Response/Institutional Safeguarding Practice: Operations

The effect of response-focused interventions to improve institutional operations to safeguard children is mixed.

Evidence status	**Some concerns**	Unclear impact of response interventions on institutional operations to safeguard children.

The summary in brief

Institutions that care for children such as children's homes, orphanages, schools, day cares, foster homes, and hospitals, can implement various safeguarding interventions and policies. These may include staff training or structural interventions such as improving the caregiver-to-child ratio.

These studies examine interventions that trained caregivers and professionals to improve their knowledge, attitudes, and practices/behaviours on working with children, identifying maltreatments, and responding better. The settings included children's homes, schools, day care, hospitals, paediatric care units, and residential care. The training led to moderate improvements in the quality of practitioners'/caregivers' response. The studies have medium to low confidence, results need to be interpreted with caution.

There are many recent and some even ongoing studies in the cell. The cell contains six completed primary studies (Rheingold 2015, Konijnendijk 2019, Hymel 2021, Cerezo 2004, Herbert 2021, and Johnson-Motoyama 2022), one systematic review (Hermenau 2017) and two study protocols (Perez 2021 and Taylor 2021).

Table 1: Contents of the cell

A. Completed Primary Studies	
Cerezo 2004 QED, high risk of bias.	Spain (Balearic Islands). Professionals such as teachers, social workers, hospital staff, child protection services (CPS) staff and police. Evaluation of a large-scale training programme to improve detection of child maltreatment by professionals who worked with children.
Rheingold 2015 *RCT, moderate risk of bias*	USA (three sites in different geographical regions – Atlanta, GA; Beaufort, SC; Bend, OR). Caregivers of children in day care, churches, schools. Evaluation of the Stewards of Children programme to prevent child sexual abuse.

Konijnendijk 2019 *RCT, high risk of bias*	The Netherlands. Child healthcare professionals. Assessment of the effects of a computerised support tool on child healthcare professionals' adherence to guidelines on child protection.
Hymel 2021 *RCT, moderate risk of bias*	USA. Paediatric intensive care unit and child abuse physicians. Evaluation of the impact of the PediBIRN (Pediatric Brain Injury Research Network) 4-variable clinical decision rule (CDR) on abuse evaluations and missed abusive head trauma.
Herbert 2021 *QED, low risk of bias.*	Australia (Perth). A multi-agency group of government and community support agencies providing combined support services with investigations, called the Multi-agency Investigation & Support Team (MIST). Evaluation of the fidelity with which this intervention was delivered, and whether it improved criminal justice, child protection, and service outcomes.
Johnson-Motoyama 2022 *QED, medium risk of bias.*	USA (data from the National Child Abuse and Neglect Data System) Evaluation of differential response (DR), a system policy that seeks to serve families of low-to moderate-risk for child maltreatment through family engagement, diversion from formal child protective services investigations, and service provision.
B. Study Protocols for Primary studies	
Perez 2021 *Study protocol for RCT*	USA (California) Testing implementation strategy for "ACEs Aware" policy that provides medicaid reimbursement for Adverse Childhood Experiences (ACEs) screening annually for child primary care visits to low-income families in Southern California.
Taylor 2021 *Study protocol for RCT*	USA. Implementation and evaluation of a web-based and consultative training for Victim Advocates to enhance early engagement in services (E3 training).
C. Systematic Review	

Hermenau 2017 *Systematic review, High Risk of Bias*	Assessment of impact of interventions in institutional care settings on children's development. The review assessed structural changes, caregiver training and enriched environments as interventions in institutional care settings. Nine studies included in systematic review for this EGM cell; studies from Tanzania, Chile, El Salvador, Turkey, Russia, and Romania.

A. PRIMARY STUDIES

There are eight primary studies in this cell (3 RCTs + 3 QEDs + 2 protocols)

Countries

Of eight primary studies, five are from the USA; the others are one each from The Netherlands, Australia, and Spain.

The interventions

Two of the QEDs (Herbert 2021 and Johnson-Motoyama 2022) assess interventions aimed to improve criminal justice, child protection, and service outcomes. Herbert 2021 studied the implementation of a Multi-agency Investigation & Support Team (MIST) program in Perth, Australia. MIST is similar to the prominent Children's Advocacy Centre approach where a group of government and community support agencies provide combined support services with investigations. Details of Herbert 2021 are given as individual summary separately.

Johnson-Motoyama 2022 studied the impact of an intervention called Differential Response (DR). DR policy serves families at low-to-moderate risk of child maltreatment, through family engagement, diversion from formal child protective services investigations, and service provision.

Two of the RCTs evaluated interventions in hospitals to see whether intervention can improve the practices of healthcare professionals in managing child maltreatment. Konijnendijk 2019 studied how a computerised support tool can help healthcare professions adhere to Child Abuse and Neglect (CAN) guidelines. The Dutch Centre for Child Health issued a clinical guideline on early detection and response to suspected CAN ("the CAN guideline") specifically for doctors and nurses in preventive child healthcare (CHC). Despite the potential benefits, the adherence to guidelines was poor. Konijnendijk 2019 developed a computerised guideline support tool that was integrated in the electronic health record used in Dutch preventive CHC, presenting CAN guidelines in a concise and easily accessible manner.

Hymel (2021) conducted another hospital-based intervention. This study evaluated the impact of the PediBIRN (Pediatric Brain Injury Research Network) 4-variable clinical decision rule (CDR) on abuse evaluations and missed abusive head trauma in pediatric intensive care settings.

Cerezo 2004 describes a large-scale intervention to improve child maltreatment detection in the Balearic Islands, Spain. The intervention consisted of two phases. Phase 1 focussed on training frontline professionals such as social workers, paediatricians, police officers, psychologists, psychiatrists, and nurses who are involved in reporting cases of child maltreatment to Child Protective Services (CPS). Phase 2 focussed on training teachers, psychologists, and support staff in preschools and primary schools. Rheingold 2014 assessed the effectiveness of Stewards of Children, a Child Sexual Abuse (CSA) prevention programme for childcare professionals. The programme was developed by the US non-profit Darkness to Light (D2L). It involved a 2.5-hour workshop to train adults in childcare settings on how to prevent, recognise and respond to CSA.

Both study protocols (Perez 2021 and Taylor 2021) propose to conduct RCTs in the USA.

Perez 2021 (US, California) proposes to develop a better implementation strategy to improve the awareness and uptake of "ACEs Aware" policy that provides Medicaid reimbursement for Adverse Childhood Experiences (ACEs) screening annually for child primary care visits to low-income families in Southern California. The study will test a multifaceted implementation strategy in partnership with a Federally Qualified Health Center (FQHC) system. The Exploration, Preparation, Implementation, Sustainment (EPIS) framework is a widely used implementation framework. This study plans to follow the EPIS framework for implementation mapping to refine implementation. The refined implementation strategy will include online training videos, a customized algorithm and use of technology to improve workflow efficiency, implementation training to internal FQHC personnel, clinic support and coaching, and written implementation protocols. This randomized trial with five primary care clinics will assess this implementation strategy for (a) fidelity to the ACE screening protocol, (b) reach, defined as the proportion of eligible children screened for ACEs, and (c) the impact of the ACE policy on child-level mental health referrals and symptom outcomes.

Taylor 2021 proposes a feasibility RCT to test the implementation of a web-based and consultative training for victim advocates at Children's Advocacy Centers. It aims to enhance mental health services provided to maltreated children by CACs, which serve as family navigators that connect children impacted by maltreatment to appropriate Evidence-Based Practices in the USA. The interactive web-based training is based on three key targets of knowledge and skills related to 1) family engagement, 2) trauma, and 3) Evidence-Based Practice services. The study proposes to assess the feasibility of the training program and the effectiveness and costs for web-based and consultative training.

Do these interventions work in improving institutional operating practices to safeguard children?

Herbert 2021 found that MIST was delivered with reasonable fidelity to its intended plan. Benefits of program were: high levels of caregiver satisfaction with the response; and high rates of children's engagement with therapy. However, workload for staff was a challenge. A quasi-experimental comparison between MIST (n = 126) and Practice as Usual (n = 276) found that MIST was significantly faster throughout the criminal justice and child protection processes, but the rate of arrest or child

protection actions were not very different between MIST and usual practice. Despite these results, MIST still is promising, because of the uptake of therapeutic services and parental satisfaction.

Johnson-Motoyama 2022 found that US states with DR programs had approximately 19% fewer substantiated reports, 25% fewer children who were shown to suffer from neglect, and a 17% reduction in use of foster care services than states without DR programs. The study suggests additional research to better understand DR programs and their effects geographically.

Konijnendijk 2019 did not observe enough differences in guideline adherence between the intervention and control groups to draw conclusions. The results regarding use of the tool were inconclusive – though, in contrast to expectations, performance of guideline activities was high in both groups.

Hymel 2021 found that doctors in the intervention group evaluated more high-risk patients thoroughly (81% vs 73%) and missed fewer potential cases of abusive head trauma (21% vs 32%). We conclude that PediBIRN-4 CDR application enabled changes in evaluations of abuse, reducing potential cases of missed abusive head trauma in PICU settings.

Cerezo 2004 found that the intervention increased the number of cases reported to CPS from in both phases. The study reports a threefold increase in the number of cases detected after the intervention compared to before. The second phase (training teachers) led to detection of 2-3 children per 1000 as new cases after accounting for duplications from the first phase. The more professionals were trained, the more cases were detected.

The first phase (training frontline workers) was implemented in three territories. Referrals increased before and after the intervention in the first two territories but not in the third. This might be due to knowledge about the intervention spreading to the third territory before implementation - via mass media, professional networks and professionals moving territories for new jobs. A later comparison of the outcomes with various region of the Balearic Islands found expected increase in referrals.

Rheingold 2014 found that Stewards of Children training improved childcare professionals' knowledge and behaviours about CSA:

- **A**: **Knowledge** about CSA increased after the intervention but declined over the next three months. The control group also showed increased knowledge during this period, but not to the same extent as the intervention group.
- **B: Attitudes.** Participants' belief in CSA myths was low initially, leaving little room for improvement. After training, the control group had the better score but at three months there was no difference between groups.
- **C: Behaviours**. Participants who received the training reported improvement in their behaviors three months after training, as compared to the control group. The behaviours reported to have improved most were:

- "Limiting the opportunity for older youth and younger youth to have one-to-one interaction". This is significant given that juveniles are offenders for over a third of CSA cases (Finkelhor et al. 2009[1]). And
- Participants in the intervention group reported an increase in behaviours such as "Sharing with another adult an article, brochure, or other information about CSA prevention" within three months of the training. The control group also showed improvement in these behaviours during the same period, possibly due to the influence of the changed behavior of their trained colleagues or knowledge sharing.

In terms of the difference between being trained in–person vs online, the evaluation also found:

- Knowledge: The group trained in-person learned 'significantly' less about CSA (their knowledge had changed less) than the group trained on-line. Three months after training, however, there were no differences in CSA knowledge between the two groups.
- Attitudes: No difference between the group trained in-person vs. the group trained on-line.
- Behaviours: No difference between the group trained in-person vs. the group trained on-line.

The size of the impact of training in terms of implications for practice are unclear.

Have the interventions been implemented at scale?

Some yes, some no. The scale of intervention across studies varied from local to national:

- PediBIRN-4 CDR application was tried in 8 US PICUs.
- integrated CAN guidelines in a large Dutch organisation.
- MIST was run across Perth, western Australia.
- Differential Response was implemented across many states in the USA.
- Cerezo 2004 was implemented on a large scale in the Balearic Islands, Spain, with 161,287 children.
- Rheingold 2014 was implemented at three sites in different geographical regions in the USA – Atlanta, GA; Beaufort, SC; Bend, OR.

What do the interventions cost?

Cost data is not available in any of these studies.

How is the programme meant to work? The theory of change

There isn't any specific theory for change given in these studies.

[1] Finkelhor, D., Ormrod, R., & Chaffin, M. (2009). Juveniles who commit sex offenses against minors. Office of Juvenile Justice and Delinquency Prevention. http://www.ncjrs.gov/pdffiles1/ojjdp/227763.pdf.

How reliable is the evidence?

Not very. Herbert 2021 is most reliable as it has only low risk of bias. Rheingold 2014, Hymel 2021, Johnson-Motoyama 2022 are having some concerns, so findings from these should be considered cautiously. However, we are less confident about two studies as they have high risk of bias (Konijnendijk 2019 and Cerezo 2014).

Risk of Bias for Randomised Controlled Trials (RCTs)

Study (Author and year)	Overall risk of bias	Randomised process	Deviations from intended interventions	Missing outcome data	Measurement of the outcome	Selection of the reported result
Rheingold 2014	Some concerns	Low risk	Some concerns	Low risk	Some concerns	Some concerns
Konijnendijk 2019	High Risk	Some concerns	Low risk	High Risk	High Risk	Some concerns
Hymel 2021	Some concerns	Some concerns	Some concerns	Low risk	Low risk	Low risk

Risk of Bias for Quasi-Experimental Designs (QEDs)

	Overall Risk of Bias	Bias due to Confounding	Selection bias	Bias due to Intervention classification	deviations from intended interventions	Bias due to missing data	Bias due to measurement of outcomes	selection of the reported result
Cerezo 2014	Serious	Serious	Moderate	Moderate	Serious	Low	Moderate	Serious
Herbert (2021)	Low	Low	Low	Low	Low	Low	Low	Low
Johnson-Motoyama 2022	Moderate	Low	Low	Moderate	Low	Moderate	Low	Low

B. SYSTEMATIC REVIEW (Hermenau 2017)

What is the systematic review about?

Hermenau 2017 looked at the impact of interventions in institutional environments on children's development. The review assessed structural changes, caregiver training and enriched environments in institutional care settings. It looks particularly at orphans – in orphanages and foster homes.

What are the findings on institutional operations to safeguard children?

The review included 24 studies from 15 studies on 5 continents. Approximately 40% were from high-income countries with the others evenly distributed between upper-middle income and low or lower-middle income countries. The range of children included was wide – from less than 4 weeks to 16 years; close to two-thirds were infants or toddlers. Both state-run and private institutions were in the mix with the publication period of studies ranging over six decades. Finally, the review included a diversity of study designs that were classified into two groups – "dependent designs" i.e., studies with matched controls or repeated measures, and "independent designs" i.e., studies without matched controls or randomised controls (includes RCTs). Independent designs would be the more robust study design in terms of studying the effects of an intervention. Results for studies from both groups of designs were presented separately.

A total of nine studies reported on the intervention's impact on either caregiving quality/institutional environment or on attachment (as an indicator for the bond between caregivers and children).

Four studies (from Tanzania, Chile, El Salvador) found a wide range of effect sizes which the systematic review authors describe as "very large" to "small". Two studies reported on the quality of caregiving; one on whether children continued to experience physical maltreatment (it was an environment where violence as a form of discipline was common); one on the quality of attachment (results were not statistically significant). Three studies had caregiver training as the only intervention while the fourth study also had structural changes to improve institutional quality implemented (although the specific changes are not mentioned). All four were theory-based interventions.

Five studies (from Turkey, Russia, Romania) reported on various outcomes. Three studies examined had caregiver training and structural changes; one examined only structural changes and one only had caregiver training. Two studies did not report data that could be used for the systematic review's analysis although one study reported that care quality was better in the intervention group after intervention compared to controls (the type of data they reported was not usable for the review's chosen method of analysis). Two other studies of the same intervention found improvements in caregiving quality compared to controls, after the intervention had run for three years. One assessed an intervention that included both caregiver training and structural changes and found a larger, significant impact than the other that only included caregiver training (not significant). The fifth study improved the child-caregiver ratio (an example of a structural improvement) and found better attachment outcomes compared to the control group. Only three of the interventions were theory-based.

What information is available on cost and cost-effectiveness?

No information is provided on cost or cost-effectiveness.

Are results generalisable?

Probably. There were nine studies from various diverse countries. Almost all used caregiver training as the intervention with mostly positive results (although results of some were not statistically significant). Results are probably generalisable to institutions that care for children without families.

How reliable is the evidence?

Not very. The quality of the systematic review is rated as **'high risk of bias'**. This means that there is at least one major flaw in how it was conducted which reduces our confidence in the findings.

The systematic review adopted a method which combined RCTs and QEDs in the same statistical analysis which is not the convention. The study also depended on a separate meta-analysis paper for some of the calculations which could add errors to the estimates.