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Measuring and monitoring national prevalence of child maltreatment: *a practical handbook*



Measuring and monitoring national prevalence of child maltreatment: *a practical handbook*

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ABSTRACT

This handbook has been developed to support the creation of a surveillance system to measure and monitor child maltreatment prevalence across European countries. Implementation of a surveillance system will be an essential factor in realizing *Investing in children*, the European child maltreatment prevention action plan 2015–2020. It describes the processes involved in setting up child maltreatment surveillance systems and presents recommendations on issues such as selection of data collection method, sampling of respondents, choice of instrument to measure abuse and ethical considerations. The handbook suggests community-based surveys on prevalence as the most appropriate method in setting up a child maltreatment surveillance system and proposes the use of one of three established child maltreatment questionnaires, based on the results of a rapid systematic review of child abuse measures. The Short Child Maltreatment Questionnaire is introduced for countries needing a brief measure. Ideally, community-based surveys should be conducted with nationally representative samples of approximately 1500 students in each age group and administered via schools. The use of self-report methods – paper-based or tablet/mobile-phone self-administered questionnaires – is advised. Questions should capture previous-year and lifetime prevalence of child maltreatment. Monitoring prevalence rates over time requires surveys to be conducted at repeated time points. It is proposed that surveys be administered every four to seven years. Methods of data collection that do not involve children are presented for countries unable to conduct surveys with children. Finally, ethical considerations in conducting surveys on child maltreatment are discussed.

Keywords

Child Abuse
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Sentinel Surveillance
Surveys and Questionnaires
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FOREWORD

A healthy start to life without maltreatment and adversity in childhood is a mainstay of the actions required to reduce inequity in Europe and achieve the goals of Health 2020. Child maltreatment is the product of social, cultural, economic and biological factors and occurs in all societies and countries in the WHO European Region. It is a leading cause of health inequality and social injustice, with the socioeconomically disadvantaged more at risk. Estimates based on combined analyses of studies suggest that at least 18 million children in the Region will suffer from sexual abuse, 44 million from physical abuse and 55 million from emotional abuse during their childhood.

Most child abuse and neglect occur in the community. Unless detected by population surveys, they may neither be identified by child protection services nor come to the attention of policy-makers and society as a whole. Child abuse and neglect are nevertheless grave public health and societal problems with far-reaching consequences for the mental and physical health of children and for societal development. The consequences of such adversity may affect people throughout the life-course, resulting in high societal costs.

In response to the public health and societal burden of child maltreatment, Member States of the WHO European Region have endorsed Investing in children: the European child maltreatment prevention action plan 2015–2020. The plan emphasizes a public health approach to prevention and sets a target to reduce child maltreatment by 20% by 2020. It calls on Member States to achieve this through three objectives:

making child maltreatment more visible with better surveillance; strengthening governance by developing national action plans for prevention; and implementing maltreatment prevention programmes.

This handbook focuses on supporting the first of these objectives. It provides practical advice on measuring and monitoring the national prevalence of child maltreatment. Population-based surveys to measure children's experience of maltreatment at regular intervals will enable stakeholders to monitor whether reductions in child maltreatment are being achieved through policy and programmatic interventions. Such evidence would inform policy-makers and the public on whether society's preventive efforts to safeguard children from abuse and neglect are having the desired effects.

We at the WHO Regional Office for Europe hope that this handbook will provide policy-makers, practitioners and activists with the technical support needed to make the problem of child maltreatment more visible. This will contribute to evaluating actions and assessing progress in eliminating violence against children. The handbook should be used in conjunction with accompanying publications from WHO.

Gauden Galea

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ACRONYMS

ACE-IQ	Adverse Childhood Experiences International Questionnaires
ACASI	audio- and computer-assisted self-interviews
CAN-MDS	Coordinated Response to Child Abuse and Neglect via a Minimum Dataset
HBSC	Health Behaviour in School-aged Children (survey/study)
ICAST	ISPCAN Child Abuse Screening Tool
ISPCAN	International Society for the Prevention of Child Abuse and Neglect
JVQ	Juvenile Victimization Questionnaire
LONGSCAN	Longitudinal Studies on Child Abuse and Neglect (study)
SCMQ	Short Child Maltreatment Questionnaire
UNICEF	United Nations Children's Fund

EXECUTIVE SUMMARY

Child maltreatment – the physical, emotional and sexual abuse and neglect of children – is a major health concern in European countries that requires an intersectoral approach. It is associated with poor physical and mental health and has been linked to anxiety, depression, self-harm, suicidality, cardiovascular disease, diabetes and cancer. According to the United Nations Convention on the Rights of the Child, child maltreatment is considered a violation of children’s human rights. Governments are legally obliged to guarantee the survival, development, well-being and participation of children. While some of the more severe child maltreatment cases are likely to be detected by child protection agencies, estimates suggest that a large number are unreported. Identifying the actual number of cases and establishing reliable statistics on prevalence for each country and region are public health imperatives.

This handbook has been developed for policy-makers, policy-implementers and practitioners to facilitate the creation of a surveillance system for measuring child maltreatment prevalence across European countries. The surveillance system will enable countries to monitor effective implementation of their national action plans over time, as described in *Investing in children, the European child maltreatment prevention action plan for 2015–2020* that was adopted by the WHO Regional Committee for Europe in 2014. It will also help to compare child maltreatment exposure across countries. The handbook should be used in conjunction with the forthcoming handbook for the development of national policy and action plans on child maltreatment prevention.

SUGGESTIONS FOR THE CREATION OF NATIONAL CHILD MALTREATMENT SURVEILLANCE SYSTEMS IN EUROPE

Child maltreatment surveillance should be conducted using representative community-based surveys that are comparable across countries. It is suggested that an efficient way of doing this is through administering questionnaires via schools, specifically targeting adolescents aged between 13 and 15 years. Administering surveys in schools increases feasibility and ensures easy access to the population of interest, but is only suitable in countries with low levels of school dropout in the target sample population. It also does not allow monitoring throughout the whole of childhood (0–17.9 years).

The handbook suggests that countries wishing to carry out national surveys solely on child maltreatment should use one of three internationally recognized longer instruments: the International Society for the Prevention of Child Abuse and Neglect (ISPCAN) Child Abuse Screening Tool (ICAST), the Juvenile Victimization Questionnaire (JVQ), or the Adverse Childhood Experiences International Questionnaires (ACE-IQ).

These cover multiple dimensions of child maltreatment and violence against children.

The handbook also introduces the Short Child Maltreatment Questionnaire for inclusion in ongoing multicomponent surveys where space is limited. The questionnaire covers four dimensions of maltreatment – physical, emotional and sexual abuse, and neglect – and adds a fifth dimension of witnessing parental intimate-partner violence.

All included questions should investigate two kinds of child maltreatment prevalence – past-year and lifetime. If only one type is to be chosen, preference should be given to past-year prevalence, as it is better suited to monitoring trends over time.

Lifetime prevalence can measure burden of experienced child maltreatment, but cannot be used to monitor changes in prevalence rates in relation to the vision of prevention programmes proposed by national action plans. It can nevertheless capture exposure early in childhood that can have a profound effect on later development. Ideally, both lifetime and past-year prevalence should be established.

National surveys should be conducted at regular intervals to allow tracking of trends in maltreatment rates over time and across European countries. The handbook suggests an interval of four to seven years.

A subset of the population should be selected based on random probability sampling. The sample should be representative to enable prevalence rates to be generalized to the whole population of the age group sampled.

Participation in surveys must be completely voluntary. Answers must remain confidential and should not be accessible to teachers or other staff members. All data must be anonymized so that answers cannot be traced to individual respondents.

The handbook suggests a passive consent procedure from guardians (where legally possible) to increase response rates. Leaflets or information sheets that provide information about the research and explain the possibility for opt-out should be distributed to parents and legal guardians. If no further action is taken by the guardian, researchers can assume that consent has been given. Where young people choose to participate, assent is assumed.

Surveys rely on self-report measures of child maltreatment. To support anonymity and confidentiality, questionnaires should be completed with paper and pencil or using audio- and computer-assisted self-interviews (ACASI) administered via a tablet, iPad or mobile phone.

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Ethical procedures should emphasize respondents' confidentiality and anonymity. Information for self-referral to child protection services, however, should be provided to all participants and referral systems should be in place for those actively seeking help.

ENDORSED ADDITIONAL MONITORING METHODS INVOLVING PARENTS OR PROFESSIONALS

For age groups in which children are too young for self-report interviewing (0–9 years, for instance), the handbook suggests parent-based reporting using one of two measures – the ICAST-P (Parent) or the JVQ–parent report. Special emphasis needs to be placed on privacy and anonymity to reduce the risk of underreporting.

Sentinel surveillance provides an alternative approach. In a sentinel surveillance process, professionals working with children in organizations such as youth clubs or schools agree to report all suspected cases of child maltreatment over a specified time frame to a designated agency. Sentinel surveillance can be used to measure incidence of child maltreatment and inform policy-makers about gaps in service provision, lack of resources and particular areas with high prevalence. Sentinel surveys are likely to provide an underestimate of the prevalence of maltreatment in the general population, but when combined with self-report surveys can produce an accurate picture of the prevalence of child maltreatment, availability of services and problems in service delivery. The handbook endorses a combination of these approaches. Sentinel surveillance may be more appropriate for establishing chronicity of maltreatment.



CHAPTER 1
INTRODUCTION

WHAT IS CHILD MALTREATMENT AND HOW DOES IT DIFFER FROM VIOLENCE AGAINST CHILDREN?

Child maltreatment is defined as the abuse and neglect that occurs to children under 18 years of age. It includes all types of physical and/or emotional ill treatment, sexual abuse, neglect, negligence and commercial or other exploitation that results in actual or potential harm to the child's health, survival, development or dignity **in the context of a relationship of responsibility, trust or power** (1). As such, the perpetrator is often someone like a parent, guardian, older relative or teacher, or older acquaintance or stranger.

While a single incident of sexual abuse is considered to meet the criteria, exposure to neglect, emotional abuse and moderate forms of physical abuse should be persistent and frequent to meet the definition of child maltreatment (2). However, no forms of abusive behaviour towards children, whether frequent or infrequent, are condoned.

For the purposes of this handbook, five types of maltreatment are considered: physical, sexual and emotional abuse, neglect and the witnessing of interparental violence.

Violence against children refers to all forms of physical or mental violence, injury and abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse against young people under 18 years (3). It includes, but is a much broader concept than, child maltreatment; for instance, it is not necessary for it to occur in the context of a relationship of responsibility, trust or power, but can be perpetrated by anyone – peers, strangers or any individual or group (4).

This handbook focuses on the measurement and surveillance of child maltreatment and not on surveillance of violence against children.

WHY IS CHILD MALTREATMENT IMPORTANT?

It is estimated that between 5% and 50% of children suffer from child maltreatment (4). Prevalence rates vary regionally and can be as high as 65% for physical abuse (5) and 55% for contact and non-contact sexual abuse (6) in some African countries. A meta-analysis in Europe showed that rates of physical abuse were 22.9%, emotional abuse 29.1% and contact sexual abuse 9.6% (5.7% in boys and 13.4% in girls) (7–10). A telephone-interview study from 2008 in the United States of America revealed that 10% of the children and adolescents surveyed had suffered from child maltreatment in the past year. This included physical and emotional abuse, neglect and family abduction. Six per cent of respondents were exposed to sexual abuse and 9% witnessed assault of a family member by another (11). A United Kingdom-wide study based on computer-assisted self-interviewing found a

prevalence of severe maltreatment (with a weapon or leaving an injury) experienced during childhood of 6% among participants under 11 years, 19% in 11–17-year-olds and 25% in those between 18 and 24 (12). In Europe, 850 children aged under 15 die from child maltreatment annually (10).

Apart from the immediate medical and psychological trauma, child maltreatment also has multiple negative lifetime effects. Those who have experienced child maltreatment are at increased risk of suicide, repeated maltreatment or victimization by others, risky sexual behaviours, poor physical and mental health, and unemployment, and also have higher risk for violence perpetration and delinquent behaviour (13–17). Child maltreatment is also associated with cancer, cardiovascular disease and diabetes (18).

Evidence points to intergenerational continuity of child maltreatment, meaning victims are more likely to maltreat their own children and/or be in violent relationships that children might witness (19). Safe, stable and nurturing relationships have been shown to moderate this association (20), but a recent prospective cohort of individuals with histories of childhood abuse matched with non-abused comparisons identified through child protection services' records found that higher detection rates in families with childhood abuse histories may be due to detection or surveillance bias (21).

Child maltreatment also has economic consequences. The estimated annual cost in the United States for related illnesses and disabilities is US\$ 124 billion. In Germany, the estimated annual costs (for all people who have ever experienced child maltreatment in their lifetime) is €11 billion due to expenditure on health care, education and social services, and through productivity losses over the victim's lifetime (22).

Reducing child maltreatment is therefore a clear public health imperative, but reliable, easily accessible and internationally standardized data on the prevalence of child maltreatment are lacking. Estimates suggest that up to 90% of cases remain unreported and are therefore undetected by child protection services (23). Survey data are needed to examine the full extent of the problem. Availability of adequate information on child maltreatment is limited in many countries by expensive and complex data collection processes and the requirement for lengthy and detailed interviews, and current survey data are often limited by small and unrepresentative sampling. The above numbers are only approximations of the European and global situation – more representative surveys using standardized tools are needed.

WHY IS CHILD MALTREATMENT SURVEILLANCE NEEDED?

Child maltreatment is considered a violation of children's human rights. The United Nations Convention on the Rights of

the Child spells out these rights as the survival, development, well-being and participation of children (24). They can further be categorized into those of protection, participation and provision.

Rights of protection promote the protection of children from harm, such as all forms of abuse and exploitation. Rights of provision comprise children's right to education and the obligation of the state to uphold this right if parents and families cannot. Rights of participation allow children to be involved in actions and decisions that affect them, and express and have their views heard about those decisions. Children's human rights are legal obligations that require an effective public health response (25): a key starting point is asking children (or their caregivers) whether they have experienced maltreatment.

In response to the scale and detrimental consequences of child maltreatment, as highlighted in the European report on preventing child maltreatment (10), the 53 Member States of the WHO European Region gave their unanimous support in 2014 to the WHO Regional Committee for Europe resolution EUR/RC64/R6 on investing in children: the European child and adolescent health strategy 2015–2020 and the European child maltreatment prevention action plan 2015–2020 (10,26). The prevention action plan establishes a regional target to reduce child maltreatment and homicides by 20% by 2020. It calls on countries to achieve this through:

- making child maltreatment more visible by setting up information systems;
- strengthening governance by developing intersectoral national action plans for prevention; and
- strengthening health systems to reduce the risks of child maltreatment.

This handbook focuses on supporting Member States to deliver on the first objective. Work is also underway on a handbook on developing national action plans to prevent child maltreatment to support achievement of the second objective, and for the third, countries have access to *Implementing child maltreatment prevention programmes: what the experts say* (27) and *INSPIRE: seven strategies for ending violence against children* (28), both of which present evidence-based resources on child abuse prevention and responses.

Effective surveillance systems based on self- or parent-reported child maltreatment are essential, as child maltreatment often is a hidden problem with many cases not disclosed to agencies involved in caring for children and young people. Reliable and valid cross-country data on prevalence are urgently needed to enable estimations of the global and national burden and

assess the effectiveness and viability of social and health interventions and policies to reduce child maltreatment, family conflict and family violence.

The lack of European survey data on prevalence is due in part to the high costs of conducting surveys on child maltreatment, which often require lengthy and detailed interviews. The International Society for the Prevention of Child Abuse and Neglect's (ISPCAN) Child Abuse Screening Tool (ICAST), for example, has 37 items and takes an average of 30 minutes to complete (29). An alternative strategy is to add child and/or adult modules to existing national or international surveys. This has been achieved successfully for fighting and bullying in the Global School-based Student Health survey and the Health Behaviour in School-aged Children (HBSC) survey and could also be done for child maltreatment (30,31). The potential for including child maltreatment items in surveys is hampered, however, by the lack of validated and freely available measures that are sufficiently concise for inclusion in large multicomponent studies.

This handbook aims to support countries in establishing child maltreatment surveillance systems that are appropriately designed to benchmark and monitor maltreatment rates over time. It is suitable for all European countries that are able to carry out a HBSC survey and have a minimum of child protection services in place, and includes detailed guidance on how to conduct community surveys on, and take sensible measurements of, child maltreatment. The handbook reviews the suitability of comprehensive questionnaires for standalone surveys of maltreatment and introduces the newly developed Short Child Maltreatment Questionnaire (SCMQ) to measure children and young people's experiences. The SCMQ can be included in multicomponent surveys, and all presented instruments can be used to establish prevalence: indeed, repeated administration of the same tool will help to monitor prevalence over time. Prevalence studies are in line with the child's right to participation, as defined in Article 12 of the Convention on the Rights of the Child (24).

Research is needed to determine the sensitivity of the selected measures in detecting change in maltreatment and the time intervals over which they should be repeated. Current practice suggests a period of four to seven years is advisable.

WHO IS THE HANDBOOK FOR?

The handbook was developed for policy-makers, policy-implementers and researchers. Its key audience includes: representatives from ministries of health, children and families, social services or welfare, and education; advisers to policy-makers; and personnel of international organizations focused on child protection and relevant nongovernmental organizations working with vulnerable children. It also targets state-led research institutions, such as offices for national

statistics, institutes of criminology and research institutes for families and young people. The handbook will help governments and agencies to monitor child maltreatment prevalence over time using standardized measures and consequently evaluate implementation of national action plans for child maltreatment prevention.

AIM AND STRUCTURE

The handbook has one main aim: **to promote system-wide monitoring of child maltreatment in European countries and globally.**

The following chapters provide a step-by-step outline of how a surveillance system for measuring child maltreatment prevalence should be put in place, with the emphasis on establishing population-wide prevalence rates via representative survey samples. Suggested tools should not be used for the identification of individual child maltreatment cases.

Fig. 1 presents a decision aid for designing surveillance studies on child maltreatment prevalence and highlights the recommended choices. It is suggested that past-year and lifetime exposure to child maltreatment be measured as a minimum: severity, chronicity and age of onset should also be considered for inclusion where more space is available (32).

Following this introductory chapter, Chapter 2 provides definitions of key concepts and Chapter 3 introduces community-based child maltreatment surveillance and monitoring, including advice on sample populations and a short how-to section. Chapter 4 focuses on survey measures and the SCMQ, discussing their strengths and limitations. Chapter 5 presents a suitable tool for capturing population information on maltreatment among younger children and toddlers, based on parent reporting, and describes agency-based and sentinel surveillance as an alternative to population surveys. Chapter 6 discusses ethical aspects, including protection from harm, seeking consent, ensuring confidentiality and putting child protection mechanisms in place.

Fig. 1. Decision aid: how to do child maltreatment surveillance

What to measure? →	Past-year exposures to different types of child maltreatment Lifetime exposures to different types of child maltreatment
Who to survey? →	Children Adolescents Parents Professionals
How to sample? →	From schools From clinics From child protection agencies From agencies working with children From the general population
How to collect data? →	Face-to-face interview Self-administered interview Telephone interview Computer-assisted interview Official records
Which tool to use? →	ICAST (approx. 25 minutes) ACE IQ ^a (approx. 25 minutes) JVQ ^b -long (approx. 30 minutes) JVQ-screener (approx. 12 minutes) SCMQ (approx. 3 minutes)

^a ACE-IQ = Adverse Childhood Experiences International Questionnaire.

^b JVQ = Juvenile Victimization Questionnaire.



CHAPTER 2

DEFINITION OF TERMS

CORPORAL PUNISHMENT

Corporal punishment is (33):

... any punishment in which physical force is used and intended to cause some degree of pain or discomfort, however light. Most involves hitting (smacking, slapping or spanking) children with the hand or with an instrument (a whip, stick, belt or shoe). Corporal punishment can also involve kicking, shaking or throwing children, pulling hair, boxing ears, burning or scalding children.

Much or all of what is considered harsh corporal punishment is also considered child maltreatment.

CHILD MALTREATMENT

Child maltreatment includes all types of physical and/or emotional ill treatment, sexual abuse, neglect, negligence and commercial or other exploitation that results in actual or potential harm to the child's health, survival, development or

dignity **in the context of a relationship of responsibility, trust or power** (1). WHO definitions for all subtypes of child maltreatment are outlined in Table 1.

It is important to distinguish between moderate and severe maltreatment. For physical abuse, spanking the buttocks, slapping the child, pulling hair or pinching would be considered moderate. Hitting the child with an object, kicking, burning, choking and beating would be considered severe. Moderate forms are much more prevalent. The WorldSAFE study, for example, found that 51% of the cohort of mothers in Chile used spanking the buttocks to discipline their child, but only 4% hit their child with an object, and none kicked, burned, beat or choked the child (4).

Moderate levels of maltreatment are still considered abusive but are considered less harmful than severe types (4). Use of the label moderate for certain types of maltreatment does not, however, justify its use. Any type of maltreatment, whether moderate or severe, is in direct contravention of the Convention on the Rights of the Child and potentially harmful

Table 1. Subtypes of child maltreatment

Subtype	Description
Physical abuse	Physical abuse of a child is that which results in actual or potential physical harm from an interaction or lack of interaction, which is reasonably within the control of a parent or person in a position of responsibility, power or trust. There may be single or repeated incidents.
Emotional abuse	Emotional abuse includes the failure to provide a developmentally appropriate supportive environment, including the availability of a primary attachment figure, so that the child can develop a stable and full range of emotional and social competences commensurate with her or his personal potentials and in the context of the society in which the child dwells. There may also be acts towards the child that cause or have a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. These acts must be reasonably within the control of the parent or person in a relationship of responsibility, trust or power. Acts include restriction of movement, patterns of belittling, denigrating, scapegoating, threatening, scaring, discriminating, ridiculing or other non-physical forms of hostile or rejecting treatment.
Neglect and negligent behaviour	Neglect is the failure to provide for the development of the child in all spheres: health, education, emotional development, nutrition, shelter, and safe living conditions, in the context of resources reasonably available to the family or caregivers and causes (or has a high probability of causing) harm to the child's health or physical, mental, spiritual, moral or social development. This includes negligent behaviours such as the failure to properly supervise and protect children from harm as much as is feasible.
Sexual abuse	Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person.
Witnessing domestic violence	Any form of verbal or physical violence between a caregiver and his or her adult partner or ex-partner.

Source: WHO (1).

to children. Surveillance teams need to take into account the frequency of maltreatment experiences to categorize children correctly.

Various definitions of child maltreatment are used across European countries, including statutory and institutional definitions that may differ from that of WHO. Researchers should use the most rigorous definition to gather monitoring information on child maltreatment that is useful for each country.

The terms child abuse and child maltreatment are commonly used interchangeably. This handbook refers to child maltreatment throughout, denoting experiences of both child abuse and neglect, but looks at measurement instruments that capture all aspects of maltreatment and are not limited to one subtype only.

PREVALENCE

Prevalence denotes the total number of existing cases at a specific time point divided by the total risk population, and

is usually expressed as a percentage (34). The focus in this handbook is the previous-year and lifetime prevalence of child maltreatment.

MEASURING CHANGE

Few child maltreatment measures have been psychometrically evaluated to measure trends accurately. Further validation work on inter-rater reliability is therefore needed to establish whether the instruments presented in this handbook are able to measure trends.

Change is considered as the difference in prevalence rates of child maltreatment exposure in a nationally representative sample of a similar population across different years of surveying. For example, a nationally representative survey of 1500 schoolchildren aged 13–15 conducted in 2005 finds a physical abuse prevalence of 35%; a nationally representative survey of 1500 schoolchildren aged 13–15 conducted in 2015 using the exact same methodology and questions as the 2005 survey finds a prevalence of 20%. The 2015 survey therefore measured a 15% change in the prevalence of physical abuse.



CHAPTER 3
DEVELOPING A CHILD MALTREATMENT
SURVEILLANCE SYSTEM

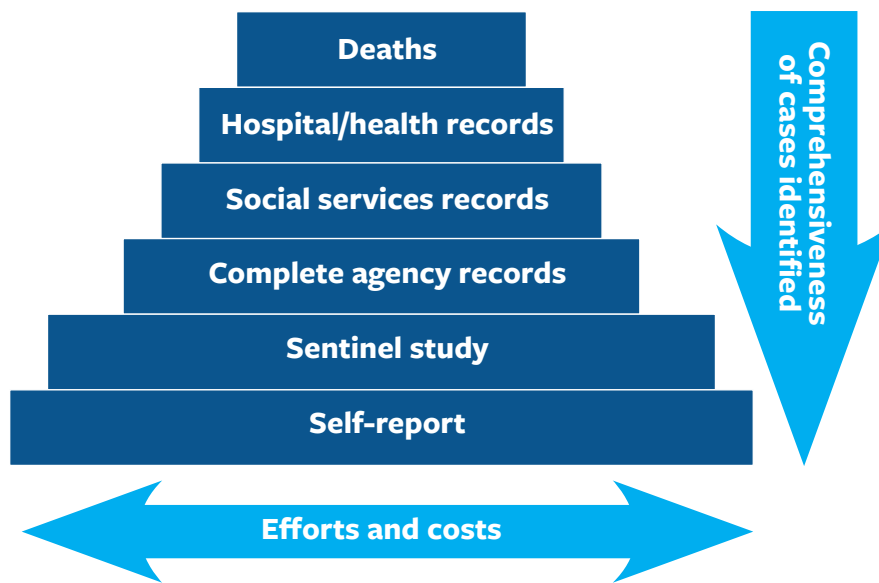
WAYS TO COLLECT DATA

Child maltreatment prevalence can be captured in a number of ways. For instance, data can be retrieved from court records of child homicide and maltreatment cases, case reports can be accessed through child protection services, and sentinel studies or broad population-based surveys can be conducted. This handbook considers representative population-based surveys

the most adequate tool for gathering accurate information for surveillance and monitoring of child maltreatment.

Fig. 2 illustrates different ways to collect data, based on the cost and effort involved and the comprehensiveness of cases identified. It is important to highlight that child maltreatment surveillance aims to identify population-wide prevalence or numbers and characteristics of children reached by services.

Fig. 2. Child maltreatment surveillance: methods of data collection and identification of cases



WHO SHOULD BE SURVEYED?

Different groups can provide information on child maltreatment for national prevalence data. Surveys could target children, adolescents, parents and legal guardians, teachers or professionals working with children, such as social workers, paediatricians or psychologists. The representativeness of the sampled population should be a major focus. Adolescents are an ideal age group as they are able to self-complete questionnaires. Ideally, children and young people aged 10 to 17 years should be sampled to capture victimization up to the age of 18. Considering the constraints in drawing representative samples from such a large age group, however, it is suggested that the minimum standard in surveillance studies should be to recruit adolescents aged between 13 and 15 years in schools, such as those recruited for HBSC surveys (35). A key strength of sampling school-aged adolescents is feasibility: surveys can be administered through schools, respondents accessed easily, and the reading levels and maturity of the proposed age group will be adequate for the use of self-interviewing techniques (see below).

Although the sampling of adolescents specifically is preferred, Chapters 4 and 5 discuss alternative approaches and describe how data on prevalence of child maltreatment in younger populations could be gathered.

HOW TO SAMPLE STUDY PARTICIPANTS

The key goal of a population-based survey is that findings can be regarded as representative for the whole population of interest. Ideally, prevalence of child maltreatment would be assessed by interviewing all members of a population, but this is too time-consuming and expensive. A representative subset of the population is therefore surveyed.

Planning for a representative survey involves two steps: 1) choosing a sampling method; and 2) determining the sample size. The following paragraphs briefly outline suggestions on sampling methodology for population-based surveys based on WHO guidelines for conducting community surveys on injuries and violence (36) and the HBSC survey protocol (37,38). An

example based on the HBSC study can be found in Box 1. It is suggested that this protocol be consulted for more detailed instructions (including recruitment and training of fieldworkers, data entry and cleaning, and data analysis).

Box 1. Sampling example: HBSC

Population

The population is young people attending school aged 11, 13 and 15 years (desired mean age 11.5, 13.5 and 15.5); 95% of the eligible target population should be within the sample frame.

Sampling

Cluster sampling using the school class as the sampling unit is employed. Probability proportionate to size sampling is used where the number of eligible classes is unknown. Every pupil within the selected class is included in the sample.

Stratification

The sample can be stratified by geographic location, ethnic group, school type, etc., to ensure representativeness.

Sample size

The suggested sample size for each of the three age groups is 1500 students, assuming a 95% confidence level and a design factor of 1.2.

Complications

School systems differ across countries, which makes uniform sampling difficult. Age is therefore used as a priority determinant for sampling. Classes that contain students in the relevant age groups are selected. Further possible challenges are that target age groups may be split across different types of schools, such as primary and secondary institutions. To reduce fieldwork costs, classes for one age group are randomly selected and other classes are drawn from the same school, consequently minimizing the total number of required schools.

Administration

The survey is administered at different times during the academic year to produce samples with the required mean ages. Depending on the country, this is delivered either by teachers or the external research team.

Representativeness

Generally, national samples are drawn. Where this is not possible, regional sampling is employed (the minimum size of the total population must be no fewer than 1 million).

Sampling method

WHO suggests a two-stage sampling process. First, a subset of secondary schools is selected via cluster probabilistic sampling. It is suggested that adolescents are targeted to allow for self-completion of the survey. Classes in these schools with students aged 10–18 are targeted. If researchers follow the HBSC format or survey, 13–15-year-olds should be recruited. Questionnaires can be administered by teachers or external researchers.

Determination of the sample size

Sample-size calculations seek to balance sufficient size for detecting differences between groups within the population and keeping survey costs at a reasonable level. A number of factors need to be considered to determine an adequate sample size:

- the estimated prevalence of the problem (in this case, child maltreatment)
- an acceptable error margin
- the level of precision
- clustering of data (in cluster samples)
- the estimated non-response rate.

Prevalence estimates should ideally be based on findings from previous studies or those of arguably similar populations. Calculations for sample sizes under different prevalence scenarios, ranging from 5% to 20%, are shown in Table 2.

The **error margin** should conventionally be set to 5%, which will retrieve prevalence estimates with a confidence level of 95%.

The **level of precision** determines the accuracy of estimates (that is, the range in which the point estimate lies). A precision level of half of the prevalence rate is suggested: for instance, with an expected maltreatment prevalence of 20%, precision should be set to 10% (40).

Standard sample size calculations are valid only if simple random sampling techniques are applied. Where **cluster** or **multistage sampling** methods are used (as suggested in this handbook), the required sample size will have to be enlarged if the level of precision is to be maintained. Sample sizes will have to be corrected by a design effect¹ that accounts for the fact that individuals within one cluster (such as schools) will likely be similar to each other, which will increase the intraclass correlation. Previous studies can give some indication of the magnitude of

¹ The design effect is calculated as $1 + \hat{\rho}(n - 1)$, whereby $\hat{\rho}$ denotes the intraclass correlation and n the average size of a cluster.

Table 2. Sample sizes for different prevalence rate scenarios

Expected prevalence rate (%)	Precision level (%)	Sample size required
5	25	8360
10	5	2156
15	75	984
20	10	566

Note: hypothetical sample sizes have been calculated with an online calculator (39). Sensitivity and specificity were assumed to be 70%, which can be regarded as a rather conservative estimate.

such design effects, but if no such studies can be identified, it is suggested that the HBSC study be followed and a design factor of 1.2 applied (38). Generally speaking, design effects between 1 and 3 are most common. A design effect of 3, for instance, would require a threefold increase of the sample size to maintain the same level of precision (41).

Last, oversampling can be used in light of possible **non-response**. Again, previous studies may give some indication of the non-response rate to be expected.

HOW TO COLLECT DATA

In self-report surveys on sensitive topics, self-administration can increase willingness of disclosure compared to face-to-face interviews, due to increased anonymity and confidentiality. Embarrassment, stigmatization and social desirability bias of self-report measures can be reduced, especially in relation to measurement of sexual abuse (42).

Self-administered surveys can be run in two formats.

1. **Paper-based surveys** require questionnaires to be completed using a paper-and-pencil method. After completion, questionnaires are handed back in sealed envelopes containing no personal identification data to ensure anonymity. These should not be used in populations with low literacy.
2. **Tablet/computer-based surveys**, such as audio- and computer-assisted self-interviews (ACASI) surveys, are self-administered on a tablet, iPad or mobile phone. Project mobile devices, rather than personal ones, are used to preserve confidentiality. Questions are displayed in a written format with an additional (optional) audio feature that reduces reading burden and is especially useful when used in sample populations with low literacy levels. Technology-based self-interview methods have been shown to be effective in increasing participants' willingness to disclose stigmatized experiences (43). One study found prevalence rates obtained from ACASI interviewing were four to six times higher than records from child protection agencies (44). The proposed target population is likely to be familiar with mobile devices.



CHAPTER 4
WHAT MEASUREMENT INSTRUMENTS
ARE AVAILABLE?

TYPES OF INSTRUMENTS

The literature exhibits a broad range of child maltreatment measures that have to date been widely applied in multiple countries across the world. Annex 1 provides a comprehensive list of child maltreatment measures identified from a rapid systematic literature review.

Countries, organizations and agencies that wish to carry out specific surveys on child maltreatment are encouraged to administer one of the long questionnaires shortlisted by the expert committee based on the following four criteria:

1. the measurement toolkit had to be available at zero cost;
2. the instrument had to cover all dimensions of maltreatment – physical, sexual and emotional abuse and neglect;
3. the instrument had to be tested and used in different contexts and deemed suitable by experts from a variety of countries; and
4. some results on reliability and validity had to be available.

The following sections briefly describe the three shortlisted instruments. Full questionnaires are available online.

ICAST

The ICAST tool has been developed in a joint effort involving ISPCAN, the United Nations Children’s Fund (UNICEF), the United Nations Secretary General’s study on violence against children, the Office of the High Commissioner for Human Rights and WHO. The tool was piloted in eight countries and refined accordingly.

ICAST questionnaires have since been used in studies across the globe, including European countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Romania, Serbia, the former Yugoslav Republic of Macedonia and Turkey) (45,46), China (47), the Democratic Republic of the Congo (48), the Republic of Korea (49), Saudi Arabia (50) and Zimbabwe (51) and has been validated in China (47). Internal consistency varied depending on the subscale, from adequate-to-good for the ICAST-C (Child) and ICAST-R (Retrospective) (29,52), and poor-to-good for the ICAST-P (Parent) (48). Psychometric properties can be found in Annex 1. The tool is now available in 20 languages.

The ICAST is a self-report measure to assess child maltreatment prevalence and frequency. There are three ICAST tools:

- child versions for ages 11–18, including ICAST-CH (Home) and ICAST-CI (Institution) (29);

- ICAST-P parent version (48); and
- ICAST-R retrospective version used for adults to measure childhood abuse (52).

The ICAST-CH measures a child’s current (past-year) and lifetime exposure to physical, emotional and sexual abuse, neglect, domestic violence and community violence. The ICAST-CI measures victimization in school or other institutional environments. The ICAST-P measures a caregiver’s current (past-year) and lifetime physical, emotional and sexual abuse, neglect and harsh parenting for an index child in their care. The ICAST-R measures an adult’s maltreatment experience during childhood.

The ICASTs contain between 36 (ICAST-R) and 77 (ICAST-C) items. Completion time varies from 15 to 30 minutes depending on interviewer style and victimization experience. The tools can be completed by participants.

Key facts about ICAST are summarized in Box 2.

Box 2. Key facts about ICAST

- The ICAST covers the following domains:
 - a) physical abuse
 - b) emotional abuse
 - c) sexual abuse
 - d) neglect
 - e) exposure to domestic violence
 - f) exposure to community violence.
- There are four versions of the ICAST:
 - child version (home and institution)
 - parent version
 - retrospective tool for measuring abuse history.
- The ICAST questionnaire is self-administered and can be completed within 30 minutes.
- ICAST includes between 36 and 77 single items.
- The ICAST tool has been translated into 20 languages.

Source: ISPCAN (53).

JUVENILE VICTIMIZATION QUESTIONNAIRE (JVQ)

The JVQ is a self- or sentinel-report measure that assesses past-year and lifetime prevalence of child maltreatment, crime and other types of victimization during childhood. It consists of 34 items spanning five domains: crime, child maltreatment, peer and sibling victimization, sexual victimization and witnessing crime. The JVQ also collects data on the frequency and perpetrators of the victimization events. It is designed for children and young people aged 0–17 years (for interview administration with those between 8 and 17 years and self-administration for age 12 and

above). The caregiver report version is suggested for children who are too young to be interviewed or surveyed.

The JVQ can be adapted for use as a retrospective measure of childhood abuse for adults (54) and has been used, with others, in the National Survey of Children's Exposure to Violence in Canada (55), China (56), Spain (57), Sweden (58), the United Kingdom (59) and the United States (60). Items have also been used in the Longitudinal Studies on Child Abuse and Neglect study (61), Finland (62), Iceland (63), two studies in South Africa (64,65) and Viet Nam (66). Validity testing established moderate correlations between the JVQ and trauma symptoms and mental health scores in studies in China (67) and the United States (54), but a Spanish validation study did not support this (57). Internal consistency for the overall measure was excellent, but subscale consistency ranged from poor to acceptable (54). Test-retest reliability was acceptable to excellent. Psychometric properties can be found in Annex 1.

Key facts about JVQ are summarized in Box 3.

Box 3. Key facts about JVQ

- The JVQ covers the following domains:
 - a) crime
 - b) child maltreatment
 - c) peer and sibling victimization
 - d) sexual victimization
 - e) witnessing crime.
- The JVQ has 34 items.
- The JVQ is designed for ages 0–17 and can be self-administered for children of 12 years and above.
- It takes approximately 30–35 minutes to complete.
- The JVQ can also be based on parent-report for children younger than 8 years.
- Two shorter versions are available: Screener (12 minutes) and Abbreviated (20 minutes).

Source: Crimes Against Children Research Center (68).

THE ADVERSE CHILDHOOD EXPERIENCES INTERNATIONAL QUESTIONNAIRE (ACE-IQ)

Developed by the Centers for Disease Control and Prevention and Kaiser Permanente in 1995, the adverse childhood experiences study originally assessed the association with long-term risky behaviour and health outcomes among a large sample of adults in San Diego, California (69). Thirty-two states and the District of Columbia in the United States assessed for adverse childhood experiences in their state health surveys (using the Behavioral Risk Factor Surveillance System (70)) to

achieve a more representative assessment of early adversity. The ACE-IQ has been developed to investigate adverse childhood experiences internationally.

The 31-item ACE-IQ spans seven domains covering emotional abuse (recurrent humiliation), physical abuse (beating), contact sexual abuse, physical and emotional neglect, household dysfunction (such as exposure to violence, alcohol and drug use, imprisonment, mental illness of household members and foster care of the child) and peer and community violence (71). It is a retrospective measuring tool, so is used mostly with adults to establish their own childhood abuse experiences. The ACE-IQ has nevertheless been used with adolescents in a number of surveys, most notably in HBSC (where lifetime prevalence is measured), and could be modified to measure past-year exposure to maltreatment. For this, a shorter version of the ACE-IQ spanning three dimensions – physical, emotional and sexual abuse – was created (Table 3).

The developers encourage use as part of broader health surveys, as it is employed mainly to demonstrate associations between exposures to adverse childhood experiences and subsequent risk behaviours and health outcomes. The ACE-IQ (or original questionnaire) has been used in other populations, including in China, Denmark (72), countries in eastern Europe (including Albania, Latvia, Lithuania and Montenegro) (73), Germany (74), Iraq (75), the Philippines, Romania (76), the Russian Federation (77), Saudi Arabia (78), Serbia (79), South Africa, Thailand, the former Yugoslav Republic of Macedonia (80), Turkey (81), the United Kingdom (82), the United States (83,84) and Viet Nam (85,86). Surveys are also being conducted in the Czech Republic, Poland and the Republic of Moldova.

A limited amount of psychometric testing has been carried out. An 11-item short version used in the Behavioral Risk Factor Surveillance System found a three-factor solution for physical/emotional abuse, sexual abuse and household dysfunction (87). Strong correlations between adverse childhood experiences, risky behaviours and poor health outcomes have been shown across a wide range of countries (73,83). The screening tool showed good construct validity in Germany, where it correlated strongly with the Childhood Trauma Questionnaire. Internal consistency was good in this German sample (74). Good test-retest reliability has been established (88). Psychometric properties can be found in Annex 1 and key facts about ACE-IQ are summarized in Box 4.

SCMQ

Apart from the HBSC version of the ACE-IQ, no child maltreatment measure brief enough to be included in national surveys is currently available. An expert group convened by the WHO Regional Office for Europe therefore developed the

Table 3. Short ACE-IQ questionnaire, as used in the HBSC 2014 survey

Dimensions	Items – While you were growing up
Emotional abuse	1. Did a parent, guardian or other household member yell, scream or swear at you, insult or humiliate you?
	2. Did a parent, guardian or other household member threaten to, or actually, abandon you or throw you out of the house?
Physical abuse	3. Did a parent, guardian or other household member spank, slap, kick, punch or beat you up?
	4. Did a parent, guardian or other household member hit or cut you with an object, such as a stick (or cane), bottle, club, knife, whip, etc.?
Sexual abuse	5. Did someone touch or fondle you in a sexual way when you did not want them to?
	6. Did someone make you touch their body in a sexual way when you did not want them to?
	7. Did someone attempt oral, anal, or vaginal intercourse with you when you did not want them to?
	8. Did someone actually have oral, anal, or vaginal intercourse with you when you did not want them to?

Source: Inchley et al. (31).

SCMQ. Countries lacking the funds to carry out specific surveys on child maltreatment or those carrying out surveys with representative samples of adolescents can use the SCMQ as a short measure for child maltreatment.

Box 4. Key facts about ACE-IQ

- The ACE-IQ covers the following domains:
 - a) protection
 - b) abuse (physical, emotional and sexual)
 - c) neglect
 - d) exposure to domestic violence
 - e) exposure to community violence
 - f) exposure to military conflict
 - g) exposure to peer violence.
- The ACE-IQ has 31 items.
- It takes approximately 25 minutes to complete.
- The ACE-IQ is used with adults to measure experiences of maltreatment retrospectively but could be adapted for past-year prevalence.
- A screener form (10 items) and HBSC short form on maltreatment experience (8 items) are also available.

Source: WHO (85).

The SCMQ provides a minimum number of questions. It was developed by an expert committee and draws on a range of validated instruments it has approved. Wordings were changed

and questions rephrased slightly where necessary to make the instrument more succinct and comprehensible. The SCMQ can be included in existing or developing national surveys on child well-being, health or behaviour, particularly where questionnaire space is an issue. It includes seven items that were adapted from validated measurements for the specific purpose of creating a short questionnaire and can be used with adolescents and young people aged 10–18.

The SCMQ does not aim to measure every type of maltreatment. Items reflect four dimensions – physical, emotional and sexual abuse, and neglect – and a fifth dimension of witnessing parental physical violence (Fig. 3). Questions endeavour to distinguish between moderate and severe levels, and single and frequent occurrences, of physical and emotional abuse. They aim to differentiate between physical and emotional neglect and contact and penetrative sexual abuse, although psychometric testing and validation are required to determine performance in practice. The SCMQ focuses on child maltreatment so measures only acts of violence against children by those in a position of power or trust. It is for use in the general population and does not target specific vulnerable groups.

Time for completion of the questionnaire is estimated to be approximately three minutes. Its inclusion in existing and planned nationally representative surveys in Europe is strongly encouraged, preferably alongside a longer child maltreatment measure to establish validity. It is essential that the SCMQ is comprehensible and appropriately worded in each language, so

Fig. 3. SCMQ

Sometimes children experience violence or are treated badly by family members or other adults. This happens to many children around the world. We would like to ask you about your experiences so we can know how to help children stay safe in the future.

Please try to answer these questions as best and honestly as you can, thinking about your experiences during your life and the last year. This is not a test. There is no right or wrong answer, just say what you remember happened to you. **Please answer the questions for your life and for the past year.**

Physical abuse

Did a parent or other adult in the household hit, beat, kick or physically try to hurt you in any way?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

Emotional abuse

Did a parent or other adult in the household swear at you, insult you, humiliate you, threaten you or make you feel unwanted?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

Sexual abuse

Did someone at least five years older than you or an adult touch or fondle you or have you touch their body in a sexual way?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

Did someone at least five years older than you or an adult attempt or actually have oral, anal or vaginal intercourse with you?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

Physical neglect

Did your parent/caregiver for long periods of time not provide you with enough food or drink, clean clothes, or a clean and warm place to live?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

Emotional neglect

Were there times when there was no adult living with you who made you feel loved?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

Witnessing parental violence

Did you see or hear one of your parents/carers being slapped, kicked, punched, beaten or deliberately hurt by a partner or ex-partner in the home?

No, never	Yes, it has happened in my life		Yes, it happened in the last 12 months	
	Once or twice	Many times	Once or twice	Many times

translation and back-translation of items should be common practice (89), followed by cognitive interviewing with a small sample of adolescents to ensure understanding of items. It is also strongly advised that the instruments be piloted with a small subset of the target population to detect any potential problems relating to misunderstanding, misinterpretation or non-comprehensibility.

The proposed short-form questionnaire has not undergone a process of cognitive testing (90), nor have its psychometric properties been established. It is presented in this handbook to countries as an instrument that is relatively short and easy to manage and implement – the first of its kind.

Several countries have agreed to undertake testing of the SCMQ as part of national surveys. This will involve cognitive interviewing and interview debriefing to ensure language and meanings are clear, including in translated versions and quantitative data collection. Where possible, investigators are encouraged to use the SCMQ in parallel with the long form of another questionnaire to enable comparison of results. Once

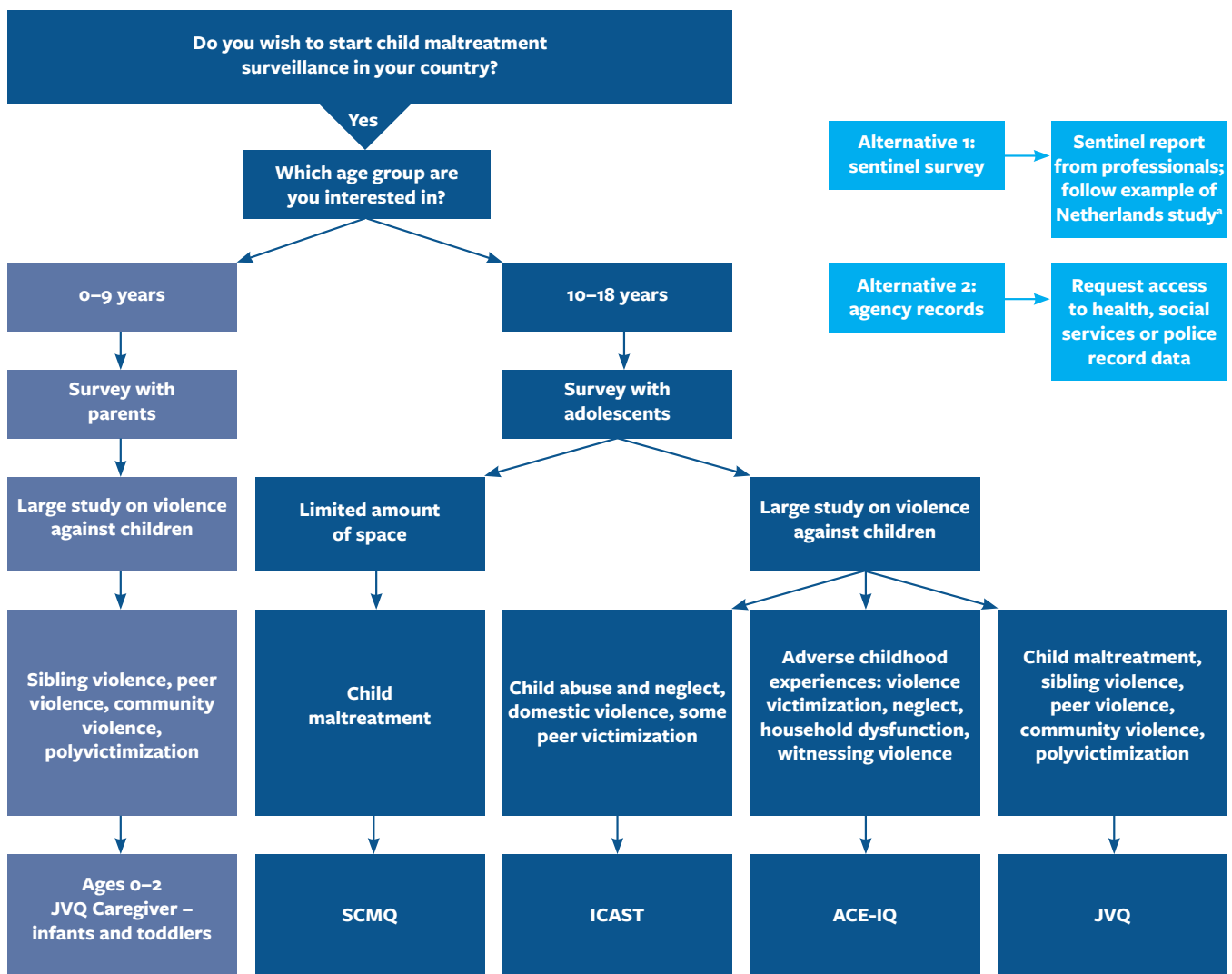
quantitative data are available, rigorous statistical examination of construct validity, dimensions and internal consistency is proposed.

Fig. 4 can be used to inform the process of choosing an appropriate instrument.

STUDYING PREVALENCE OVER TIME

It is imperative that surveys are repeated to monitor prevalence of child maltreatment and allow benchmarking of the effectiveness of European countries’ national prevention action plans and programmes. As there is currently no scientific evidence for the ideal time span between studies, it is suggested that the survey be repeated every four to seven years after adopting the national action plan to allow for provisions to be implemented and show an effect. Regular and repeated surveillance is essential to demonstrate progress in implementing the European child maltreatment prevention action plan 2015–2020, but further research is needed to establish the most useful time span between surveys.

Fig. 4. How to choose the type of surveillance



^a Netherlands Prevalence Study on Maltreatment of Children and Young People.

Continuity and comparability are important in child maltreatment surveillance. Surveys should therefore use the same instrument for all waves to ascertain comparability of measurements across different points in time. If countries have already administered one of the shortlisted survey tools in previous years, it might be advisable to continue with existing approaches for the purpose of historical comparability. The SCMQ can be added to any survey if plans for future reduction of items or inception of multicomponent surveys are in place. Ideally, surveys across Europe would use the same measurement to enable monitoring of trends across the Region. It is also vital that the same sampling frame be used for every repetition of the survey in a country. Where this is not the case, prevalence rates will not be comparable.

REFERENCE PERIODS

Child maltreatment can be measured for different reference periods. Most measurement tools look at lifetime prevalence (the experience of any maltreatment between 0 and 18 years). Some, such as the ICAST and JVQ, also ask about past-year exposure (48). Past-year prevalence is more appropriate for measuring change and investigating the effect of a national action plan on preventing child maltreatment. This handbook suggests the measurement of past-year prevalence and lifetime prevalence in surveillance surveys, with a priority of past-year prevalence if only one can be measured. Measuring both has the advantage not only of establishing maltreatment exposure in the past year of the child's life, but also measuring abusive incidents in earlier childhood.

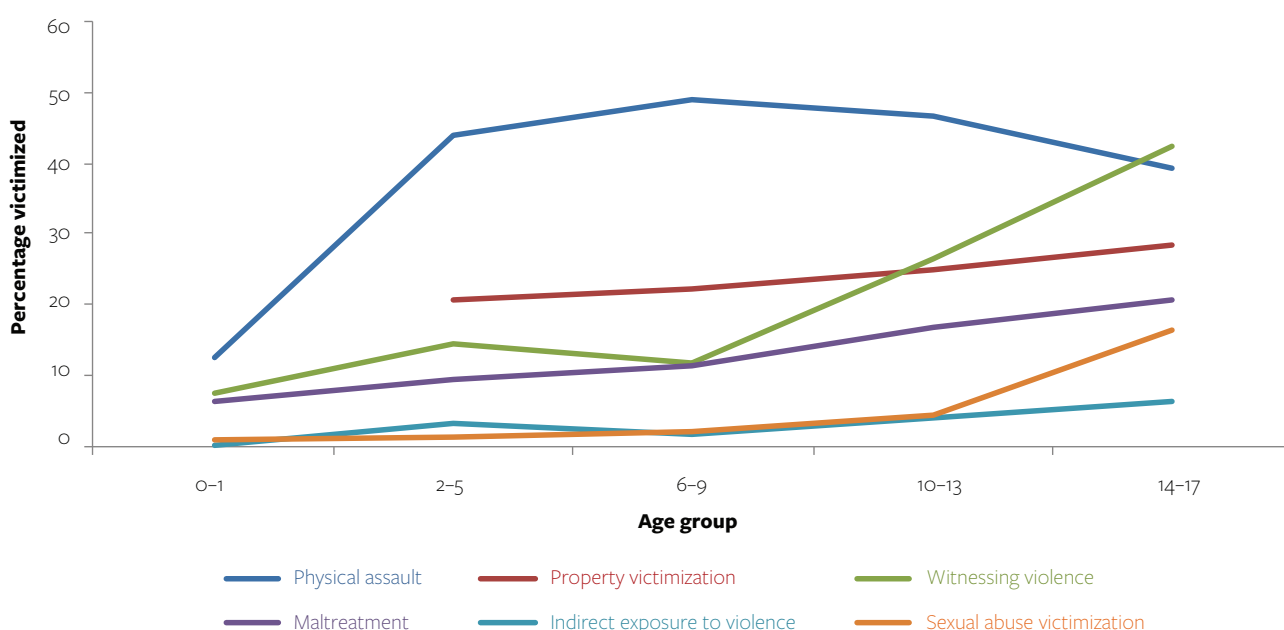
Of the shortlisted instruments presented above, the ACE-IQ has not been designed to capture past-year prevalence. It is nevertheless possible to replace the phrase "While you were growing up ..." (see Table 3) with "In the past year ..." to allow past-year prevalence estimates.

LIMITATIONS

Surveying 13–15-year-old adolescents in school is suggested, based on ease of administration and feasibility. A key limitation, however, is that the suggested approach will not capture adolescents of that age who are not attending secondary school, such as those from vulnerable populations like Sinti and Roma (97). Self-administered survey tools may also be problematic in marginal populations with low literacy levels. Survey data will not include children of younger age or adolescents aged 16–18, among whom experiences of maltreatment and sexual victimization respectively are reportedly highest (see Fig. 5) (10): children and young people in the age range 10–17 could therefore be targeted.

Chapter 5 presents an alternative approach to gathering prevalence data on child maltreatment in younger populations (children) based on parent/caregiver reports and elaborates on agency-based child surveillance. Although these alternative approaches may overcome some of the shortcomings cited above, it is important to note that they suffer from severe limitations in relation to representativeness and reliability. The surveillance tool outlined in this chapter should be considered the first choice.

Fig. 5. Childhood violence victimization relative to age



Source: Finkelhor et al. (92).



CHAPTER 5
PARENT-REPORTED CHILD
MALTREATMENT SURVEILLANCE, AND
AGENCY AND SENTINEL REPORTS

ADULT SELF-REPORTS

Information about the prevalence of child maltreatment among younger children (who are too young to self-complete surveys) can be gathered through adult self-report on maltreatment against children. Adults, in this sense, is most likely to refer to parents, caregivers or legal guardians, but can extend to other relatives and acquaintances. A large body of literature focuses on institutional maltreatment perpetrated by, for example, teachers, sports coaches and priests (93).

Monitoring prevalence of child maltreatment in populations too young for self-report questionnaires requires that surveys of parents or legal guardians be undertaken. No brief questionnaire for parent report of child maltreatment currently exists, so it is suggested that the ICAST-P or JVQ parent versions are used. As with the adolescent-report survey tool, it is important that questions capture the past-year prevalence. Parent-report surveys should ideally be repeated every four to seven years to capture change in prevalence.

A key limitation of parent-based surveying is the potential for underreporting due to stigmatization and social desirability bias. The full scope of the problem is not known, but research frequently shows a discordance between parent and child reports of a child's violence exposure (94). It is therefore crucial to use surveying methods with a distinct emphasis on anonymity: self-administered survey formats are best suited. If survey administrators are used, they should be trained to adopt a non-judgemental approach. Information about counselling and family support should be made easily accessible for parents in need.

AGENCY REPORTS

Agency and sentinel reports on child maltreatment provide alternatives to population-based surveys.

Agency reports collect data on the magnitude of detected and reported child maltreatment incidence. State agencies – child protection agencies, police departments, schools, day-care centres, hospitals, social services and mental health agencies, juvenile probation services, shelters, residential care institutions and public health departments, for instance – routinely collect administrative data on actual or suspected child maltreatment cases. These data are inadequate, however, as only cases reported to the authorities are included.

Some scholars have argued that child protection records can only detect what Maier et al. call the tip of the iceberg (95), and numerous challenges have to be overcome before arriving at a comprehensive and representative surveillance system. These include regional differences in definitions of child maltreatment, inadequate legislative frameworks and data collection, federal structures that lack a centrally organized welfare system, and inadequate human and institutional resources. Agency records

can nevertheless provide invaluable information on the most vulnerable populations, child maltreatment incidence and the volume of services accessed and delivered (96). While attempts are being made in Europe to improve the discovery of child maltreatment and develop a minimum dataset to enable more reliability and comparability (see Box 5, which summarizes the Coordinated Response to Child Abuse and Neglect via a Minimum Dataset (CAN-MDS) system) (97), it is also important to collect data from sentinels – that is, professionals who work with children on a daily basis.

SENTINEL SURVEYS

Sentinel surveys provide an excellent way of establishing the prevalence of moderate and severe cases of child abuse, although mainly they serve the different purpose of informing policy-makers about the incidence of child maltreatment and services provided (and not provided) for children exposed to maltreatment. Based on this, information resources can be allocated, practices changed, training conducted and systems reorganized to provide a better response (96). Sentinel surveys provide invaluable information on interdisciplinary collaboration and necessary structural and statutory reforms, particularly in the early stages of implementation of a child maltreatment prevention action plan.

Sentinel surveys collect data from professionals working with children in community and government organizations, such as day-care centres, schools, social services, nongovernmental organizations, shelters and youth clubs, to report all cases of child maltreatment during a defined period. WHO has published a toolkit on mapping legal, health and social services' responses

Box 5. CAN-MDS

- This is a newly developed surveillance system to measure incidents of child abuse and neglect. CAN-MDS:
 - uses a common methodology across countries and different sectors; and
 - aims to support administration and follow-up of individual cases by promoting multisectoral and multidisciplinary cooperation.
- It includes 18 data elements related to the incident (4), child's identity (4), family (4), involved services (2) and the record (4).
- The CAN-MDS toolkit includes an operator's manual, data-collection protocol, training modules for professionals and methodology to define eligibility criteria for relevant sectors.
- The toolkit is currently adapted for seven countries.

Source: Institute of Child Health (Athens) (98).

to child maltreatment that serves as a resource for researchers and decision-makers who use sentinel surveys and provides further guidance to what briefly is outlined here (99).

The Netherlands Prevalence Study on Maltreatment of Children and Young People is an example of a sentinel-based study that could serve as a model (Box 6).

Box 6. Netherlands Prevalence Study on Maltreatment of Children and Young People

- The study combines three methodologies:
 - 1) a self-report study among high-school students aged 12–17 years;
 - 2) a sentinel study in which professionals report child maltreatment cases flagged in the previous three months; and
 - 3) substantiated cases reported to child protection services.
- The survey has been conducted in two waves in 2005 and 2010.
- There was evidence that professional awareness and reporting increased from 2005 to 2010.

Source: Institute of Child Health (Athens) (98).

It commenced in 2005 and is modelled on national incidence studies in the United States (100). The study combines sentinel reports, substantiated child protection services' cases and high-school students' self-reports. Sentinel reporters in the study are professionals from different occupations who are in contact with children and who anonymously report any child for whom they suspected maltreatment in the study period duration of three months (extrapolated to a full year). Substantiated cases reported to child protection services and self-reports from high-school students aged 12–17 for the entire year are also included (100–102). Data have been collected in two waves in 2005 and 2010 and a further round is currently being planned.

As with self-report surveys, it is essential that data collection for sentinel-based reports is repeated at several time points. The same follow-up period of four to seven years for sentinel surveillance of maltreatment cases is advised.

COMBINATION OF SENTINEL AND SELF-REPORT SURVEYS

Agency-based data cannot adequately measure the prevalence of child maltreatment. Self-report surveys with children or sentinel report surveys are therefore preferred methods for child maltreatment surveillance. A combination of child self-report and sentinel surveys, such as in the Netherlands study described above, is optimal to establish prevalence, incidence and effectiveness of services (100).



CHAPTER 6
ETHICAL CONSIDERATIONS

PROTECTING CHILDREN FROM HARM

The primary ethical requirement is that children should not be harmed during the research process. It is necessary to obtain approval from an ethics committee before engaging in research on child abuse and neglect.

To prevent harm, all efforts should be made to inform children about the potential risks of participating in the study. Confidentiality and support mechanisms should be ensured in case children feel upset or distressed while answering questions. Researchers need to be trained thoroughly to ensure support is provided to children experiencing distress, with protocols developed on how to support them effectively during and after the study. Clear language must be used when informing participants about the study, obtaining their consent and administering the questionnaire. Further protective mechanisms need to be put in place in cases in which participants disclose severe present danger, as detailed below.

All procedures should be pilot-tested with the specific target population and made culturally appropriate and relevant. While cultural sensitivity should be observed, it is important to acknowledge that child maltreatment is difficult to research in any context and questions are necessary and important for maltreatment prevention.

OBTAINING CONSENT

Voluntary and informed consent must be sought from all participants. They must understand that they can refuse to participate in the research or discontinue participation at any time. Consent of parents or legal guardians is also required, given that respondents are minors.

Studies have revealed that response rates are likely to be higher when seeking **passive parental consent**, a common practice for surveys administered in schools (103). A passive consent procedure typically involves the distribution of a leaflet or information sheet describing the research and outlining the opt-out procedure to the child's parent or guardian. Consent is assumed to have been granted unless some action is taken by the parent or guardian. Completion of the survey by the child is considered as assent.

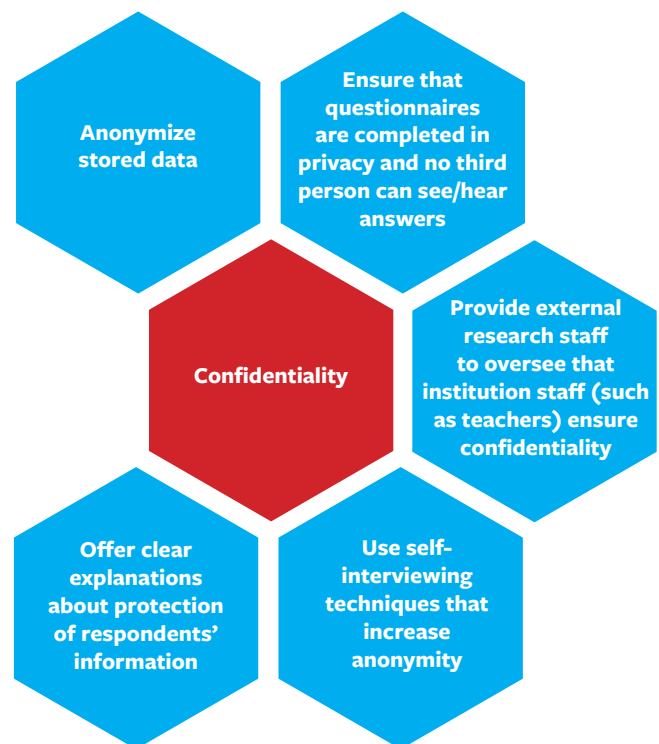
An example is provided in the Netherlands Prevalence Study on Maltreatment of Children and Young People (which was approved by the ethics committee of the Leiden University Medical Centre). Legal guardians were informed about the study by mail, with an option to withdraw their children from the study (100). Questionnaires were filled out during class hours. If students or parents did not agree to take part, students filled out a questionnaire about a non-related neutral topic, to prevent stigmatization.

Practitioners are strongly encouraged to familiarize themselves with the legal requirements and regulations in relation to parental consent in their country.

ENSURING CONFIDENTIALITY

The suggested surveillance instruments are not designed to be used as case-identification tools, but will serve to identify prevalence of child maltreatment across European countries. Emphasis is put on protecting the anonymity, confidentiality and privacy of respondents (children and adolescents but also their legal guardians). Fig. 6 outlines a range of strategies proposed by ISPCAN that help to ensure privacy and confidentiality of answers (104).

Fig. 6. Strategies to ensure confidentiality

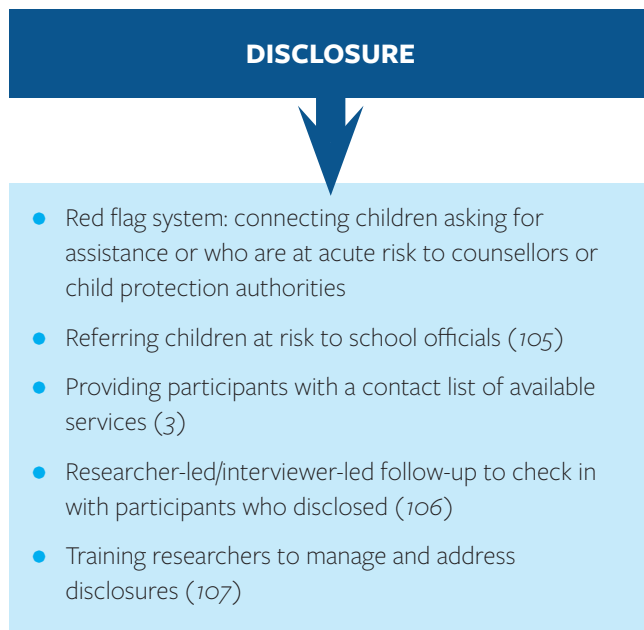


Source: ISPCAN (104).

OFFERING SUPPORT IF SERIOUS HARM IS IDENTIFIED

The importance of confidentiality has been highlighted, but confidentiality may be restricted if an acute and serious risk of harm is identified. ISPCAN has developed a number of strategies to follow in cases of disclosure of severe risk or harm (Fig. 7). The strategy selected to protect children should be discussed with the ethics committee to ensure it is in line with national requirements.

Fig. 7. Strategies in response to child disclosure of maltreatment



GENERAL ETHICAL CONSIDERATIONS

The Ethical Research Involving Children project, a joint effort of the UNICEF Innocenti Research Centre, the Childwatch International Research Network, the Centre for Children and Young People at Southern Cross University (Australia) and the Children's Issues Centre at the University of Otago (New Zealand), provides important general guidance on research ethics with a specific focus on children (108). The project's guidelines have been developed by international research stakeholders and attempt to assure the dignity, rights and well-being of children participating in research.



**CHAPTER 7
CONCLUSION**

SUMMARY

Child maltreatment is a severe public health concern with immediate physical and emotional harm and a range of far-reaching adverse physical and mental health outcomes, including noncommunicable diseases, anxiety, depression, lack of self-worth and suicidality. The European child maltreatment prevention action plan was adopted to address the public health and societal burden of child maltreatment across European countries. This handbook was developed to provide guidance on how to establish effective child maltreatment surveillance systems by conducting consecutive surveys. Surveillance is essential for monitoring potential change in maltreatment rates and producing reliable and coherent data on prevalence.

This handbook facilitates the creation of maltreatment surveillance systems by outlining the steps and considerations necessary to conduct community-based surveys. It should be used in conjunction with related resources developed by WHO and ISPCAN, including the forthcoming handbook on development of national policy and action plans on child maltreatment prevention, guidance on taking action and generating evidence to prevent child maltreatment (23), guidelines for conducting community surveys on injuries and violence (36), identification of ethical considerations in

the collection, analysis and publication of data (104), expert advice on implementing child maltreatment prevention programmes (27) and the *INSPIRE* resource, which presents seven strategies for ending violence against children (28).

The handbook endorses surveillance through school-based surveys using adolescent self-reports. There can be no blueprint approach for all European countries, however. A range of diverse factors needs to be taken into account when designing surveillance systems, including the legal setup of a country, patterns of maltreatment victimization and social stigmatization. The handbook has therefore introduced alternative approaches (Fig. 8). Countries may adopt mixed forms by, for instance, combining sentinel surveillance with community surveys.

Child maltreatment is a hidden form of violence. The handbook was developed to make the problem more visible by providing practitioners and policy-makers with reliable methods of measuring and monitoring the scale of the problem. Member States are called upon to join the global effort to reduce a leading societal and health problem and create safer and more just societies for children. Regular surveys, such as those based in schools that engage children, is one means of monitoring progress towards achieving the European goal of reducing child maltreatment.

Fig. 8. Approaches to child maltreatment surveillance: key characteristics

Establishing prevalence of child maltreatment		
<p>Child self-report</p> <ul style="list-style-type: none"> ● Probabilistic sampling at the level of schools or general population ● Self-interviewing techniques ● Passive consent of parent ● Active consent of child ● Most likely to produce reliable prevalence data ● Chronicity of child maltreatment difficult to capture ● Not possible for younger age group 	<p>Parent self-report</p> <ul style="list-style-type: none"> ● Probabilistic sampling at the level of the general population, or schools, or general practitioner units ● Self-interviewing techniques ● Active consent ● May produce reliable prevalence data; caution with potential social desirability bias 	<p>Sentinel-based report</p> <ul style="list-style-type: none"> ● Probabilistic sampling at the level of organizations and professionals ● Institutional consent ● Representative prevalence estimates ● Possibly underestimation ● Can provide valuable information on use of services and service delivery

REFERENCES

1. Report of the consultation on child abuse prevention, 29–31 March 1999. Geneva: World Health Organization; 1999 (<http://apps.who.int/iris/handle/10665/65900>, accessed 25 July 2016).
2. Child protection fact sheet: the definitions and signs of child abuse. London: National Society for the Prevention of Cruelty to Children; 2009 (<http://www.ncl.ac.uk/studentambassadors/assets/documents/NSPCCDefinitionsandsignsofchildabuse.pdf>, accessed 25 July 2016).
3. United Nations Secretary-General's report on violence against children. New York (NY): United Nations; 2006 (<http://www.unviolencestudy.org/>, accessed 25 July 2016).
4. Child abuse and neglect by parents and other caregivers. In: Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, editors. World report on violence and health. Geneva: World Health Organization; 2002 (http://www.who.int/violence_injury_prevention/violence/world_report/en/, accessed 25 July 2016).
5. Afifi ZEM, El-Lawindi MI, Ahmed SA, Basily WW. Adolescent abuse in a community sample in Beni Suef, Egypt: prevalence and risk factors. *East Mediterr Health J.* 2003;9:1003–17.
6. Madu SN, Peltzer K. Risk factors and child sexual abuse among secondary school students in the Northern Province (South Africa). *Child Abuse Negl.* 2000;24(2):259–68.
7. Stoltenborgh M, Bakermans-Kranenburg MJ, van IJzendoorn MH, Alink LRA. Cultural-geographical differences in the occurrence of child physical abuse? A meta-analysis of global prevalence. *Int J Psychol.* 2013;48(2):81–94.
8. Stoltenborgh M, Bakermans-Kranenburg MJ, Alink LRA, van IJzendoorn MH. The universality of childhood emotional abuse: a meta-analysis of worldwide prevalence. *J Aggress Maltreat Trauma* 2012;21(8):870–90.
9. Stoltenborgh M, van IJzendoorn MH, Euser EM, Bakermans-Kranenburg MJ. A global perspective on child sexual abuse: meta-analysis of prevalence around the world. *Child Maltreat.* 2011;16:79–101.
10. Sethi D, Bellis M, Hughes K, Gilbert R, Mitis F, Galea G. European report on preventing child maltreatment. Copenhagen: WHO Regional Office for Europe; 2013 (<http://www.euro.who.int/en/publications/abstracts/european-report-on-preventing-child-maltreatment-2013>, accessed 25 July 2016).
11. Finkelhor D, Turner H, Ormrod R, Hamby SL. Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics* 2009;124(5):1411–23.
12. Radford L, Corral S, Bradley C, Fisher H, Bassett C, Howat N et al. Child abuse and neglect in the United Kingdom today. London: National Society for the Prevention of Cruelty to Children; 2011 (<https://www.nspcc.org.uk/services-and-resources/research-and-resources/pre-2013/child-abuse-and-neglect-in-the-uk-today/>, accessed 25 July 2016).
13. Springer KW, Sheridan J, Kuo D, Carnes M. The long-term health outcomes of childhood abuse. *J Gen Intern Med.* 2003;18(10):864–70.
14. Measuring and monitoring child protection systems. Proposed core indicators for the East Asia and Pacific Region. Bangkok: UNICEF East Asia and Pacific Regional Office; 2012 (Strengthening Child Protection Series No. 3; http://www.unicef.org/eapro/Measuring_and_monitoring.pdf, accessed 25 July 2016).
15. Lau J, Chan K, Lam P, Choi P, Lai K. Psychological correlates of physical abuse in Hong Kong Chinese adolescents. *Child Abuse Negl.* 2003;27(1):63–75.
16. Cunningham RM, Stiffman AR, Doré P, Earls F. The association of physical and sexual abuse with HIV risk behaviors in adolescence and young adulthood: implications for public health. *Child Abuse Negl.* 1994;18(3):233–45.
17. Harrison PA, Fulkerson JA, Beebe TJ. Multiple substance use among adolescent physical and sexual abuse victims. *Child Abuse Negl.* 1997;21(6):529–39.
18. Merrick M, Fortson B, Mercy JA. The epidemiology of child maltreatment. In: Ward C, Donnelly P, editors. *Oxford textbook of violence prevention: epidemiology, evidence, and policy*, 1st edition. Oxford: Oxford University Press; 2014.
19. McCloskey L, Bailey J. The intergenerational transmission of risk for child sexual abuse. *J Interpers Violence* 2000;15:1019–35.
20. Schofield TJ, Lee RD. Safe, stable, nurturing relationships as a moderator of intergenerational continuity of

- child maltreatment: a meta-analysis. *J Adolesc Health* 2013;53(4):S32-8.
21. Widom CS, Czaja SJ, DuMont KA, Berlin LJ, Appleyard K, Dodge KA et al. Intergenerational transmission of child abuse and neglect: real or detection bias? *Science* 2015;347(6229):1480-5.
 22. Habetha S, Bleich S, Weidenhammer J, Fegert JM. A prevalence-based approach to societal costs occurring in consequence of child abuse and neglect. *Child Adolesc Psychiatry Ment Health* 2012;6(1):35.
 23. Horswell BB, Istfan S. Preventing child maltreatment: a guide to taking action and generating evidence. Geneva: World Health Organization; 2006 (http://www.who.int/violence_injury_prevention/publications/violence/child_maltreatment/en/, accessed 25 July 2016).
 24. Convention on the Rights of the Child. Adopted and opened for signature, ratification and accession by General Assembly resolution 44/25 of 20 November 1989 entry into force 2 September 1990, in accordance with Article 49. New York (NY): United Nations, Office of the High Commissioner; 1989 (<http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>, accessed 25 July 2016).
 25. Reading R, Bissell S, Goldhagen J, Harwin J, Masson J, Moynihan S et al. Promotion of children's rights and prevention of child maltreatment. *Lancet* 2009;373(9660):332-43.
 26. WHO Regional Committee for Europe resolution EUR/RC64/R6 on investing in children: the European child and adolescent health strategy 2015-2020 and the European child maltreatment prevention action plan 2015-2020. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.euro.who.int/_data/assets/pdf_file/0010/253729/64wd12e_InvestCAHstrategy_140440.pdf?ua=1, accessed 25 July 2016).
 27. Hardcastle K, Bellis M, Hughes K, Sethi D. Implementing child maltreatment prevention programmes: what the experts say. Copenhagen: WHO Regional Office for Europe; 2015 (<http://www.euro.who.int/en/publications/abstracts/implementing-child-maltreatment-prevention-programmes-what-the-experts-say-2015>, accessed 25 July 2016).
 28. INSPIRE: seven strategies for ending violence against children. Geneva: World Health Organization; 2016 (http://www.who.int/violence_injury_prevention/violence/inspire/en/, accessed 25 July 2016).
 29. Zolotor AJ, Runyan DK, Dunne MP, Jain D, Péters HR, Ramirez C et al. ISPCAN Child Abuse Screening Tool Children's Version (ICAST-C): instrument development and multinational pilot testing. *Child Abuse Negl.* 2009;33:833-41.
 30. WHO, United Nations Children's Fund, United Nations Educational, Scientific and Cultural Organization, Joint United Nations Programme on HIV/AIDS, Centers for Disease Control and Prevention. Global School-based Student Health Survey (GSHS) [website]. Atlanta (GA): Centers for Disease Control and Prevention; 2015 (www.cdc.gov/GSHS/, accessed 25 July 2016).
 31. Inchley J, Currie D, Young T, Samdal O, Torsheim T, Augustson L et al., editors. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey. Copenhagen: WHO Regional Office for Europe; 2016 (Health Policy for Children and Adolescents, No. 7; <http://www.euro.who.int/en/publications/abstracts/growing-up-unequal-gender-and-socioeconomic-differences-in-young-peoples-health-and-well-being-health-behaviour-in-school-aged-children-hbsc-study-international-report-from-the-20132014-survey>, accessed 25 July 2016).
 32. English D, Upadhyaya MP, Litrownik AJ, Marshall JM, Runyan DK, Graham JC et al. Maltreatment's wake: the relationship of maltreatment dimensions to child outcomes. *Child Abuse Negl.* 2005;29(5):597-619.
 33. United Nations Committee on the Rights of the Child. Forty-second session, Geneva, 15 May-2 June 2006. General comment No. 8 (2006). The right of the child to protection from corporal punishment and other cruel or degrading forms of punishment (arts. 19; 28, para. 2; and 37, inter alia). New York (NY): United Nations; 2006 (www2.ohchr.org/english/bodies/crc/docs/GC8_en.doc, accessed 25 July 2016).
 34. Bowling A. Research methods in health. Investigating health and health services, third edition. Maidenhead: Open University Press; 2009.
 35. Currie C, Nic Gabhainn S, Godeau E. The Health Behaviour in School-aged Children: WHO collaborative cross-national (HBSC) study: origins, concept, history and development 1982-2008. *Int J Public Health* 2009;54(Suppl. 2):131-9.
 36. Guidelines for conducting community surveys on injuries and violence. Geneva: World Health Organization; 2004 (<http://apps.who.int/iris/bitstream/10665/42975/1/9241546484.pdf>, accessed 25 July 2016).

37. Currie C, Inchley J, Molcho M, Lenzi M, Veselska Z, Wild F. Health Behaviour in School-Aged Children protocol: background, methodology and mandatory items for the 2013/2014 survey [website]. St Andrews: HBSC International Coordinating Centre; 2014 (<http://www.hbsc.org>, accessed 25 July 2016).
38. Roberts C, Freeman J, Samdal O, Schnohr CW, de Looze ME, Nic Gabhainn S et al. The Health Behaviour in School-aged Children (HBSC) study: methodological developments and current tensions. *Int J Public Health* 2009;54(S2):140–50 (<http://link.springer.com/10.1007/s00038-009-5405-9>, accessed 25 July 2016).
39. Sample size to estimate a true prevalence with an imperfect test [website]. Canberra (ACT): AusVet Animal Health Services; 2016 (<http://epitools.ausvet.com.au/content.php?page=PrevalenceSS&HTP=0.15&HSENS=0.7&HSPEC=0.7&Popsiz=&Conf=0.95&Precision=0.075>, accessed 25 July 2016).
40. Naing L, Winn T, Rusli B. Practical issues in calculating the sample size for prevalence studies. *Arch Orofac Sci*. 2006;1(1):9–14.
41. Levy P, Lemeshow S. Sampling populations: methods and applications. New York (NY): John Wiley & Sons; 1999.
42. Tang CS. Childhood experience of sexual abuse among Hong Kong Chinese college students. *Child Abuse Negl*. 2002;26(1):23–37.
43. Phillips AE, Gomez GB, Boily M-C, Garnett GP. A systematic review and meta-analysis of quantitative interviewing tools to investigate self-reported HIV and STI associated behaviours in low- and middle-income countries. *Int J Epidemiol*. 2010;39(6):1541–55.
44. Everson MD, Smith JB, Hussey JM, English D, Litrownik AJ, Dubowitz H et al. Concordance between adolescent reports of childhood abuse and child protective service determinations in an at-risk sample of young adolescents. *Child Maltreat*. 2008;13(1):14–26.
45. Balkan epidemiological study on child abuse & neglect [website]. Athens: Centre for the Study and Prevention of Child Abuse and Neglect; 2013 (<http://www.becan.eu/>, accessed 25 July 2016).
46. Ajdukovic M, Susac N, Rajter M. Gender and age differences in prevalence and incidence of child sexual abuse in Croatia. *Croat Med J*. 2013;54(5):469–79.
47. Chang H-Y, Lin C-L, Chang Y-T, Tsai M-C, Feng J-Y. Psychometric testing of the Chinese version of ISPCAN Child Abuse Screening Tools Children's Home version (ICAST-CH-C). *Child Youth Serv Rev*. 2013;35(12):2135–9.
48. Runyan DK, Dunne MP, Zolotor AJ, Madrid B, Jain D, Gerbaka B et al. The development and piloting of the ISPCAN Child Abuse Screening Tool-Parent version (ICAST-P). *Child Abuse Negl*. 2009;33(11):826–32.
49. Lee Y, Kim S. Childhood maltreatment in South Korea: retrospective study. *Child Abuse Negl*. 2011;35(12):1037–44.
50. Al-Eissa MA, AlBuhairan FS, Qayad M, Saleheen H, Runyan D, Almuneef M. Determining child maltreatment incidence in Saudi Arabia using the ICAST-CH: a pilot study. *Child Abuse Negl*. 2015;42:174–82.
51. Gwirayi P. The prevalence of child sexual abuse among secondary school pupils in Gweru, Zimbabwe. *J Sex Aggress*. 2013;19(3):253–63.
52. Dunne MP, Zolotor AJ, Runyan DK, Andrevia-Miller I, Choo WY, Dunne SK, et al. ISPCAN Child Abuse Screening Tools Retrospective version (ICAST-R): Delphi study and field testing in seven countries. *Child Abuse Negl*. 2009;33:826–32.
53. ICAST [website]. Aurora (CO): ISPCAN; 2016 (<http://www.ispcan.org/?page=ICAST>, accessed 25 July 2016).
54. Finkelhor D, Hamby SL, Ormrod R, Turner H. The Juvenile Victimization Questionnaire: reliability, validity, and national norms. *Child Abuse Negl*. 2005;29:383–412.
55. Wright J, Friedrich WN, Cyr M, Theriault C, Perron A, Lussier Y et al. The evaluation of Franco-Quebec victims of child sexual abuse and their mothers: the implementation of a standard assessment protocol. *Child Abuse Negl*. 1998;22(1):9–23.
56. Chan KL. Victimization and poly-victimization among school-aged Chinese adolescents: prevalence and associations with health. *Prev Med*. 2013;56(3–4):207–10.
57. Fornis M, Kirchner T, Soler L, Paretilla C. Spanish/Catalan version of the Juvenile Victimization Questionnaire (JVQ): psychometric properties. *Anuario de Psicologia* 2013;43(2):171–88.
58. Gren-Landell M, Aho N, Andersson G, Svedin CG. Social anxiety disorder and victimization in a community sample of adolescents. *J Adolesc*. 2011;34(3):569–77.
59. Radford L, Corral S, Bradley C, Fisher HL. The prevalence and impact of child maltreatment and other types of victimization in the United Kingdom: findings from a

- population survey of caregivers, children and young people and young adults. *Child Abuse Negl.* 2013;37:801–13.
60. National Survey of Children's Exposure to Violence (NatSCEV) [website]. Durham (NH): Crimes Against Children Research Center; 2007 (<http://www.unh.edu/ccrc/projects/natscev.html>, accessed 25 July 2016).
 61. Longitudinal studies of child abuse and neglect [website]. Chapel Hill (NC): University of North Carolina; 2016 (<http://www.unc.edu/depts/sph/longscan/>, accessed 25 July 2016).
 62. Ellonen N, Salmi V. Poly-victimization as a life condition: correlates of poly-victimization among Finnish children. *J Scand Stud Criminol Crime Prev.* 2011;12(1):20–44.
 63. Gudjonsson GH, Sigurdsson JF, Sigfusdottir ID, Asgeirsdottir BB. False confessions and individual differences: the importance of victimization among youth. *Pers Individ Dif.* 2008;45(8):801–5.
 64. Burton P, Ward C, Artz L, Leoschut L. The Optimus study on child abuse, violence and neglect in South Africa. Cape Town: University of Cape Town; 2015.
 65. Meinck F, Cluver L, Boyes M, Loening-Voysey H. Physical, emotional and sexual adolescent abuse victimization in South Africa: prevalence, incidence, perpetrators and locations. *J Epidemiol Community Health* 2016; doi:10.1136/jech-2015-205860.
 66. Nguyen HT, Dunne MP, Le AV. Multiple types of child maltreatment and adolescent mental health in Viet Nam. *Bull World Health Organ.* 2010; 88(1):22–30.
 67. Cheng P-X, Cao FL, Liu J-J, Chen G-G. Reliability and validity of Chinese self-report version of Juvenile Victimization Questionnaire in middle school students. *Chinese Journal of Clinical Psychology* 2010;04 (http://en.cnki.com.cn/Article_en/CJFDTOTAL-ZLCY201004021.htm, accessed 25 July 2016).
 68. Available versions of the JVQ-R2 [website]. Durham (NH): Crimes Against Children Research Center; 2016 (http://www.unh.edu/ccrc/jvq/available_versions.html, accessed 25 July 2016).
 69. Bisceglia R, Jenkins JM, Wigg KG, O'Connor TG, Moran G, Barr CL. Arginine vasopressin 1a receptor gene and maternal behavior: evidence of association and moderation. *Genes Brain Behav.* 2012;11(3):262–8.
 70. Behavioral risk factor surveillance system [website]. Atlanta (GA): Centers for Disease Control and Prevention; 2016 (<http://www.cdc.gov/brfss/>, accessed 25 July 2016).
 71. Adverse Childhood Experiences International Questionnaire (ACE-IQ) – rationale for ACE-IQ. Geneva: World Health Organization; 2012 (http://www.who.int/violence_injury_prevention/violence/activities/adverse_childhood_experiences/en/, accessed 25 July 2016).
 72. Bøe M, Thortveit E, Vatne A, Frøyland I, Kjellevoid L, Stø K et al. EHMTI-0166. Chronic daily headache – impact of adverse childhood experiences. *J Headache Pain.* 2014;15(Suppl. 1):D2. doi:10.1186/1129-2377-15-S1-D2.
 73. Bellis MA, Hughes K, Leckenby N, Jones L, Baban A, Kachaeva M et al. Adverse childhood experiences and associations with health-harming behaviours in young adults: surveys in eight eastern European countries. *Bull World Health Organ.* 2014;92(9):641–55.
 74. Wingenfeld K, Schäfer I, Terfehr K, Grabski H, Driessen M, Grabe H et al. The reliable, valid and economic assessment of early traumatization: first psychometric characteristics of the German version of the Adverse Childhood Experiences Questionnaire (ACE). *Psychother Psychosom Med Psychol.* 2011;61(1):e10–4.
 75. Al-Shawi A, Lafta R. Effect of adverse childhood experiences on physical health in adulthood: results of a study conducted in Baghdad city. *J Fam Community Med.* 2015;22(2):78.
 76. Baban A, Cosma A, Blazsi R, Sethi D, Olsavszky V. Survey of adverse childhood experiences among Romanian university students. Copenhagen: WHO Regional Office for Europe; 2013 (<http://www.euro.who.int/en/countries/romania/publications2/survey-of-adverse-childhood-experiences-among-romanian-university-students>, accessed 25 July 2016).
 77. Kachaeva M, Sethi D, Badmaeva V, Novozhilov A, Ivanov A. Survey on the prevalence of adverse childhood experiences among young people in the Russian Federation. Copenhagen: WHO Regional Office for Europe; 2014 (<http://www.euro.who.int/en/countries/russian-federation/publications/survey-on-the-prevalence-of-adverse-childhood-experiences-among-young-people-in-the-russian-federation>, accessed 25 July 2016).
 78. Almuneef M, Qayad M, Aleissa M, Albuhairan F. Adverse childhood experiences, chronic diseases, and risky health behaviors in Saudi Arabian adults: a pilot study. *Child Abuse Negl.* 2014;38(11):1787–93.
 79. Paunovic M, Markovic M, Vojvodic K, Nsekovic A, Sethi D, Grbic M. Survey of adverse childhood experiences among Serbian university students. Copenhagen: WHO Regional Office for Europe; 2015 (<http://www.euro.who.int/en/>

- countries/serbia/publications/survey-of-adverse-childhood-experiences-among-serbian-university-students, accessed 25 July 2016).
80. Raleva M, Jordanova Peshevska D, Sethi D. Survey of adverse childhood experiences among young people in the former Yugoslav Republic of Macedonia. Copenhagen: WHO Regional Office for Europe; 2013 (<http://apps.who.int/iris/handle/10665/107315>, accessed 25 July 2016).
 81. Ulukol B, Kahiloğulları AK, Sethi D. Adverse childhood experiences survey among university students in Turkey. Copenhagen: WHO Regional Office for Europe; 2014 (<http://www.euro.who.int/en/health-topics/disease-prevention/violence-and-injuries/publications/2015/adverse-childhood-experiences-survey-among-university-students-in-turkey-2014>, accessed 25 July 2016).
 82. Bellis MA, Lowey H, Leckenby N, Hughes K, Harrison D. Adverse childhood experiences: retrospective study to determine their impact on adult health behaviours and health outcomes in a United Kingdom population. *J Public Health* 2014;36(1):81–91.
 83. Brockie TN, Dana-Sacco G, Wallen GR, Wilcox HC, Campbell JC. The relationship of adverse childhood experiences to PTSD, depression, poly-drug use and suicide attempt in reservation-based Native American adolescents and young Adults. *Am J Community Psychol*. 2015;55(3–4):411–21.
 84. Sinnott C, Mc Hugh S, Fitzgerald AP, Bradley CP, Kearney PM. Psychosocial complexity in multimorbidity: the legacy of adverse childhood experiences. *Fam Pract*. 2015;32(3):269–75.
 85. Adverse Childhood Experiences International Questionnaire (ACE-IQ) [website]. Geneva: World Health Organization; 2012 (http://www.who.int/violence_injury_prevention/violence/activities/adverse_childhood_experiences/en/, accessed 25 July 2016).
 86. Tran Q, Dunne M, Luu N. Adverse childhood experiences and the health of university students in eight provinces of Vietnam. *Asia Pac J Public Health* 2015;27(8 Suppl.):26–32S. doi:org/10.1177/1010539515589812.
 87. Ford DC, Merrick MT, Parks SE, Breiding MJ, Gilbert LK, Edwards VJ et al. Examination of the factorial structure of adverse childhood experiences and recommendations for three subscale scores. *Psychol Violence* 2014;4(4):432–44.
 88. Dube SR, Williamson DF, Thompson T, Felitti VJ, Anda RF. Assessing the reliability of retrospective reports of adverse childhood experiences among adult HMO members attending a primary care clinic. *Child Abuse Negl*. 2004;28(7):729–37.
 89. Brislin RW. The wording and translation of research instruments. *F Methods Cross-Cultural Res*. 1986;137–64.
 90. Willis GB, Artino AR. What do our respondents think we're asking? Using cognitive interviewing to improve medical education surveys. *J Grad Med Educ*. 2013;5(3):353–6.
 91. European Union Agency for Fundamental Rights. Roma survey – data in focus. Education: the situation of Roma in 11 EU Member States. Luxembourg: Publications Office of the European Union; 2014 (<http://fra.europa.eu/en/publication/2014/education-situation-roma-11-eu-member-states>, accessed 25 July 2016).
 92. Finkelhor D, Turner HA, Shattuck A, Hamby SL. Violence, crime, and abuse exposure in a national sample of children and youth: an update. *JAMA Pediatr*. 2013;167(7):614–21.
 93. Lueger-Schuster B, Kantor V, Weindl D, Knefel M, Moy Y, Butollo A et al. Institutional abuse of children in the Austrian Catholic church: types of abuse and impact on adult survivors' current mental health. *Child Abuse Negl*. 2014;38(1):52–64.
 94. Johnsona RM, Kotch JB, Catellier DJ, Winsor JR, Dufort V, Hunter W et al. Adverse behavioral and emotional outcomes from child abuse and witnessed violence. *Child Maltreat*. 2002;7(3):179–86.
 95. Maier T, Mohler-Kuo M, Landolt MA, Schnyder U, Jud A. The tip of the iceberg. Incidence of disclosed cases of child sexual abuse in Switzerland: results from a nationwide agency survey. *Int J Public Health* 2013;58(6):875–83.
 96. Jud A, Fegert JM, Finkelhor D, Fegert J, Rassenhofer M, Witt A et al. On the incidence and prevalence of child maltreatment: a research agenda. *Child Adolesc Psychiatry Ment Health* 2016;10(1):17. doi:10.1186/s13034-016-0105-8 (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4907083/>, accessed 25 July 2016).
 97. Ntinapogias A, Gray J, Durning P, Nikolaidis G. CAN-MDS policy and procedures manual. Athens: Institute of Child Health; 2015 (http://can-via-mds.eu/sites/default/files/WS.5_D6_Policy%20and%20Procedures%20Manual_%CE%95%CE%9D.pdf, accessed 25 July 2016).
 98. Coordinated response to child abuse & neglect [website]. Athens: Institute of Child Health; 2016 (<http://www.can-via-mds.eu/>, accessed 25 July 2016).

99. WHO, Lucerne University of Applied Sciences and Arts, University of New Hampshire. Toolkit on mapping legal, health and social services responses to child maltreatment. Geneva: World Health Organization; 2015 (http://www.who.int/violence_injury_prevention/publications/violence/toolkit_child_maltreatment/en/, accessed 25 July 2016).
100. Euser S, Alink LRA, Pannebakker F, Vogels T, Bakermans-Kranenburg MJ, van Ijzendoorn MH. The prevalence of child maltreatment in the Netherlands across a 5-year period. *Child Abuse Negl.* 2013;37(10):841–51.
101. Euser EM, van Ijzendoorn MH, Prinzie P, Bakermans-Kranenburg MJ. Prevalence of child maltreatment in the Netherlands. *Child Maltreat.* 2010;15(1):5–17.
102. Snoeren F. Giving maltreated children a voice – a study of self-reported quality of life, and the effectiveness and cost-effectiveness of the child-interview intervention during the investigation of reports of child maltreatment. Maastricht: University of Maastricht; 2014 (<http://www.ouders.nl/sites/default/files/pdf/Snoeren2014-Proefschrift-giving-maltreated-children-a-voice.pdf>, accessed 25 July 2016).
103. Finkelhor D, Hamby S, Turner H, Walsh W. Ethical issues in surveys about children’s exposure to violence and sexual abuse. In: Cuevas C, Rennison C, editors. *The Wiley handbook on the psychology of violence*. London: Wiley-Blackwell; 2016;24–48.
104. Ethical considerations for the collection, analysis & publication of child maltreatment data. Aurora (CO): ISPCAN; 2016 (http://cymcdn.com/sites/www.ispcan.org/resource/resmgr/Special_Report/Ethics_Report.pdf, accessed 25 July 2016).
105. Richters J, Martinez P. The NIMH community violence project: I. Children as victims of and witnesses to violence. *Psychiatry* 1993;56(1):7–21.
106. Carroll-Lind J, Chapman JW, Gregory G, Maxwell G. The key to the gatekeepers: passive consent and other ethical issues surrounding the rights of children to speak on issues that concern them. *Child Abuse Negl.* 2006;30:979–89.
107. Nikolaidis G. Periodic report 2 – BECAN (Balkan epidemiological study on child abuse and neglect). Athens: BECAN Consortium; 2013 (http://cordis.europa.eu/publication/rcn/16606_en.html, accessed 25 July 2016).
108. Graham A, Powell M, Taylor N, Anderson D, Fitzgerald R. *Ethical research involving children*. Florence: UNICEF Office of Research – Innocenti; 2013 (<https://www.unicef-irc.org/publications/pdf/eric-compendium-approved-digital-web.pdf>, accessed 25 July 2016).

ANNEX 1. OVERVIEW OF CHILD MALTREATMENT MEASURES

The literature exhibits a broad range of measures that have to date been widely applied in multiple countries across the world. Table A1.1 presents an overview of child maltreatment measurement tools.

Table A1.1. Overview of child maltreatment measurement tools

Measuring tool	Respondent type	Use of measure	Number of items	Types of abuse	Administration	Reliability/validity	Cost	Internet access
Adverse Childhood Experiences (ACE) (1) and Adverse Childhood Experiences International Questionnaire (ACE-IQ) (2)	Adult self-report (no age specification)	Retrospective (during childhood)	68 (ACE) 31 (ACE-IQ)	Physical, emotional, sexual, neglect, domestic violence, community violence, peer violence, military conflict	Available freely online with guidelines on administration	No psychometric properties for ACE and ACE-IQ Three-factor structure of physical/emotional abuse, sexual abuse and household dysfunction in short questionnaire (3) Good construct validity and adequate internal consistency of ACE-ST ($\alpha = .76$) (4)	Free online	WHO (2)
Abusive Sexual Exposure Scale (ASES) (5)	Adolescent self-report (no age specification)	No information	No information	Contact and non-contact sexual abuse	No information	No information	Free from developer – no response	
Child Abuse and Neglect Inventory Schedule (CANIS-R) (6)	Parent sentinel report	Current and retrospective	More than 100	Disciplinary practices, past and current history of family violence, child's exposure to physical, emotional and sexual abuse and neglect	Semi-structured, carried out by interviewer, completion approximately 45 minutes	No information on validity, low internal consistency, 85% inter-rater reliability (6)	Free from developer – no response	
Checklist for Child Abuse Evaluation (CCAIE) (7)	Professional sentinel report	Checklist to investigate circumstances of abuse, service provision and credibility of victim	264	Physical, emotional and sexual abuse, neglect, competence of the child, case-specific treatment, psychological state	Completed by trained, experienced professional	No information	€155* (25 checklists and manual), €140 (25 checklists)	
Checklist of Sexual Abuse and Related Stressors (C-SARS) (8,9)	Adolescent/adult self-report (no age specification)	Retrospective	70	Sexual abuse victimization and associated stressful events	No information	Validity is under investigation, excellent internal consistency (maximum $\alpha = .93$ for total abuse events) (5)	Free from developer – no response	
Child Maltreatment History Self-Report (CMHSR) (10–13)	Adult self-report (no age specification)	Retrospective	11	Physical and sexual abuse	Completion approximately 5 minutes	No information on validity, showed good test-retest consistency (test-retest reliability with kappas of .75 for physical abuse, .78 for severe physical abuse, 1.0 for sexual abuse and 1.0 for severe sexual abuse) (10)	Available in publication (13)	
Child Maltreatment Interview Schedule – Short Form (CMIS-SF) (14–18)	Adult self-report	Retrospective	11	Parental substance use, domestic violence, neglect, physical, emotional and sexual abuse	Completion approximately 5 minutes	Strong correlations with Child Abuse Trauma Scale, good internal consistency (α ranging from .87 to .90) (19–21)	Free online	Briere (22)
Child Physical Maltreatment (CPM) (23)	Parent self-report	Current	7	Physical abuse	Completion approximately 5 minutes	Correlates with child behaviour problems and parental childhood abuse, acceptable internal consistency ($\alpha = 0.76$) (23)	Free in publication online	Ma et al. (23)

Table A1.1 contd

Measuring tool	Respondent type	Use of measure	Number of items	Types of abuse	Administration	Reliability/validity	Cost	Internet access
Child Sexual Behaviour Inventory (CSBI) (24–29)	Parent sentinel report (with children aged 2–12)	Current	38	Sexual behaviours associated with sexual abuse	Administered by trained professional, completion approximately 5–15 minutes, either self-administered or interview-based	Good validity, acceptable internal consistency (α ranging from .72 to .93) and excellent test-retest reliability ($r = .91$) (25)	Introductory kit €180 (50 test booklets), further booklets €65 (25 booklets)	
Childhood Experiences of Violence Questionnaire (CEVQ)/CEVQ-SF (13,30–33)	Adolescent self-report (ages 12–18)	Current and retrospective, used solely for prevalence	20 (CEVQ) 7 (CEVQ-SF)	Peer and domestic violence, physical, emotional and sexual abuse, physical punishment, bullying	Completion approximately 15 minutes	Content and criterion validity acceptable, test-retest consistency good (kappa ranging from .77 to .92), internal consistency excellent (maximum $\alpha = 0.90$) (34)	Free in publication online	Walsh et al. (31)
Childhood Experiences of Care and Abuse (CECA) (35–37)	Adult self-report	Retrospective	29	Physical abuse, sexual abuse, neglect	Completion approximately 10 minutes, advises two-day training course for administration	Good construct validity, good internal consistency ($\alpha .81$), test-retest reliability acceptable/good (r ranging from 0.51 to 0.84) (37)	Free in publication online	University of Middlesex (38)
Childhood Trauma Questionnaire (CTQ) (29,39–43)	Adolescent self-report (no age specifications)	Retrospective	28	Physical, emotional and sexual abuse, emotional and physical neglect	Self-completed questionnaires, non-intrusive	Good construct validity, good sensitivity and acceptable specificity, good internal consistency (α ranging from .80 to .95) (41,43,44)	Introductory kit €220 (25 booklets and manual), €80 (25 booklets)	
Dimensions of Discipline (DDI) (45–48)	Parent self-report Child self-report Adult retrospective self-report (no age specifications)	Current	77	Discipline used and attitudes to different types of disciplinary behaviours	Completion approximately 5–10 minutes	Good validity, poor-to-excellent internal consistency depending on the questionnaire used (α ranging from .31 to .80), excellent test-retest reliability	Free online	Straus & Fauchier (48)
Escala de Crenças sobre Punição Física Portuguesa (ECPF) [Physical Punishment Beliefs Scale, Portugal] (49)	Parent self-report	Current	21	Beliefs about physical punishment	Completion approximately 10–20 minutes	Good internal consistency ($\alpha = .90$) (50)	€120 manual and 20 questionnaires	
International Association for the Prevention of Child Abuse and Neglect Child Abuse Screening Tool (ICAST) (51–56)	Child (ages 11–18), parent self-report	Current (Child (C) and Parent (P)) and Retrospective (R)	36 (R) 77 (C)	Physical, emotional, sexual abuse, neglect, domestic violence	Either self- or interviewer-completed, ISPCAN provides a guide for interviewers, completion approximately 10–30 minutes	Acceptable construct validity, poor-to-good internal consistency (ICAST-P: $\alpha .20$ to .88; ICAST-C: $\alpha .69$ to .86; ICAST-R: $\alpha .61$ to .82) (51,53)	Free online	ISPCAN (57)
Juvenile Victimization Questionnaire (JVQ) (58,59)	Child self-report (ages 8–17) and parent sentinel report (ages 0–17)	Current	34	Crime, child maltreatment, peer and sibling victimization, sexual victimization and witnessing crime	Self-administered in older, interviewers for younger children, completion approximately 20 minutes	Moderate correlations with trauma scales and mental and physical health, test-retest consistency acceptable (kappa ranging from .50 to 1.00), internal consistency good (maximum $\alpha = .8$) but poor for subscales (minimum $\alpha = .35$) (58–60)	Free online	Crimes Against Children Research Center (61)
(Modified) Maltreatment Classification System (MMCS) (62,63)	Sentinel report	Systematic classification of child protection records – checks for severity	7 categories	Physical and sexual abuse, physical neglect, lack of supervision, emotional maltreatment, moral-legal maltreatment	Coders can be trained at the LONGSCAN Coordinating Centre	Correlates with child behaviour, trauma and children's social functioning, intercoder consistency acceptable ($> .77$) (64,65)	Free online	English et al. (62)

Table A1.1 contd

Measuring tool	Respondent type	Use of measure	Number of items	Types of abuse	Administration	Reliability/validity	Cost	Internet access
Multidimensional Neglectful Behavior Scale (MNBS) (45,65–67)	Self- and sentinel report (ages 6–9, ages 10–15)	Retrospective and current	20	Childhood neglect	Completion approximately 20 minutes, self-administered or interview-guided, picture-based for children	Good construct validity, excellent internal consistency (α ranging from .8 to .94) (45)	Free online	University of New Hampshire (68)
NorVold Abuse Questionnaire (NorAQ) (69–71)	Self-report	Retrospective	13	Physical, emotional and sexual abuse	No information	Good sensitivity and excellent specificity, good test-retest consistency (84–95%) (70), internal consistency not reported	Free online	Schei et al. (72)
Parent–Child Conflict Tactics Scale (PC-CTS) (11,73–77)	Parent and child self-report	Current	27	Physical and emotional aggression, non-violent discipline, neglect	Completion approximately 10 minutes, picture version for young children, self-completed or interview format	Good construct and discriminant validity, internal consistency low for some subscales (α ranging from .55 to .72) (76,78)	Introductory kit €90 (handbook, 10 forms), €90 (25 forms)	
Sexual Abuse Interview Schedule (79)	Adult self-report (no age specifications)	Retrospective	14 (semi-structured)	Sexual abuse	Interview schedule requires interviewers to probe participants for sufficient detail for coding; it could therefore be perceived to be more invasive than other measures	No information available	Available in publication (79)	
Sexual Experiences Survey (SES) (80,81)	Child self-report (no age specifications)	Current	20 (long form) 10 (short form)	Unwanted sexual acts	Self-report or interview format	Acceptable convergent validity, poor/acceptable internal consistency (α ranging from .43 to .71) (81–83)	Free from developer	Koss et al. (84)
Things I've seen and heard (85–88)	Child self-report (ages 6–14)	Current	20	Witnessing community violence	Completion approximately 5–10 minutes, use of illustrations to facilitate comprehension	Correlates with psychological stress and adult reports on neighbourhood safety, excellent internal consistency (α ranging from .76 to .82) (89)	Free from developer – no response	

^aAll quoted prices accurate as of June 2016.

REFERENCES

- Adverse childhood experiences (ACEs) [website]. Atlanta (GA): Centers for Disease Control and Prevention; 2016 (<http://www.cdc.gov/violenceprevention/acestudy/>, accessed 25 July 2016).
- Adverse Childhood Experiences International Questionnaire (ACE-IQ) [website]. Geneva: World Health Organization; 2012 (http://www.who.int/violence_injury_prevention/violence/activities/adverse_childhood_experiences/en/, accessed 25 July 2016).
- Ford DC, Merrick MT, Parks SE, Breiding MJ, Gilbert LK, Edwards VJ et al. Examination of the factorial structure of adverse childhood experiences and recommendations for three subscale scores. *Psychol Violence* 2014;4(4):432–44.
- Wingenfeld K, Schäfer I, Terfehr K, Grabski H, Driessen M, Grabe H et al. The reliable, valid and economic assessment of early traumatization: first psychometric characteristics of the German version of the Adverse Childhood Experiences Questionnaire (ACE). *Psychother Psychosom Med Psychol*. 2011;61(1):e10–4.
- Spaccarelli S. Measuring abuse stress and negative cognitive appraisals in child sexual abuse: validity data on two new scales. *J Abnorm Child Psychol*. 1995;23(6):703–27.
- Ammermann R, Hersen M, Van Hasselt V, Lubetsky M, Sieck W. Maltreatment in psychiatrically hospitalized children and adolescents with developmental disabilities: prevalence and correlates. *J Am Acad Child Adolesc Psychiatry* 1994;33(4):567–76.

7. Petty J. Checklist for child abuse evaluation (CCAЕ) [website]. Lutz (FL): Psychological Assessment Resources Inc.; 1990 (<http://www4.parinc.com/Products/Product.aspx?ProductID=CCAЕ>, accessed 25 July 2016).
8. Sciolla A, Glover DA, Loeb TB, Zhang M, Myers HF, Wyatt GE. Childhood sexual abuse severity and disclosure as predictors of depression among adult African-American and Latina women. *J Nerv Ment Dis.* 2011;199(7):471-7.
9. Glover DA, Loeb TB, Carmona JV, Sciolla A, Zhang M, Myers HF et al. Childhood sexual abuse severity and disclosure predict posttraumatic stress symptoms and biomarkers in ethnic minority women. *J Trauma Dissociation* 2010;11(2):152-73.
10. MacMillan HL, Fleming JE, Trocme N, Boyle MH, Wong M, Racine YA et al. Prevalence of child physical and sexual abuse in the community. Results from the Ontario Health Supplement. *JAMA* 1997;278(2):131-5.
11. Straus MA, Hamby SL, Finkelhor D, Moore DW, Runyan D. Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: psychometric data for a national sample of American parents. *Child Abuse Negl.* 1998;22:249-70.
12. Bagley C. Prevalence and correlates of unwanted sexual acts in childhood in a national Canadian sample. *Can J Public Health* 1989;80(4):295-6.
13. MacMillan HL, Jamieson E, Walsh CA. Reported contact with child protection services among those reporting child physical and sexual abuse: results from a community survey. *Child Abuse Negl.* 2003;27(12):1397-408 (<http://www.sciencedirect.com/science/article/pii/S0145213403002412>, accessed 25 July 2016).
14. Briere J. *Child abuse trauma: theory and treatment of the lasting effects.* Newbury Park (CA): Sage Publications; 1992.
15. Briere J, Gil E. Self-mutilation in clinical and general population samples: prevalence, correlates, and functions. *Am J Orthopsychiatry* 1998;68(4):609-20.
16. Dietrich A. Characteristics of child maltreatment, psychological dissociation, and somatoform dissociation of Canadian inmates. *J Trauma Dissociation* 2003;4(1):81-100.
17. Swahn MH, Whitaker DJ, Phippen CB, Leeb RT, Teplin LA, Abram KM et al. Concordance between self-reported maltreatment and court records of abuse or neglect among high-risk youths. *Am J Public Health* 2006;96(10):1849-53.
18. Taylor CA, Boris NW, Heller SS, Clum GA, Rice JC, Zeanah CH. Cumulative experiences of violence among high-risk urban youth. *J Interpers Violence* 2008;23(11):1618-35.
19. Briere J, Runtz M. Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse Negl.* 1988;12(3):331-41.
20. Van Bruggen L, Runtz M, Kadlec H. Sexual revictimization: the role of sexual self-esteem and dysfunctional sexual behaviours. *Child Maltreat.* 2006;11(2):132-45.
21. Marivate P, Madu SN. Levels of social support and coping strategies in adult survivors of child sexual abuse. *J Psychol Africa* 2014;17(1-2):133-6.
22. Childhood maltreatment interview schedule short form [website]. Los Angeles (CA): John Briere Ph.D.; 1992 (<http://www.johnbriere.com/cmis.htm>, accessed 25 July 2016).
23. Ma Y, Chen J, Xiao W, Wang F, Zhang M. Parents' self-reporting of child physical maltreatment in Yuncheng City, China. *Child Abuse Negl.* 2011;35(8):592-600 (<http://www.sciencedirect.com/science/article/pii/S014521341100161X>, accessed 25 July 2016).
24. Wright J, Friedrich WN, Cyr M, Theriault C, Perron A, Lussier Y et al. The evaluation of Franco-Quebec victims of child sexual abuse and their mothers: the implementation of a standard assessment protocol. *Child Abuse Negl.* 1998;22(1):9-23.
25. Friedrich WN, Grambsch P, Damon L, Hewitt SK, Koverola C, Lang RA et al. Child Sexual Behavior Inventory: normative and clinical comparisons. *Psychol Assess.* 1992;4(3):303-11.
26. Berliner L, Saunders BE. Treating fear and anxiety in sexually abused children: results of a controlled 2-year follow-up study. *Child Maltreat.* 1996;1(4):294-309.
27. Schoentjes E, Deboutte D, Friedrich WN. Child Sexual Behavior Inventory: a Dutch-speaking normative sample. *Pediatrics* 1999;104(4):885-93.
28. Friedrich W. *Child Sexual Behaviour Inventory (CSBI) - professional manual.* Odessa (FL): Psychological Assessment Resources; 1997.
29. Wright KD, Asmundson GJ, McCreary DR, Scher C, Hami S, Stein MB. Factorial validity of the Childhood Trauma Questionnaire in men and women. *Depress Anxiety* 2001;13(4):179-83.
30. Bisceglia R, Jenkins JM, Wigg KG, O'Connor TG, Moran G, Barr CL. Arginine vasopressin 1a receptor gene and maternal

- behavior: evidence of association and moderation. *Genes Brain Behav.* 2012;11(3):262–8.
31. Walsh CA, MacMillan HL, Trocmé N, Jamieson E, Boyle MH. Measurement of victimization in adolescence: development and validation of the Childhood Experiences of Violence Questionnaire. *Child Abuse Negl.* 2008;32(11):1037–57.
 32. Cleverley K, Boyle MH. The individual as a moderating agent of the long-term impact of sexual abuse. *J Interpers Violence* 2010;25(2):274–90.
 33. Kelley ML, Lawrence HR, Milletich RJ, Hollis BF, Henson JM. Modeling risk for child abuse and harsh parenting in families with depressed and substance-abusing parents. *Child Abuse Negl.* 2015;43:42–52.
 34. Tanaka M, Wekerle C, Leung E, Waechter R, Gonzalez A, Jamieson E et al. Preliminary evaluation of the childhood experiences of violence questionnaire short form. *J Interpers Violence* 2012;27(2):396–407 (<http://www.sciencedirect.com/science/article/pii/S0145213408001634>, accessed 25 July 2016).
 35. Kaess M, Parzer P, Mattern M, Resch F, Bifulco A, Brunner R. Childhood Experiences of Care and Abuse (CECA) – validation of the German version of the questionnaire and interview, and results of an investigation of correlations between adverse childhood experiences and suicidal behaviour. *Z Kinder Jugendpsychiatr Psychother.* 2011;39(4):243–52.
 36. Bifulco A, Brown G, Harris T. Childhood Experience of Care and Abuse (CECA): a retrospective interview measure. *J Child Psychol Psychiatry* 1994;35(8):1419–35.
 37. Bifulco A, Bernazzani O. The childhood experience of care and abuse questionnaire (CECA. Q): validation in a community series. *Br J Clin Psychol.* 2005;44(4):563–81.
 38. Training in the Childhood Experience of Care and Abuse (CECA) interview [website]. London: Centre for Abuse and Trauma Studies, University of Middlesex; 2016 (<http://www.cecainterview.com/>, accessed 25 July 2016).
 39. Thombs BD, Bernstein DP, Lobbstaël J, Arntz A. A validation study of the Dutch Childhood Trauma Questionnaire-Short Form: factor structure, reliability, and known-groups validity. *Child Abuse Negl.* 2009;33(8):518–23.
 40. Fink LA, Bernstein D, Handelsman L, Foote J, Lovejoy M. Initial reliability and validity of the childhood trauma interview: a new multidimensional measure of childhood interpersonal trauma. *Am J Psychiatry* 1995;152(9):1329–35.
 41. Bernstein DP, Ahluvalia T, Pogge D, Handelsman L. Validity of the Childhood Trauma Questionnaire in an adolescent psychiatric population. *J Am Acad Child Adolesc Psychiatry* 1997;36(3):340–8.
 42. Lundgren K, Gerdner A, Lundqvist L-O. Childhood abuse and neglect in severely dependent female addicts: homogeneity and reliability of a Swedish version of the Childhood Trauma Questionnaire. *Int J Soc Welf.* 2002;11(3):219–27.
 43. Grassi-Oliveira R, Cogó-Moreira H, Salum GA, Brietzke E, Viola TW, Manfro GG et al. Childhood Trauma Questionnaire (CTQ) in Brazilian samples of different age groups: findings from confirmatory factor analysis. *PLoS One* 2014;9(1):e87118.
 44. Bernstein DP, Stein JA, Newcomb MD, Walker E, Pogge D, Ahluvalia T et al. Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse Negl.* 2003;27(2):169–90.
 45. Straus MA, Kinard EM, Williams LM. The Multidimensional Neglectful Behavior Scale, form A: Adolescent and Adult-Recall version. Durham (NH): University of New Hampshire; 1995 (<http://pubpages.unh.edu/~mas2/NS1H.pdf>, accessed 25 July 2016).
 46. Fauchier A, Straus MA. Psychometric properties of the Adult-Recall form of the Dimensions of Discipline Inventory. Durham (NH): University of New Hampshire; 2010 (http://pubpages.unh.edu/~mas2/DDo3M5_Psychometrics_of_adult_recall_form.pdf, accessed 25 July 2016).
 47. Van Leeuwen KG, Fauchier A, Straus MA. Assessing dimensions of parental discipline. *J Psychopathol Behav Assess.* 2012;34(2):216–31.
 48. Straus MA, Fauchier A. Manual for the Dimensions of Discipline Inventory (DDI). Durham (NH): University of New Hampshire; 2005–2011 (<http://pubpages.unh.edu/~mas2/DDo1%20S17%20Manual.pdf>, accessed 25 July 2016).
 49. Machado C, Gonçalves M, Matos M. ECPF – Escala de Crenças sobre Punição Física [Physical Punishment Beliefs Scale]. Braga: Psiquilibrios; 2000.
 50. Machado C, Gonçalves M, Matos M, Dias A. Child and partner abuse: self-reported prevalence and attitudes in the north of Portugal. *Child Abuse Negl.* 2007;31:657–70.
 51. Zolotor AJ, Runyan DK, Dunne MP, Jain D, Péturs HR, Ramirez C et al. ISPCAN Child Abuse Screening Tool Children’s Version (ICAST-C): instrument development and multinational pilot testing. *Child Abuse Negl.* 2009;33:833–41.

52. Al-Eissa MA, AlBuhairan FS, Qayad M, Saleheen H, Runyan D, Almuneef M. Determining child maltreatment incidence in Saudi Arabia using the ICAST-CH: a pilot study. *Child Abuse Negl.* 2015;42:174–82.
53. Runyan DK, Dunne MP, Zolotor AJ, Madrid B, Jain D, Gerbaka B et al. The development and piloting of the ISPCAN Child Abuse Screening Tool-Parent version (ICAST-P). *Child Abuse Negl.* 2009;33(11):826–32.
54. Chang H-Y, Lin C-L, Chang Y-T, Tsai M-C, Feng J-Y. Psychometric testing of the Chinese version of ISPCAN Child Abuse Screening Tools Children's Home version (ICAST-CH-C). *Child Youth Serv Rev.* 2013;35(12):2135–9.
55. Dunne MP, Zolotor AJ, Runyan DK, Andrevia-Miller I, Choo WY, Dunne SK et al. ISPCAN Child Abuse Screening Tools Retrospective version (ICAST-R): Delphi study and field testing in seven countries. *Child Abuse Negl.* 2009;33:826–32.
56. Chen J, Dunne MP, Han P. Child sexual abuse in China: a study of adolescents in four provinces. *Child Abuse Negl.* 2004;28(11):1171–86.
57. ICAST. ISPCAN Child Abuse Screening Tools (ICAST). Questionnaires and guides available for UN study on violence against children [website]. Aurora (CO): ISPCAN; 2016 (<http://www.ispcan.org/?page=ICAST>, accessed 25 July 2016).
58. Finkelhor D, Hamby SL, Ormrod R, Turner H. The Juvenile Victimization Questionnaire: reliability, validity, and national norms. *Child Abuse Negl.* 2005;29:383–412.
59. Forns M, Kirchner T, Soler L, Paretilla C. Spanish/Catalan version of the Juvenile Victimization Questionnaire (JVQ): psychometric properties. *Anuario de Psicología* 2013;43(2):171–88.
60. Gren-Landell M, Aho N, Andersson G, Svedin CG. Social anxiety disorder and victimization in a community sample of adolescents. *J Adolesc.* 2011;34(3):569–77.
61. Juvenile victimization questionnaire [website]. Durham (NH): Crimes Against Children Research Center; 2016 (http://www.unh.edu/ccrc/jvq/index_new.html, accessed 25 July 2016).
62. English D, LONGSCAN investigators. Modified maltreatment classification system (MMCS). Chapel Hill (NC): University of North Carolina at Chapel Hill; 1997 (<http://www.learningace.com/doc/4582713/427aefbd436c8b77ad7133a69431131a/longscan-mmcs-coding>, accessed 25 July 2016).
63. Dubowitz H, Pitts SC, Litrownik AJ, Cox CE, Runyan D, Black MM. Defining child neglect based on child protective services data. *Child Abuse Negl.* 2005;29(5):493–511.
64. Bolger K, Patterson C. Developmental pathways from child maltreatment to peer rejection. *Child Dev.* 2001;72(2):549–68.
65. Dubowitz H, Feigelman S, Lane W, Kim J. Pediatric primary care to help prevent child maltreatment: the Safe Environment for Every Kid (SEEK) model. *Pediatrics* 2009;123(3):858–64.
66. Straus MA. Cross-cultural reliability and validity of the Multidimensional Neglectful Behavior Scale Adult Recall Short Form. *Child Abuse Negl.* 2006;30:1257–79.
67. Kaufman Kantor G, Holt MK, Mebert CJ, Straus MA, Drach KM, Ricci LR et al. Development and preliminary psychometric properties of the Multidimensional Neglectful Behavior Scale – child report. *Child Maltreat.* 2004;9(5):409–28.
68. Neglect and the Multidimensional Neglectful Behavior Scale (MNBS) [website]. Durham (NH): University of New Hampshire; undated (<http://pubpages.unh.edu/~mas2/Mul.htm>, accessed 25 July 2016).
69. Schei B, Lukasse M, Ryding EL, Campbell J, Karro H, Kristjansdottir H et al. A history of abuse and operative delivery – results from a European multicountry cohort study. *PLoS One* 2014;9(1):e87579.
70. Swahnberg IMK, Wijma B. The NorVold Abuse Questionnaire (NorAQ): validation of new measures of emotional, physical, and sexual abuse, and abuse in the health care system among women. *Eur J Public Health* 2003;13(4):361–6.
71. Swahnberg K. NorVold Abuse Questionnaire for men (m-NorAQ): validation of new measures of emotional, physical, and sexual abuse and abuse in health care in male patients. *Gend Med.* 2011;8(2):69–79.
72. Schei B, Lukasse M, Ryding E-L, Campbell J, Karro H, Kristjansdottir H et al. The Norvold Abuse Questionnaire (NorAQ) questions on emotional, physical and sexual abuse [website]. Brooklyn (NY): Figshare; 2014 (https://figshare.com/articles/_The_Norvold_Abuse_Questionnaire_NorAQ_questions_on_emotional_physical_and_sexual_abuse_/923228, accessed 25 July 2016).
73. Straus MA, Hamby SL, Boney-McCoy S, Sugarman DB. The revised Conflict Tactics Scales (CTS2): development and

- preliminary psychometric data. *J Fam Issues* 1996;17(3):283-316.
74. de Zoysa P, Rajapakse L, Newcombe PA. Adaptation and validation of the parent-child conflict tactics scale for use in Sri Lanka. *Ceylon Med J*. 2005;50(1):11-4.
 75. Bonfim CB, Santos DN, Menezes IG, Reichenheim ME, Barreto ML. A study on the construct validity of the Parent-Child Conflict Tactics Scale (CTSPC) in an urban population in Northeast Brazil. *Cad Saude Publica*. 2011;27(11):2215-26.
 76. Straus MA, Hamby SL. Measuring physical and psychological maltreatment of children with the Conflict Tactics Scales. In: Kaufman Kantor G, Jasinski JL, editors. *Out of the darkness: contemporary perspectives on family violence*, 1st edition. London: Sage Publications, Inc.; 1997:119-35.
 77. Reichenheim ME, Moraes CL. Psychometric properties of the Portuguese version of the Conflict Tactics Scales: Parent-Child version (CTSPC) used to identify child abuse. *Cad Saude Publica*. 2006;22(3):503-15.
 78. Chan KL. Co-occurrence of intimate partner violence and child abuse in Hong Kong Chinese families. *J Interpers Violence* 2011;26(7):1322-42.
 79. Russell DEH. The incidence and prevalence of intrafamilial and extrafamilial sexual abuse of female children. *Child Abuse Negl*. 1983;7:133-46 (<http://www.sciencedirect.com/science/article/pii/0145213483900650>, accessed 25 July 2016).
 80. Cecil H, Matson S. Sexual victimization among African American adolescent females: examination of the reliability and validity of the Sexual Experiences Survey. *J Interpers Violence* 2006;21(1):89-104.
 81. Sipsma E, Carrobbles Isabel JA, Montorio Cerrato I, Everaerd W. Sexual aggression against women by men acquaintances: attitudes and experiences among Spanish university students. *Span J Psychol*. 2000;3(1):14-27.
 82. Krahé B, Reimer T. Measuring sexual aggression: the reliability of the Sexual Experiences Survey in a German Sample. *J Interpers Violence* 1999;14(1):91-100.
 83. Koss MP, Gidycz CA. Sexual Experiences Survey: reliability and validity. *J Consult Clin Psychol*. 1985;53(3):422-3.
 84. Koss MP, Abbey A, Campbell R, Cook, S, Norris J, Testa M et al. *Sexual Experiences Survey – Long Form Victimization (SES-LFV)*. Tucson (AZ): University of Arizona; 2006 (<http://www.midss.org/content/sexual-experiences-survey-long-form-victimization-ses-lfv>, accessed 25 July 2016).
 85. Johnsona RM, Kotch JB, Catellier DJ, Winsor JR, Dufort V, Hunter W et al. Adverse behavioral and emotional outcomes from child abuse and witnessed violence. *Child Maltreat*. 2002;7(3):179-86.
 86. Richters J, Martinez P. Violent communities, family choices, and children's chances: an algorithm for improving the odds. *Dev Psychopathol*. 1993;5(4):609-27.
 87. Cox CE, Kotch JB, Everson MD. A longitudinal study of modifying influences in the relationship between domestic violence and child maltreatment. *J Fam Violence* 2003;18(1):5-17.
 88. Seedat S, van Nood E, Vythilingum B, Stein DJ, Kamlner D. School survey of exposure to violence and posttraumatic stress symptoms in adolescents. *South African J Child Adolesc Ment Health* 2000;12(1):38-44.
 89. Richters J, Martinez P. The NIMH community violence project: I. Children as victims of and witnesses to violence. *Psychiatry* 1993;56(1):7-21.

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Measuring and monitoring national prevalence of child maltreatment: *a practical handbook*



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