td><strong>Selection bias</strong></td>
</tr>
</tbody>
</table>

**Generalisability**

Related to issues of efficacy and effectiveness, another important question is whether the intervention will work with a different group of people. If a parenting programme was tested in Soweto with Setswana speakers, will it also work with isiZulu speakers in Ixopo, and Afrikaans speakers in Eldorado Park? This question – one of **external validity**, or **generalisability** – is crucial if policymakers wish to roll the programme out widely (see Box 1). If it was established as effective in one place, will it remain effective when taken to other places?
Efficacy and effectiveness are linked to the concept of generalisability. When a trial is conducted in an ideal setting with all factors and variables being controlled (as far as is possible) by the researcher, it may lack a measure of generalisability. Characteristics of those enrolled in a study (e.g. sex, age, severity of the disease, racial groups) are primary factors in generalisability. For example, a study of a counselling intervention targeted at women may not necessarily generalise to men or children.

Geographic settings (urban versus rural) and health care systems can also be significant factors, particularly when something more complex than a drug (e.g. screening programmes, behavioural therapy) is being tested. Multiple factors determine the external validity (i.e. generalisability or applicability) of studies, including of RCTs: characteristics of those taking part in the programme and in the study, the problem under investigation, costs, compliance, co-morbidities and concomitant interventions. Also, certain aspects of study design – eligibility criteria, study duration, mode of intervention, outcomes, adverse events assessment, or type of statistical analysis – greatly influence the degree of generalisability.

**Phases of scientific discovery**

For scientific evidence to be useful to policymakers, they need to distinguish which research and types of evidence will be most useful to them, which means understanding how new interventions are developed and taken to scale. Thornicroft and colleagues propose a five-phase schema to understand research terminology and the discovery, development, dissemination and implementation of new interventions.

The starting point for any scientific discovery (Phase 0) is exploring relevant theories, generating hypotheses about how interventions might work, and conducting fundamental epidemiological research to understand factors driving the problem. These understandings can then be transferred to develop interventions. Phase 1 includes early studies that aim to identify key components of an intervention. In Phase 2, investigators include efficacy studies (usually an RCT) that assess whether the intervention is effective under ideal conditions. After efficacy of the intervention has been established, investigators shift the focus to studies in routine clinical conditions, to investigate intervention effectiveness in the real world (Phase 3). These studies may be implemented in target populations over a longer time period to identify other effects. Scaling up interventions that are scientifically proven and applicable to the everyday procedures of violence prevention practice can be challenging, and form Phase 4.

These five phases work together with standards set by the Institute of Medicine, the Society for Prevention Research and other communities of researchers to provide a framework for understanding what is good and sufficient evidence for establishing that an intervention should be implemented as a matter of policy. According to these standards, scale-up or countrywide implementation would be dependent on the completion (for each intervention) of (a) two high-quality efficacy RCTs, (b) two high-quality effectiveness RCTs, followed by (c) dissemination research that has established that the intervention can be delivered with fidelity to the model, and (d) information about the intervention’s costs (see Figure 1 for a summary of these stages).

In addition, policymakers need to make decisions about how to weigh the evidence when considering implementation. Victora and colleagues have proposed three levels of evidence to guide decisions:

- **Adequacy evidence** – was the intervention implemented and found to be successful?
- **Plausibility evidence** – were the changes found in adequacy evidence shown to not be due to other influences?
- **Probability evidence** – were the changes observed not due to chance? For probability evidence, RCTs are needed.
Why randomised controlled trials, and where do they fit in?

RCTs are most successful in achieving high levels of internal validity and are thus considered the standard method for efficacy and effectiveness trials. RCTs have a simple intention: to compare what would have happened in one group if the intervention was not received, with what happens when the intervention is received in another, otherwise equivalent, group. At the start (before the intervention is provided) those two groups must be equal in terms of their experience of the problem and characteristics that affect their experience. For instance, if the problem being addressed is child aggression, at the start both groups of children must be equal on a measure of child aggression, and have the same spread of age and gender of children (since older children and boys tend to be more aggressive, one must have equal numbers of older and younger children, and of boys and girls, in both groups). A defining characteristic of the RCT is that research participants who receive the intervention and the participants who make up the control group (i.e. those who do not receive the intervention) are randomly assigned to those groups (hence randomised controlled trial). With a sufficiently large sample, randomisation ensures fair distribution of the problem and related characteristics across the two groups. This capacity of RCTs to ensure a fair comparison between intervention and control groups is a particular strength, as it allows the most accurate possible estimate of what would have happened if the intervention group had not received the intervention. Given an adequate sample size, the RCT typically surpasses all other designs in terms of its statistical power to detect the predicted effect of the intervention.

However, randomisation may face opposition from policymakers and practitioners, who may believe in the value of an intervention for certain individuals or groups, often regardless of its actual evidence base, and therefore oppose random allocation. For instance, in one trial – testing a substance abuse intervention in a community health centre, with the hope that it would reduce substance-related...
aggression as well as substance misuse and HIV risk behaviours – nurses in the health centre tried to refer patients to the intervention group in the belief that the intervention would help them, regardless of the fact that the intervention had yet to be tested. However, only after the intervention has been tested in a high-quality evaluation can we have any certainty that it is effective. It is entirely possible that the intervention could have very little effect (as was in fact the case for that substance abuse intervention) or even do harm. Famously, a substance abuse intervention that was rolled out widely in US high schools cost an enormous amount and made no difference to those receiving the programme: they were just as likely to use drugs and alcohol as those who did not. Even more concerning, a common-sense delinquency prevention programme – taking youth at risk into prisons so that convicted offenders could scare them away from their lives of delinquency – turned out to increase offending in the young people, rather than deterring them. In the long run, therefore, randomly assigning people to groups – knowing that people in need may end up in the control group and receive nothing – is more ethical than not using either random assignment or a control group, providing of course that implementers truly do not know what the outcome of the intervention will be.

In the case of difficulties with, or objections to, individual randomisation, one possible solution is to use a cluster RCT, with the group (cluster) rather than the individual as the unit of randomisation. Members of a cluster (e.g., village, clinic, community) who might naturally influence one another or be affected as a group by prevailing conditions are clustered together and then randomised.

RCTs are one of the most reliable methods of determining the effects of a treatment, because they are high in internal validity. However, they – like other trial designs that are used under very particular conditions – are not necessarily high in external validity. For instance, RCTs are often conducted with specific types of people under highly controlled conditions, and making inferences to the wider population may be difficult. Recruitment often employs stringent eligibility criteria to minimise adverse events and potential non-responders. Some trials screen up to 68 people for each person enrolled. In many settings, RCTs emphasise standardised interventions that might be too rigid when they need to be tailored for local population needs or other settings. There are also concerns about the extent to which trials conducted in high-income settings apply to low- and middle-income countries (LMIC). It cannot be assumed that there will be a universal response to an intervention across contexts, since a delivery system (such as a health system) in one context may have particular capacity for training, contact between health workers, supervision and population differences that will determine the effect of an intervention and to what extent it can be successfully implemented, while delivery systems in other contexts may have different characteristics.

Other limitations of RCTs are that they are time- and energy-intensive as well as expensive, and may not be feasible for all interventions or settings. These threats to external validity limit the potential generalisation of the research results, an important consideration given the increasing emphasis on the translation of research results into practice.

One common response to this is to try to have tests of programmes explicitly examine ‘what works for whom, in what circumstances, in what respects and how’, an approach called ‘realist evaluation’. This makes sure that the mechanisms that actually produced the change are clearly specified and consistent with the best available scientific theory and evidence, providing policymakers with the very detailed and practical understanding of a programme that is necessary before deciding whether that programme may be suitable for their context or not.

**Case study: Box 1**

**Cognitive therapy-based intervention using community health workers (Pakistan)**

Rahman and colleagues implemented a cognitive behavioural intervention in which local health workers, known as Lady Health Workers, delivered a mental health intervention component. One of the difficulties with implementing health interventions is the lack of adequately trained professionals in most...
LMIC, especially in the case of mental health interventions where, in some countries, the treatment gap approaches 90%. In Pakistan, Lady Health Workers are women who have completed secondary school and are trained to deliver preventive maternal, neonatal and child health care and education in the community. Lady Health Workers provide services to about 80% of the rural population of Pakistan. A cluster RCT was conducted with depressed women in their third trimester of pregnancy. Lady Health Workers were trained to deliver the intervention, while in control clusters Lady Health Workers who had not been trained in mental health made an equal number of visits to depressed women. The intervention halved the rate of prenatal depression in the intervention group. In addition, women receiving the intervention had better overall functioning and less disability up to a year later. Other health benefits included fewer episodes of diarrhoea and higher levels of immunisation in the intervention group. The intervention is a pivotal one because it is not dependent on a new or separate mental health workforce for its delivery. Rahman and colleagues argue that evidence of this sort is crucial in order to convince LMIC policymakers of the importance of integrating interventions such as these into the existing health system. This study is frequently used as evidence for how mental health interventions can be delivered by community health workers and how they can feasibly be delivered at scale – and this is undoubtedly true. There are a number of potential problems, however, with using evidence such as this in countries other than Pakistan. One is the lack of similar existing cadres of functioning community health workers such as the Lady Health Workers. Most LMIC do not have such an extensive workforce, and when they do there are significant problems with management, care delivery and supervision. In addition, it is likely that the prevailing cultural and contextual conditions in this region of Pakistan (such as maternal seclusion after birth, and not being permitted visitors unless they are family) may limit the external validity of these data.

Alternatives to the RCT

Aside from external validity, there are many other reasons why an RCT might not be the best method to assess intervention effectiveness. Reasons might include the following: when the impact is likely to be large, making randomisation potentially unethical; when the timing of the impact is likely to be long, making follow-up and assessment too expensive; or in a situation where a national roll-out of an intervention (such as in the Integrated Management of Childhood Illness [IMCI]) has already occurred, because a policy (or ideological) decision has been made about implementing a particular intervention.

In these cases, random allocation may not be possible. But there are alternatives, for instance:

- In consultation with policymakers, it might be possible to use a ‘stepped-wedge’ design, where implementing the intervention in certain areas is delayed – here the order of receiving the intervention is randomised.

- In some cases, there may be a clear cut-off that defines who gets the programme and who does not. For instance, the government may decide that only those whose household income is below a certain level will get the programme. Bonell and colleagues argue that in cases such as this a ‘regression-discontinuity’ analysis can be used, which examines the association between the outcome of the intervention and the measure of need. Under certain conditions (such as a very large sample size), regression discontinuity designs can be just as powerful as RCTs. This approach was used to evaluate pre-kindergarten (the equivalent of Grade R) in Tulsa, Oklahoma. All children had to attend pre-kindergarten, and so randomisation was impossible – but the regression discontinuity design used in the evaluation provided convincing evidence that the city’s investment in pre-kindergarten led to worthwhile outcomes for children.

- Another alternative design is what is known as non-random quantitative assignment of treatment. In this design, participants are assigned to a treatment group based on need or merit, rather than random assignment. A good example of this is the school lunch programme in
the United States (US) where household income (below the poverty line) is used to assign children to receiving school lunches. Statistical analysis then models the functional relationship between the quantitative assignment variable (household income level) with the known outcome variables (such as health, concentration at school and academic achievement).45

- A similar design is a non-randomised cohort study where two groups are followed over time with baseline assessments, intervention is delivered to one group and not the other, and follow-up interviews are conducted to assess outcome. In this case two neighbourhoods can be chosen and matched as closely as possible. Without randomisation, ascribing change solely to the intervention is difficult, but if changes are in the hypothesised direction, policymakers might have sufficient evidence of effectiveness to implement.

- A final option is a repeated cross-sectional survey (or interrupted time series), which permits the evaluation of secular trends.46 These are, however, expensive and prone to selection bias, although if routinely collected administrative data is of sufficient quality they can be very helpful and are relatively cheap, since they are gathered routinely and not just for the purposes of the evaluation. For instance, crime statistics collected by the US Federal Bureau of Investigation (FBI) were combined with data collected by the television industry to explore whether the introduction of television had increased violent crime in the US. A time series design was used to clearly demonstrate that violent crime had not increased, but that theft had increased as television was introduced.47

The point is that programmes that are to be rolled out widely (and where people cannot be randomised) must still be evaluated, using the best possible research design.

**Scale-up and ‘when is there enough evidence’**

Attempts have been made to rank the levels of evidence in order to assist policymakers in making decisions about evidence-based policy and practice. Within this framework the design and conduct of the research is categorised in terms of strength of evidence. In one of the most widely-used frameworks, there are five levels of evidence.48 These range from level 5, the lowest level of support (expert opinion), to level 1, the highest – a meta-analysis of randomised controlled trials addressing the same problem, which can provide clarity on both whether the proposed intervention works and under what conditions. If many studies carried out in different settings together result in the conclusion that the programme generally has an effect, then one can have greater confidence that it will work in a new setting. Each of the other ‘levels’ of evidence (levels 2, 3, 4) of experimental design can then be seen as increasing the potential for the outcomes to be confounded by factors that are external to the experiment, or an inherent part of it, and are therefore weaker and less useful for making policy decisions.49 Olds has argued that if policy and practice recommendations (in his case, for parenting interventions) are based on RCTs that meet the most stringent RCT requirements, they will have the greatest chance of being efficacious when disseminated and implemented at scale.50

Weaker evaluations mean that there is less chance that programmes will be effective when implemented widely and under real-world conditions. In addition, even implementing an established programme with a strong evidence base in a new setting runs the risk of changing some of the fundamental characteristics that led to programme success in the earlier settings (see Box 2). For this reason, every programme, no matter how strong its evidence base, should be evaluated when it is moved to a new setting.51 For instance, when Strengthening Families (a substance misuse prevention programme shown to be effective in one setting) was implemented in a different setting (in the US – the same country in which it was originally tested) it was much appreciated by the families receiving it, but made no difference to their children’s behaviour.52 In cases where a programme is moved, but a full evaluation is not possible, some basic monitoring (for instance, comparing children’s behaviour at the start and at the end of the programme) should be carried out.
Case study: Box 2

Nutrition and psychosocial stimulation and mental development of stunted children (Jamaica)

Grantham-McGregor and colleagues implemented an intervention study of nutritional supplementation and psychosocial stimulation of stunted children. A total of 129 children were randomly assigned to four groups: nutritional supplementation only; psychosocial stimulation only; nutritional plus psychosocial stimulation; and a control group. There was also a group of matched non-stunted children. Community health aides delivered the intervention. The results of the study were compelling and showed how nutritional supplementation had a beneficial effect on stunted children’s mental development. Importantly though, the treatment effects were additive, with the combined intervention (nutritional plus psychosocial stimulation) being significantly more effective than either of the stand-alone interventions. This study is one of the most frequently cited papers in the child development literature and has had a significant impact on the design of interventions in many LMIC. A recent 20-year follow-up on the same sample found that the earnings of the stimulation group were 25% higher than those of the control group and had caught up to the earnings of a non-stunted comparison group. This study is unquestionably an important and seminal one. There are, however, two particular issues that should be borne in mind when using this data to inform scale-up or interventions in other countries. The first is the small sample size – only 32 children received the supplementation and psychosocial intervention. The second has to do with the relevance of this data (particularly the long-term economic finding) to most other LMIC. Jamaica has a very high rate of pre-school attendance, unlike most LMIC. The early impact of the supplementation and psychosocial stimulation is an important and compelling finding, but it is possible that part of the explanation for the long-term benefit of the early intervention is the additive booster benefit of a high enrolment in pre-school. It is possible that in countries where enrolment in crèches or pre-school is very low, the benefits of the early intervention may disappear over time. This is of course an empirical question and should be tested, but the issue is testament to the limitations of RCTs and how longitudinal assessment in many countries is vital in order to make meaningful policy decisions.

Conclusions

Where does this leave policymakers? There are several principles to apply. Firstly, if a meta-analysis finds that a programme is effective, it is likely to be a good investment. At that point, experts should be commissioned to ensure cultural acceptability in the new setting, and to evaluate it – preferably using an RCT, to ensure good estimation of effect. Secondly, if there is no meta-analysis, one might commission experts to conduct one if enough RCTs testing the programme have been carried out. Thirdly, if a programme has shown promise in one RCT or in other forms of evaluation, conduct at least two RCTs before considering rolling the programme out. Programmes that are grounded in strong theory and have clear manuals to guide them are more likely to be effective than those that do not meet these criteria. If programmes must be taken to scale immediately, there is no reason not to phase them in carefully in a cluster RCT. For instance, the government of the Democratic Republic of the Congo has invested in a programme aimed at improving children’s numeracy, literacy and socio-emotional well-being. Schools were clustered together in clusters of three to six schools, with clusters randomly assigned, either to receive the new programme immediately or to be allocated to the control group, which will receive the programme at a later date. This allows for the programme to be tested in a thorough cluster RCT, at a level approaching scale, achieving two goals for policymakers: (1) making a potentially effective programme available to many children, while (2) ensuring that it is rigorously tested under real-world conditions, before scale is completely reached. In this article we have argued that policymakers should consider evaluation of programmes an...
essential investment, as part of their responsibility to taxpayers, to ensure that public funds are wisely invested. We have discussed how RCTs are very powerful designs but may not always be possible, and have a number of limitations. Given this, we have suggested a number of alternative designs and approaches to evaluation that can help policymakers decide on which programmes might work best, and how to assess them in new settings. That policymakers should draw on the strongest possible evidence, and that programmes should be monitored and evaluated, are, however, beyond question.

Notes

15. PJ Mrazek and RJ Haggerty, Reducing risks for mental disorders: frontiers for preventive intervention research, Washington DC: Committee on Prevention of Mental Disorders, Institute of Medicine, 1994.
22. Ibid.
23. Ibid.


28 Ibid.

29 Ibid.

30 CP Gross et al, Reporting the recruitment process in clinical trials: who are these patients and how did they get there?, Annals of Internal Medicine, 137:1, 2002, 10–16.


32 PM Rothwell, External validity of randomised controlled trials: ‘To whom do the results of this trial apply?’, The Lancet, 365:9453, 2005, 82–93.


36 Ibid.


41 Ibid.


43 Ibid.


45 Ibid.


48 PB Burns, RJ Rohrich and KC Chung, The levels of evidence and their role in evidence-based medicine, Plastic and Reconstructive Surgery, 128:1, 2011, 305.


54 Ibid.


Violence prevention programme

Consideration for selection and implementation

Anik Gevers and Elizabeth Dartnall*

anik.gevers@mrc.ac.za
elizabeth.dartnall@mrc.ac.za

http://dx.doi.org/10.4314/sacq.v51i1.6

Public health violence primary prevention programmes are designed to engage all people, not only at-risk groups. Currently programmes such as those described in the Jama Shai and Sikweyiya article in this edition tend to focus on groups at different stages of the lifespan – for example, parents and infants, or teenagers, or young adult community members. There is no evidence to suggest that targeting one developmental period over another is more effective. Given the onset of risk factors early in life (as discussed in the Skea et al article in this edition), and the likelihood of continued exposure to risk factors, primary prevention efforts must start early and continue to be implemented across the lifespan. Implementation of evidence-based primary prevention programmes across the lifespan is essential if we are to achieve the development goals of the National Development Plan.

Since policymakers and implementing organisations face the challenge of deciding which violence prevention programmes to invest in, and how to effectively and sustainably implement them at scale, we offer this checklist as a guide.

Selection tips

What to consider when selecting a violence prevention programme:

- **Is the programme supported by good evidence?** Select existing, evidence-based interventions that have shown effectiveness through rigorous evaluation (as discussed in the Tomlinson et al article) or, in the absence of these, programmes where preliminary studies show promise or effectiveness – rather than developing new interventions.

- **Is there a reality-based implementation strategy?** Programmes tested in similar settings with clear and feasible implementation models should be preferred over those tested and scaled up in very different, higher-resourced settings.

- **What costs are involved in implementing the programme?** Reviewing the costs of the programme will be helpful for policymakers and implementers to understand the costs involved in successful implementation and thus to allow for adequate budgeting. Programme developers and evaluators must ensure that they gather and publish this information.

- **What is the programme’s theory of change and how does it address factors at different levels of the ecological model?** Ensure that the selected programme has a strong theoretical

* Anik Gevers is affiliated to the Gender & Health Research Unit, Medical Research Council, the Adolescent Health Research Unit, University of Cape Town and the Sexual Violence Research Initiative. Elizabeth Dartnall is with the Sexual Violence Research Initiative.
basis (i.e. addresses causal factors of violence) and addresses factors at different levels of the ecological model, based on current literature and developments in the field.¹

• Does the programme use participatory approaches to learning? The interventions should use participatory, rather than didactic, approaches to engage participants in a process of transformation.²

• Is the programme manualised? Clear, user-friendly manuals and training programmes are helpful to ensure that interventions are implemented with fidelity, which will increase the likelihood of achieving the desired outcomes.

• Does the programme address the core content outlined below? Core content should include:³
  • Challenging hegemonic constructions of gender and gender inequities
  • Promoting respectful, healthy relationship skills such as caring and kindness, and open, assertive communication and conflict resolution
  • Fostering supportive carer–youth relationships
  • Advocating positive discipline strategies that build self-esteem, social skills, and feelings of supportiveness and nurturing
  • Encouraging adaptive stress management and coping strategies, help seeking and the promotion of well-being

Tips for implementation and scale-up

Considerations for the successful implementation and scale up of effective violence prevention programmes:

• Resource allocation: Allocate adequate resources (staff time and budget) to implement the full programme. Programme developers and evaluators should make this information clear in their cost analysis report to guide policymakers and implementers.

• Milestone-based programming: Develop a clear implementation plan associated with resource allocation, and a strong monitoring and evaluation framework to ensure fidelity to the model, to understand the impact and on-going success of the programme, and to ensure continued relevance or guide any further adaptations.

• Formative monitoring, evaluation and phase-in planning: Conduct some formative pilot work to ensure that the programme will be acceptable, feasible and relevant within your setting. This kind of phase-based approach to rolling out a programme has budgetary implications, but may save money in the long term and increase the positive impact by ensuring that a programme is effective and appropriate for its setting, especially if it is being implemented in a context different to that in which it was developed and evaluated.

• Partnerships: Where possible, it may be advantageous to partner with other organisations that have implemented the same or similar programmes, or, where possible, to work with the developer to assist with adaptation and implementation advice, based on previous experiences with the programme. In our experience of doing local and regional capacity development work in this field, organisations with a strong track record of developing and implementing such programmes have extensive lessons on what has worked well and why, as well as what has not worked and why, that are not always reported or published. New implementers or policymakers can access and apply these learnings through partnerships with experienced intervention developers and evaluators.

• Training for transformation: Training and ongoing support for facilitators and supervisors are particularly important for the long-term success and sustainability of primary prevention programmes. These interventions are a transformative process, and therefore it is essential that supervisors and facilitators go through the programme themselves as part of pre-service training. Training and support are fundamental and must thus be included in the budget.

• Management, mentoring and support: Ongoing, regular support and supervision contribute to maintaining a high-quality programme and preventing burnout among programme implementers. For example, weekly group meetings with programme staff to share experiences, challenges and achievements, and to discuss needs or ideas for any adaptations or
improvements are important. These interactions maintain staff morale and dedication as well as fidelity to the programme model, and facilitate ongoing development and strengthening of the programme in systematic ways.

To comment on this article visit http://www.issafrica.org/sacq.php

Notes
Subscribe to the ISS for the latest analysis, insight and news

We’re improving human security in Africa with authoritative research, training and expert policy analysis

Step 1: Go to www.issafrica.org
Step 2: Under ‘Subscribe to the ISS,’ click on ‘Email subscriptions’
Step 3: Select the type of notices you would like to receive:

**Latest from the ISS**
- ISS press releases
- ISS Weekly newsletter
- ISS Today
- ISS Spotlight

**ISS event invitations**
- Seminars, ISS Addis Ababa
- Seminars, ISS Dakar
- Seminars, ISS Nairobi
- Seminars, ISS Pretoria
- Training courses

**ISS thematic reports**
- Peace and Security Council Report
- Regional Report: Central Africa
- Regional Report: East Africa
- Regional Report: ECOWAS
- Regional Report: Southern Africa

Or, subscribe by topic of interest (to receive press releases, spotlights, event invitations, and reports that deal with your chosen topic):
- African Futures
- Arms control and disarmament
- Conflict prevention and analysis
- Corruption and governance
- Counter-terrorism
- Crime and criminal justice
- International criminal justice
- Organised crime
- Peacekeeping and conflict management
Previous issues

In this edition of SACQ Maria Schreurs argues that political interference in the NPA and the failure to appoint credible, stable leaders threaten to undermine the institution. Professor Jonathan Freedman analyses the risk of a constitutional crisis in South Africa because of the actions of the Minister of Police to prevent a Commission of Inquiry into policing in Khayelitsha. Zita Hansungule considers the Constitutional Court judgment that found the sexual offences Act unconstitutional in requiring names of child offenders to be automatically placed on the National Register of Sexual Offenders. Douglas Coupland views on South Africa’s experience to show how the new Constitution of Zimbabwe might be used to avoid the same mistakes relating to rape and sexual offences.

The articles in this edition of SACQ reveal the extent to which the promise of the democratisation of rural South Africa in the 1990s has turned to bitter disappointment for residents of those areas in the North West province. Contributors to this edition are: Nelson Le Roux, SANDF researcher; Rosalie Mabotja, Centre for Law and Governance, University of the Witwatersrand; Monica de Souza, Legal Resource Centre; and Sonwabile Mnwanza, researcher. The edition is guest edited by Mironqane Buhezile.

ISS Pretoria
Block C, Brookly Court
5th Ave Street
New Market
Pretoria, South Africa
Tel: +27 12 346 9000
Fax: +27 12 465 3944

ISS Addis Ababa
9th Floor. Get-House Building
Africa Avenue
Addis Ababa, Ethiopia
Tel: +251 11 515 5590
Fax: +251 11 515 5649

ISS Dakar
19th Floor, Star House
Route de Baam
Dakar, Senegal
Tel: +221 32 67 40 60
Fax: +221 32 67 40 65

ISS Nairobi
2nd floor, GetHouse
3rd Floor of Muthanga Road
Lavington, Nairobi, Kenya
Tel: +254 72 667 7642
Fax: +254 73 661 7539

www.isafrica.org

- Early intervention: a foundation for lifelong violence prevention
- The impact of parenting on child behaviour and mental health
- Violence prevention and early childhood development
- Addressing sexual and intimate partner violence in South Africa
- The strengths and limitations of randomised controlled trials
- Violence prevention programmes: considerations for selection and implementation