The Australian Child Maltreatment Study:
A landmark study of the national prevalence of child maltreatment, its mental and physical health outcomes, and burden of disease

Presentation to Families & Children Tasmania

Tuesday 24 November 2020

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https://www.australianchildmaltreatmentstudy.org/

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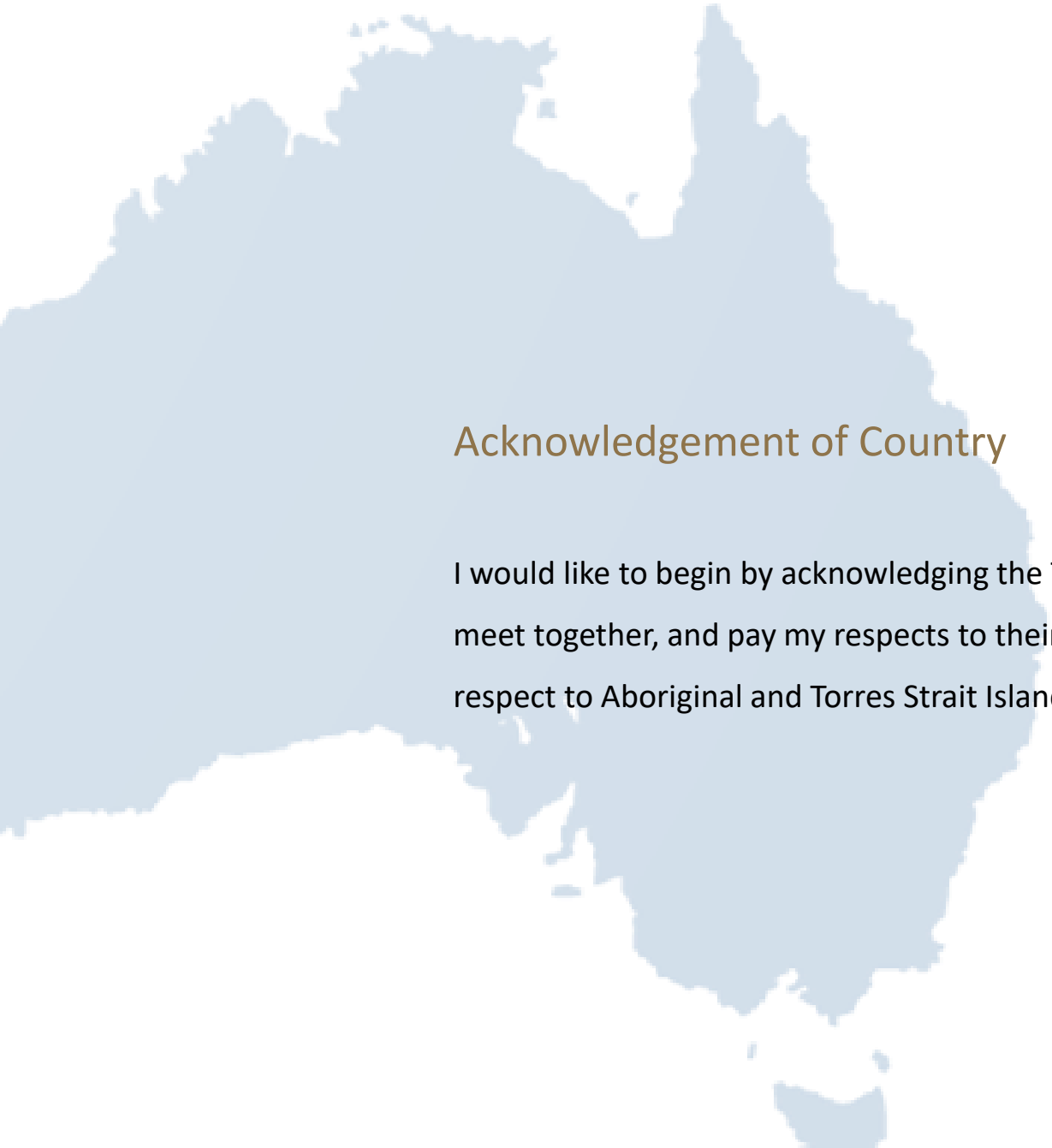

Acknowledgement of Country

I would like to begin by acknowledging the Traditional Custodians of the lands on which we meet together, and pay my respects to their Elders past, present and future. I extend that respect to Aboriginal and Torres Strait Islander people who are joining us today.

On Behalf of the ACMS team

- Prof Ben Mathews (QUT)
- Prof Rosana Pacella (Greenwich University)
- Prof Michael Dunne (QUT)
- Prof James Scott (QIMR Berghofer)
- Prof Daryl Higgins (ACU)
- Dr Hannah Thomas (UQ)
- Dr Holly Erskine (UQ)
- Dr Franziska Meinck (University of Edinburgh)
- Prof David Finkelhor (University Of New Hampshire)
- Dr Divna Haslam (Project Manager, QUT)
- Dr Nikki Honey (Senior Research Director, Social Research Centre)

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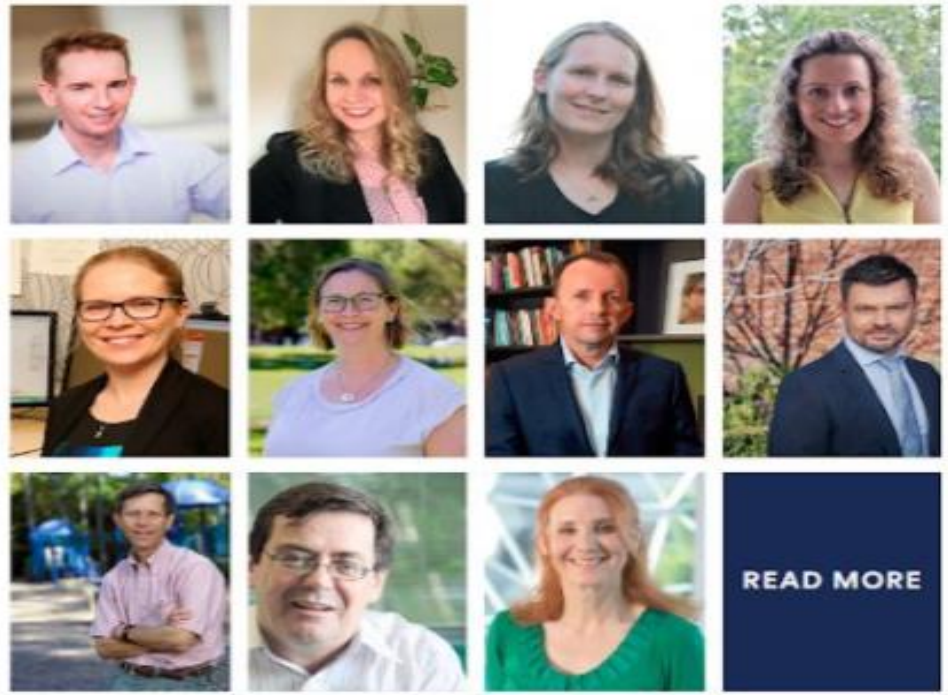

Overview of presentation

1. Why we need to study child maltreatment and its health outcomes

2. The Australian Child Maltreatment Study:

- Aims and Study design
- Sampling frame
- Survey instrument
- Key parameters:
  - ➢ Maltreatment data
  - ➢ Mental health outcome data
  - ➢ Physical health & health risk behaviours

3. Publications and timeline

- Knowledge translation and engagement with governments, Advisory Board
- Future planning

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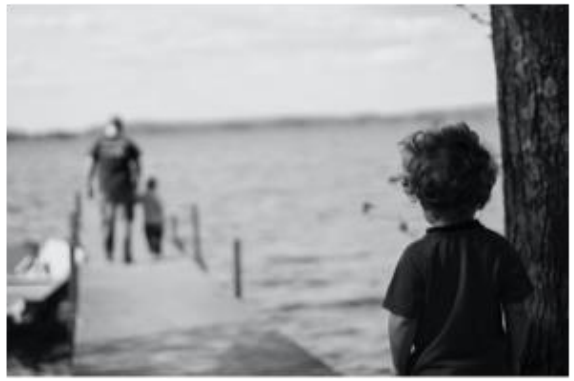
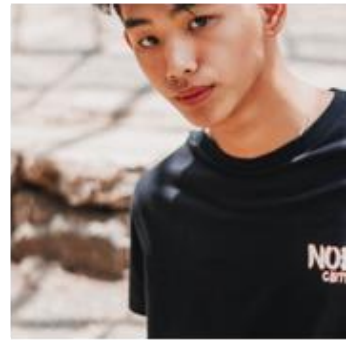


1. Why Should We Study Child Maltreatment?

- In sum: massive significance for individuals, families, communities, governments, society, and the economy
- Child maltreatment (physical, sexual, and emotional abuse, neglect, and exposure to domestic violence) is common and harmful
- Violates physical, psychological, sexual integrity; often endured repeatedly; sometimes criminal
- Breaches fundamental human rights of vulnerable individuals
- Psychological trauma: **depressive** disorders (22.8% females;15.7% males); **anxiety** disorders (30.6% females; 20.9% males); **self harm** (33% females; 23.5% males) (Moore et al., 2015)
- UN Sustainable Development Goals view child maltreatment as a **major public health issue**: **Goal 16** aims to end child maltreatment and requires governments to report on their efforts
- Impact on core social systems of care (child protection, out-of-home care, health, education)
- ROGS 2018: single year cost 2016/17: >$5 billion (child protection, OOH care, intensive family support and family support services) – not counting downstream costs

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Adverse Health, Behavioural and Economic Consequences through the Lifespan


Failure to thrive; impaired development; physical injuries and fatalities


Mental health outcomes: depression, anxiety, PTSD, self-harm, suicide


Physical health outcomes from coping strategies, including obesity


Academic impact (schooling, including behaviour); economic achievement; welfare


Effects on adult relationships, re-victimisation, violence, intergenerational maltreatment


Long-term disease caused via coping mechanisms (e.g., smoking, alcohol, drug abuse) and chronic stress (e.g. coronary artery disease, inflammation)


Impairs brain development and function; shortens telomeres, accelerates cellular ageing


Produces lifelong disease burden with intergenerational effects


Multi-type maltreatment and poly-victimization have the strongest effects

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'Maltreatment-related childhood adversity is the leading preventable risk factor for mental illness and substance abuse.'
(Teicher, 2016, Nature Reviews Neuroscience)

Why Australian prevalence data is essential

- Australia lacks fundamental evidence about:
  - national prevalence of each type of abuse and neglect, & multi-type maltreatment
  - the characteristics of these experiences (age, gender, frequency, sub-types)
  - associations with mental disorders, physical health outcomes, other adverse effects
  - specific high-risk profiles
- Lack of evidence impedes evidence-based, targeted public health approaches to:
  - ➢ prevent maltreatment
  - ➢ reduce associated health conditions
  - ➢ reduce other adverse outcomes
- ACMS will provide this evidence; inform national public health and child safety policy (Prime Minister's speech, 22 October 2020)
- Implications for intergenerational prevention
- Due to intrinsic limitations, official/agency sources of data are the tip of the iceberg…

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Official sources of prevalence data are the tip of the iceberg…

Prevalence studies: self-report with national samples using rigorous measurement

Finkelhor 2015 (USA):
15.2% prior year maltreatment (physical abuse, sexual abuse, emotional abuse, neglect) (children 2-17)
24.9% lifetime maltreatment (children 2-17)
38.1% lifetime maltreatment (children 14-17)

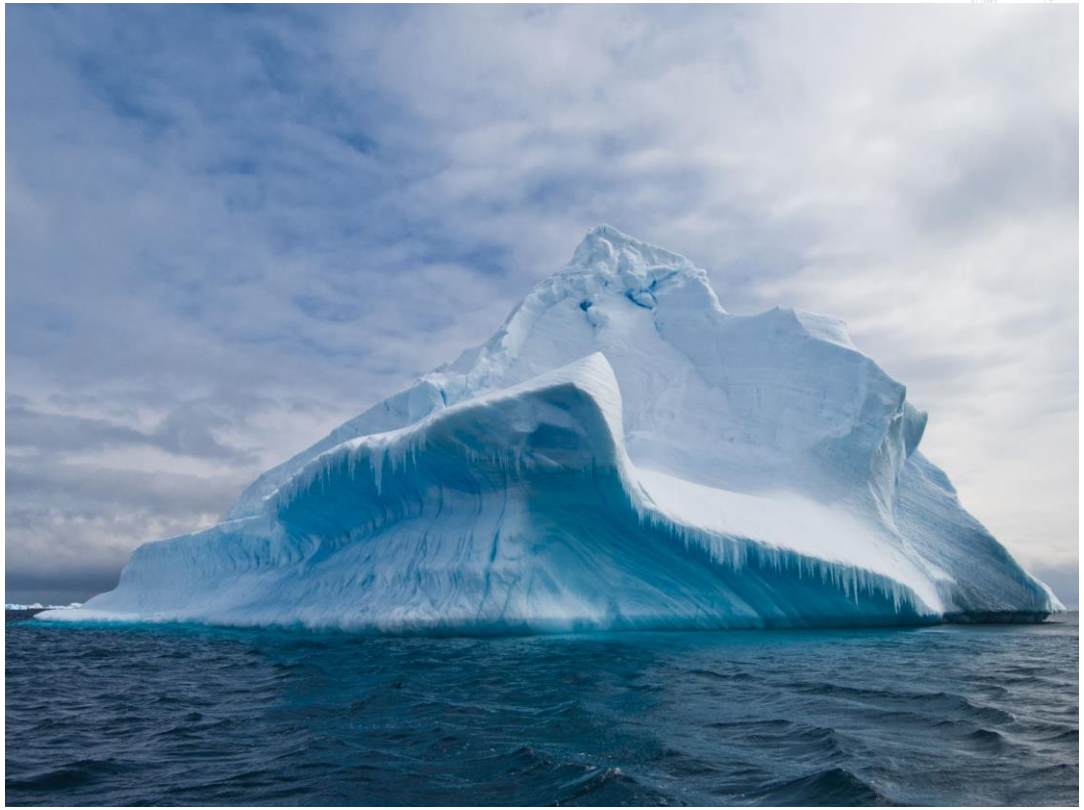
Radford 2013 (UK):
6% prior year maltreatment by parent/guardian (children 0-17)
21.9% lifetime maltreatment by parent/guardian (children 11-17)
24.5% lifetime maltreatment by parent/guardian (retro: 18-24)

Radford, lifetime:
- Physical abuse: 8.4%
- Sexual abuse: 24.1%
- Emotional abuse: 6.9%
- Neglect: 16%
- EDV: 23.7%

Contrast: AIHW 2020

8.5/1000 children (0.85%)
(children in **substantiated** cases)

- 9354 physical abuse
- 5950 sexual abuse
- 31,631 emotional abuse
- 15,586 neglect



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Why Should We Study Health Outcomes?

"*In Australia, as in most countries, there has not been a comprehensive assessment of the health consequences of child maltreatment at the national level*" (Moore et al., 2015)

Multiple, fundamental evidence gaps exist about the effects of child maltreatment on mental and physical health through the lifespan, including:

1. health consequences of childhood emotional abuse
2. health consequences of childhood exposure to domestic violence
3. health consequences of neglect
4. health consequences of multi-type child abuse / poly-victimization
5. effect on health consequences of developmental timing of child maltreatment
6. effect on health consequences of chronicity and severity

Reliable evidence is needed to inform targeted prevention policy and clinical responses

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The Australian Child Maltreatment Study (ACMS)

Funded for 5 years 2019-23: National Health and Medical Research Council Project Grant 1158750 ($2.3m)

Additional funding and contributions for the ACMS have been provided by the Department of the Prime Minister and Cabinet, Department of Social Services, the Australian Institute of Criminology and by the Queensland University of Technology

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Australian Government
Department of Social Services

Australian Government
Australian Institute of Criminology

ACMS: Aims

The first comprehensive study of:

1. The **prevalence** of each form of maltreatment (and multi-type abuse)
2. The **characteristics** of these experiences (e.g., child age, sex, timing, frequency, relationship to person inflicting abuse: specific risk profiles)
3. Key **mental and physical health** outcomes through the lifespan
4. **Burden of disease** associated with maltreatment (and other health utilisation outcomes)

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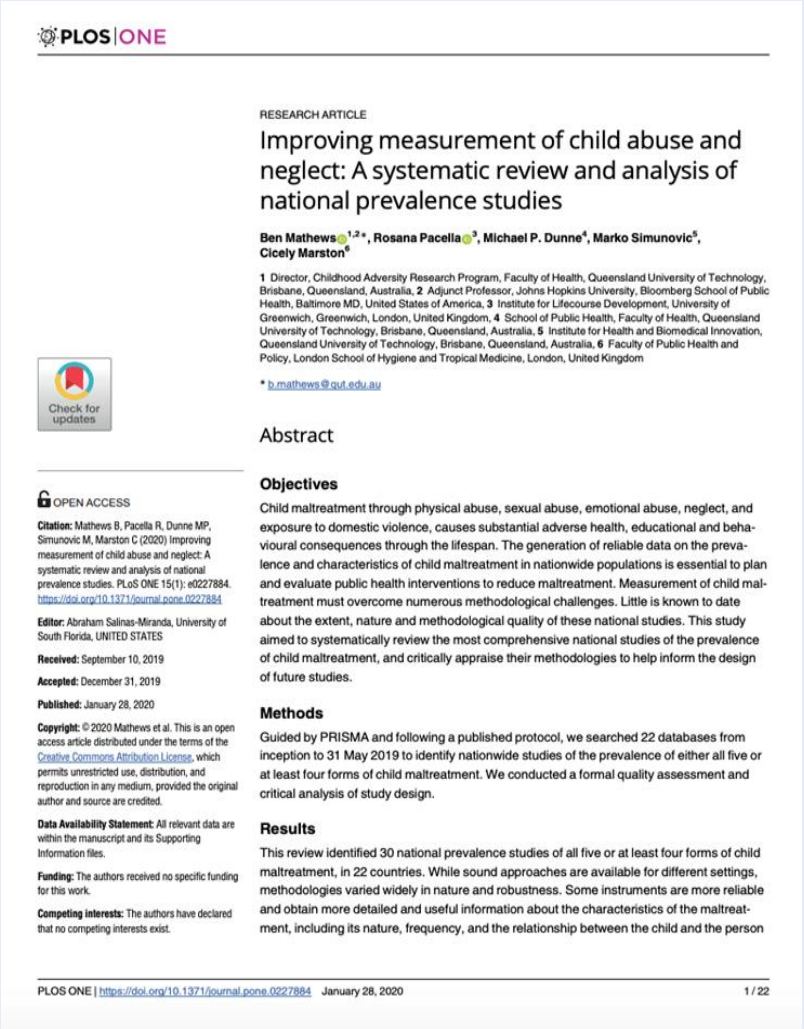
Study Design

- Informed by global systematic review and analysis*
- **Nationwide cross-sectional survey**
- Computer-assisted telephone interviews (CATI)

- Approx. 10,000 participants aged 16 and over
  - ➢ ~5000 adolescents/young adults aged 16-24
  - ➢ 1000 adults in each of the following strata:
    - ❑ 25-34, 35-44, 45-54, 55-64, >65
- Enables measurement of health through life



PLOS ONE

RESEARCH ARTICLE

Improving measurement of child abuse and neglect: A systematic review and analysis of national prevalence studies

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Abstract

Objectives

Child maltreatment through physical abuse, sexual abuse, emotional abuse, neglect, and exposure to domestic violence, causes substantial adverse health, educational and behavioural consequences through the lifespan. The generation of reliable data on the prevalence and characteristics of child maltreatment in nationwide populations is essential to plan and evaluate public health interventions to reduce maltreatment. Measurement of child maltreatment must overcome numerous methodological challenges. Little is known to date about the extent, nature and methodological quality of these national studies. This study aimed to systematically review the most comprehensive national studies of the prevalence of child maltreatment, and critically appraise their methodologies to help inform the design of future studies.

Methods

Guided by PRISMA and following a published protocol, we searched 22 databases from inception to 31 May 2019 to identify nationwide studies of the prevalence of either all five or at least four forms of child maltreatment. We conducted a formal quality assessment and critical analysis of study design.

Results

This review identified 30 national prevalence studies of all five or at least four forms of child maltreatment, in 22 countries. While sound approaches are available for different settings, methodologies varied widely in nature and robustness. Some instruments are more reliable and obtain more detailed and useful information about the characteristics of the maltreatment, including its nature, frequency, and the relationship between the child and the person

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* Mathews, B., Pacella, R., Dunne, M., Simunovic, M., & Marston, C. (2020). Improving measurement of child abuse and neglect: a systematic review and analysis of national prevalence studies. PLoS ONE 15(1): e0227884. https://doi.org/10.1371/journal.pone.0227884

Study Design

Allows us to obtain:

- self-reported retrospective data about child maltreatment experiences
- diagnostic information about mental health disorders
- information about physical health outcomes
- information about other health risk behaviors
- information about other adversities (confounders): bullying, ACEs

Lays foundation for further essential studies, examining:

- Change in trends over time
- Intergenerational effects

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Sampling Frame

- People aged 16 years and over, accessible by mobile phones
- Nationally representative: metropolitan, regional, rural, remote
- Mobile phone numbers via random digit dialing (commercial vendor database)
- Pre-approach text message
- Note hard-to-reach subpopulations
- The Social Research Centre is our partner organization
  - expert, highly trained telephone interviewers
  - further intensive training by ACMS team
  - special support and oversight / monitoring / quality assurance

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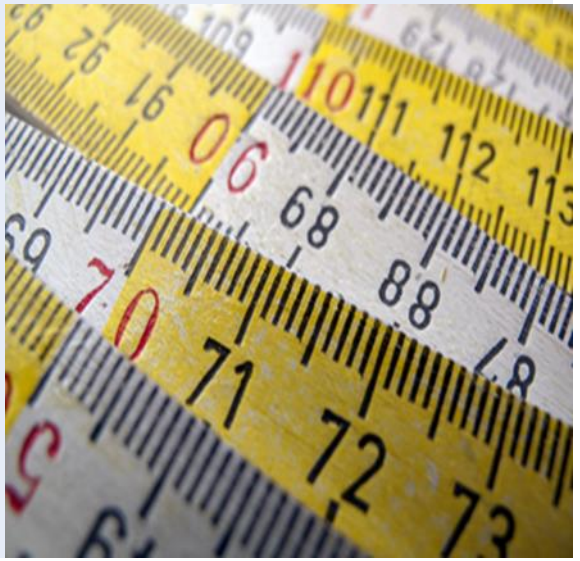
Survey instrument

The JVQ-R2: Adapted Version (Australian Child Maltreatment Study)

Extensive design and testing process

Sections include:

- Demographics (age, gender, ethnicity, OOH care, education, employment, income)
- **Maltreatment**
- Adverse childhood experiences
- Peer bullying (physical, verbal, relational, online); sibling violence
- Criminal justice involvement (arrested, convicted, imprisoned)
- Mental health
- Physical health
- Health risk behaviours
- Service use



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Five sections on experiences of child maltreatment (each of the 5 types)

20 screener questions in total: different dimensions of each maltreatment type: **Y/N**

1. Physical abuse: 2 (+ 1 on corporal punishment): **3**
2. Sexual abuse: 5 (+ 2 on internet victimisation): **7**
3. Emotional abuse: **3**
4. Neglect: **3**
5. Exposure to domestic violence: **4**

Follow-up questions:

- frequency (number of times; or duration over time)
- age of onset and cessation
- relationship with person(s) who did the acts
- institutional physical and sexual abuse + disclosure (4 follow-ups)

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Parameter 1: Experiences of child maltreatment

Data on prevalence in childhood up to age 18 of each type of child maltreatment:

- Physical abuse (parent/caregiver)
- Sexual abuse (anyone)
- Emotional abuse (parent/caregiver)
- Neglect (parent/caregiver)
- Exposure to domestic violence (family violence)
- Also other key adversities (peer/sibling violence; ACES; corporal punishment)

Data also obtained from 16-17 year-olds on past year prevalence

Also capturing data on characteristics of these maltreatment experiences

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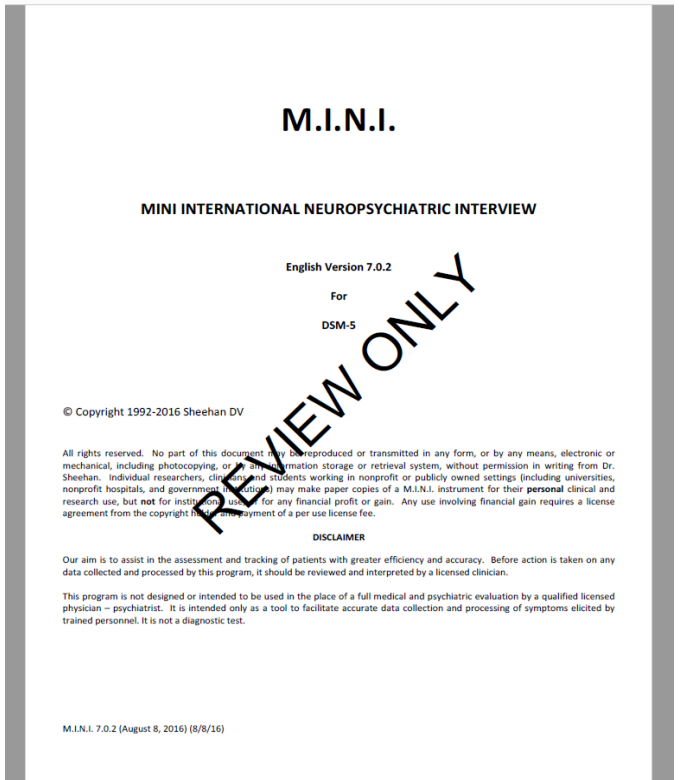
Parameter 2: Health Outcomes - Mental Health

We use the MINI (Mini International Neuropsychiatric Interview) survey instrument

Key advantage: obtains diagnostic information for four key mental health conditions

1. Generalized anxiety disorder (current: past 6 mths)
2. Post-traumatic stress disorder (current)
3. Alcohol use disorder (current: past 12 mths)
4. Major depressive disorder (lifetime)



M.I.N.I.

MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

English Version 7.0.2

For

DSM-5

REVIEW ONLY

DISCLAIMER

Our aim is to assist in the assessment and tracking of patients with greater efficiency and accuracy. Before action is taken on any data collected and processed by this program, it should be reviewed and interpreted by a licensed clinician.

This program is not designed or intended to be used in the place of a full medical and psychiatric evaluation by a qualified licensed physician – psychiatrist. It is intended only as a tool to facilitate accurate data collection and processing of symptoms elicited by trained personnel. It is not a diagnostic test.

M.I.N.I. 7.0.2 (August 8, 2016) (8/8/16)

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Parameter 2: Health Outcomes - Physical Health

Major physical health conditions and adverse health and behavioural outcomes are assessed using NSMHW modules (chronic conditions, suicidality) and tailored items

Physical health diagnoses

1. Obesity (current)
2. Cardiovascular disease (LT, PY)
3. Diabetes (LT, PY)
4. STI (LT, PY)

Health Risk Behaviours

1. Tobacco use (LT, PY)
2. Alcohol use (sub-clinical) (LT, PY)
3. Substance use (cannabis) (LT, PY)
4. Self-harm (LT, PY)
5. Suicidal thoughts / attempts (LT/PY)

Parameter 3: Burden of Disease

Personal, community and national costs of maltreatment will be assessed via:

Burden of disease attributable to health conditions from child maltreatment, calculated based on prevalence data and relative risks of disease

- Years of Life Lost (YLLs)
- Years Lived With Disability (YLDs)
- Disability Adjusted Life Years (DALYs)

Health service utilisation data gathered on a range of HSU measures using NSMHW service utilisation module

- hospitalisations
- medical and mental health consultations
- medication use

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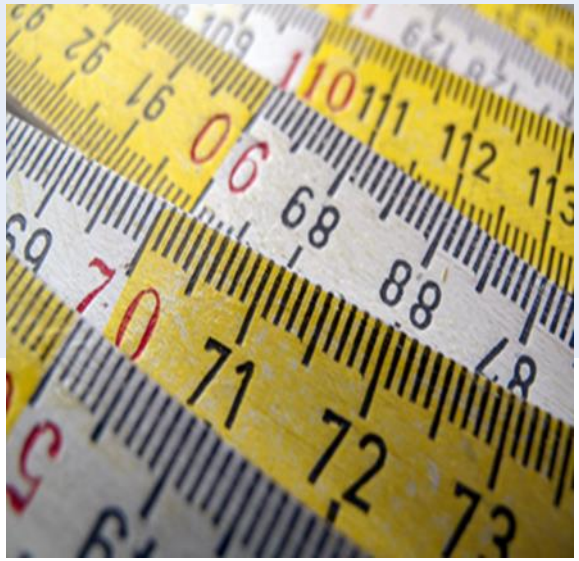
Pilot testing (April – May 2020)

Strong performance + useful information for final revisions

Entire instrument (Time 1: n=100); re-test 4 wks later (Time 2: n=74 maltreatment only)

Key outcomes:

1. Demographics sufficiently representative
2. Minimal missing data (clarity, face validity, participant comfort)
3. Frequencies for maltreatment types generally within expected ranges
4. Frequencies for other components also within expected ranges (MINI, bullying)
5. Testing of maltreatment questions:
   - strong percentage agreement at Time 1 and Time 2
   - strong internal consistency via Cronbach's alpha
   - strong test-retest via Cohen's kappa
   - Area under the curve analysis
   - McDonald's omega analysis



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A Note on Conceptual Models and Item Congruence

Many studies have asked questions that are not congruent with sound conceptual constructs of the different forms of child abuse and neglect[1] – leading to over-estimates and under-estimates

A key strength of the ACMS is that its items robustly embody each theoretical construct

Physical Abuse: an intentional act of physical force by a parent/caregiver that is intended to and does cause injury, harm, pain, or breach of dignity, or has a high likelihood of doing so (excludes lawful corporal punishment)[2]

Sexual Abuse: contact and non-contact sexual acts by any adult or child in a position of power over the victim, to obtain sexual gratification for the person or another person whether immediately or deferred in time and space, when the child either does not have capacity to provide consent, or has capacity but does not provide consent[3]

Emotional Abuse: parental behaviour, typically repeated, that conveys to the child they are worthless, unloved, unwanted, or only of value in meeting another's needs. Exemplified by acts of hostility; terrorizing; rejection; isolation; corruption; and denying emotional responsiveness[4]

Neglect: parental failure to provide the basic necessities of life as suited to the child's developmental stage and as recognised by the child's cultural context; includes physical, emotional, medical, supervisory and educational neglect[5]

Exposure to Domestic Violence: witnessing a parent/family member subjected to assaults, threats, or property damage by another adult/teenager who lives in the household; includes other forms of inter-parental coercion[6]

[1] Mathews et al, 2020, [2]WHO and ISPCAN 2006.) [3]Mathews & Collin-Vezina, 2019; [4]Glaser 2011; Kairys et al., 2002. [5]Dubowitz et al., 2005, [6]Hamby, Finkelhor et al., 2010; Ford-Gilboe et al., 2016.

3. Publications and timeline

Initial publications on methodology, law, ethics, conceptual models of maltreatment

Submission date	Primary focus
Nov 2020	Protocol article: Mathews, B., Pacella, R., Dunne, M., Scott, J., Finkelhor, D., Meinck, F., Higgins, D., Erskine, H., Thomas, H., Haslam, D., Tran, N., Le, H., Honey, N., & Kellard, K. (2020). The Australian Child Maltreatment Study (ACMS): Protocol for a national survey of the prevalence of child abuse and neglect, associated mental disorders and physical health problems, and burden of disease. BMJ Open (under review)
Dec 2020	The nature and operation of legal duties towards research participants in surveys of child maltreatment
Jan 2021	The ethics of research on child maltreatment: promoting participant confidentiality, welfare, and research participation
1st quarter 2021	Adaptation and validation of the Juvenile Victimization Questionnaire to the Australian context
2nd quarter 2021	Conceptual models of physical abuse and corporal punishment: a critical analysis

Forthcoming work

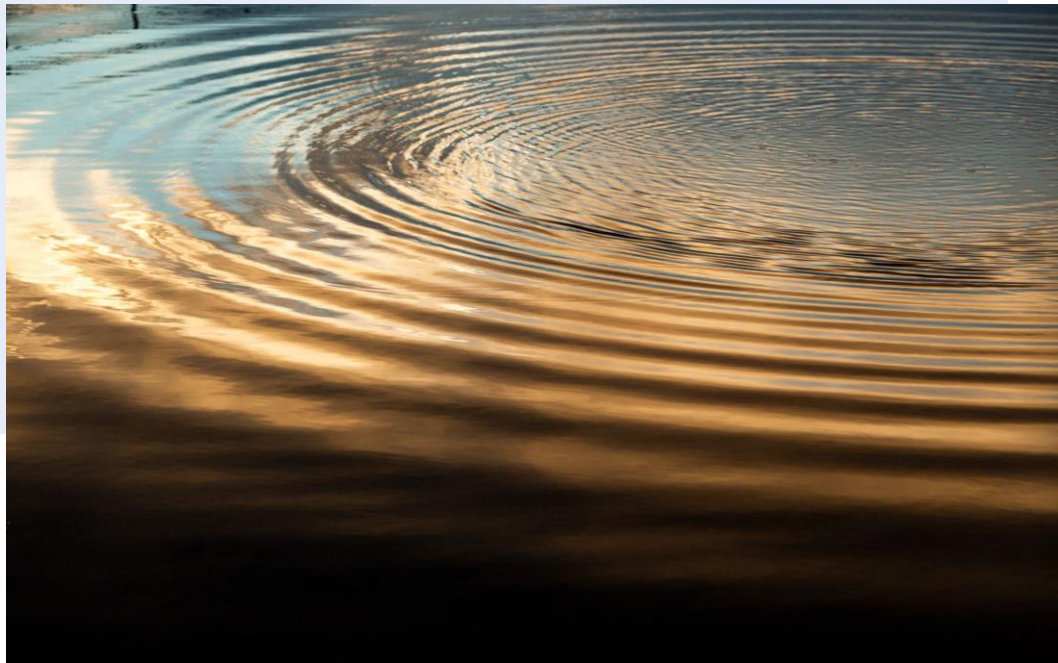
Date	Primary focus
2021 Jan - June	**Publications**: Key methodological issues, and further conceptual models Technical reports and administration manuals (ongoing)
2021 Mar - Nov	**Main survey** **Ongoing engagement** (**Advisory Board**, incl multiple government and non-government stakeholders at national, State and Territory level) Preparation for **knowledge translation** (Advisory Board, Expert Panel)
2021 Nov - Dec	Data cleaning; **initial descriptive data anticipated late 2021/early 2022**
2022	Data analysis; multiple articles on maltreatment trends, health outcomes **Ongoing engagement** (Advisory Board, multiple government and non-government stakeholders at national, State and Territory level) Accelerating **knowledge translation** (Advisory Board, Expert Panel)
2023 **Continuing**	Multiple articles on maltreatment trends, health outcomes, burden of disease, numerous specialized topics and scientific and policy advances **Ongoing engagement** (Advisory Board, Expert Panel); knowledge translation; policy briefs; reform submissions; impact focus; **further projects**

Publications, knowledge translation, and engagement strategy

1. Staged release of results – survey March-November 2021
2. National data (relevant nationally and internationally)
   - Key national findings are significant for all States and Territories
   - Anticipate initial descriptive trend data: **early 2022**
   - Analyses of more complex questions, trends, associations: 2022-23 and beyond
3. State and Territory data will be analysed separately (disaggregated) - with caution
   - Analysis and discussion with individual States / Territories
   - Consideration of policy implications for States / Territories vs federated systems
     - education; child protection/OOH care; criminal justice; public health - health, welfare
   - Thematic analysis of specific topics informed by Advisory Board members' advice, and State/Territory government policy priorities: **we welcome your engagement and input**
4. Accelerating liaison with Advisory Board: ongoing partnerships; discussions; presentations to government departments, peak bodies, community groups

Future goals

1. Prevalence studies with separate youth samples 16-24
   - track trends in maltreatment generally over time in Australia
   - enables further and deeper analysis of specialized contemporary topics
   - enables consideration of effects of policy and practice
2. Longitudinal study (cohort studies)
   - identify mechanisms/pathways of impact over time, incl neurobiological research
   - intergenerational trends
   - efficacy of interventions
   - breaking cycles of maltreatment
   - identify mechanisms/pathways of resilience



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Limitations

1. Not possible to assess all health / other outcomes
   - strategic decisions, constraints of time and cost
   - requires other methods e.g., data linkage

2. Hard-to-reach subpopulations
   - Considered at length in planning and design
   - For some (e.g., ethnic groups), may naturally obtain sufficient participation
     - May also use orthodox statistical weights and adjustments
   - For some (e.g., those in detention) – need separate dedicated study, likely with adjusted methodology / administration
   - Indigenous Australians – may naturally obtain sufficient participation, but may need separate dedicated study especially for some subsamples

Selected References

Dubowitz H, Newton RR, Litrownik AJ, et al. (2005). Examination of a conceptual model of child neglect. Child Maltreatment, 10(2), 173-89.

Finkelhor D, et al. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. Child Abuse & Neglect, 29, 383-412.

****Finkelhor** D, et al. (2015). Prevalence of Childhood Exposure to Violence, Crime, and Abuse: Results From the National Survey of Children's Exposure to Violence. JAMA Pediatrics 169: 746–54.

****Finkelhor** D, et al. Ethical Issues in Surveys about Children's Exposure to Violence and Sexual Abuse. In: Cuevas CA, Rennison CM, editors. The Wiley Handbook on the Psychology of Violence. Chichester: Wiley; 2016. pp. 24–48

Ford-Gilboe, M., Wathen, C. N., Varcoe, C., MacMillan, H.L., Scott-Storey, K., Mantler, T., Hegarty, K., & Perrin, N. (2016). Development of a brief measure of intimate partner violence experiences: the Composite Abuse Scale (Revised)—Short Form. BMJ Open 6:e012824

Gakidou E...Erskine H, **Pacella** R, et al. (2017). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet, 390(10100):1345-422.

Glaser D. (2011). How to deal with emotional abuse and neglect: further development of a conceptual framework. Child Abuse & Neglect, 35, 866-75

Hamby S, **Finkelhor** D, et al. (2010). The overlap of witnessing partner violence with child maltreatment and other victimizations. Child Abuse & Neglect, 34, 734-41.

Heyes N, & **Mathews B. (2020). Mandatory reporting of child abuse and neglect, Australian Institute of Family Studies. https://aifs.gov.au/cfca/publications/mandatory-reporting-child-abuse-and-neglect

Hughes K, …, & **Dunne**, M. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. The Lancet: Public Health, 2(8):e356-e66

Kairys SW, Johnson CF, et al. (2002). The Psychological Maltreatment of Children—Technical Report. Pediatrics, 109, e68

****Mathews**, B., Pacella, R., Dunne, M., Scott, J., Finkelhor, D., Meinck, F., Higgins, D., Erskine, H., Thomas, H., Haslam, D., Tran, N., Le, H., Honey, N., & Kellard, K. (2020). The Australian Child Maltreatment Study (ACMS): Protocol for a national survey of the prevalence of child abuse and neglect, associated mental disorders and physical health problems, and burden of disease. BMJ Open (under review)

****Mathews**, B. (2019). New international frontiers in child sexual abuse: theory, problems and progress. Dordrecht: Springer, 1-307.

****Mathews** B. (2019). A taxonomy of duties to report child sexual abuse: legal developments offer new ways to facilitate disclosure. Child Abuse & Neglect, 88, 337-347. https://doi.org/10.1016/j.chiabu.2018.12.003

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Mathews B, Collin-Vézina D. (2019). Child sexual abuse: Toward a conceptual model and definition. Trauma, Violence & Abuse, 20(2), 131-148.

Mathews B, Pacella R, Dunne M, Simunovic M, & Marston C. (2020). Improving measurement of child abuse and neglect: a systematic review and analysis of national prevalence studies. PLoS ONE 15(1): e0227884. https://doi.org/10.1371/journal.pone.0227884

The Australian Child Maltreatment Study Team. (2020). Australian Child Maltreatment Study Instrument Design: Conceptual mapping to configure the Juvenile Victimization Questionnaire Child Maltreatment Screeners. Brisbane. 1-56.

The Australian Child Maltreatment Study Team. (2020). The JVQ-R2: Adapted Version (Australian Child Maltreatment Study). 1-170.

Mathews B, Walsh K, **Dunne** M, **Higgins** D, et al. (2016). Scoping study for the first Australian national survey of the prevalence of child abuse and neglect. Sydney: Royal Commission into Institutional Responses to Child Sexual Abuse, 1-256.

****Mathews** B, Smith M. (2018). Children and consent to medical treatment. In B White, F McDonald and L Willmott (Eds) Health Law In Australia, Sydney: Thomson, 159-206.

****Mathews** B, & Kenny M. (2008). Mandatory reporting legislation in the USA, Canada and Australia: a cross-jurisdictional review of key features, differences and issues. Child Maltreatment, 13, 50-63.

****Mathews**, B. (2020). The Australian Child Maltreatment Study: Legal duties to report situations reported by participants. 1-34.

****Meinck, F**., Steinert, J., Sethi, D., Gilbert, R., Bellis, M., Mikton, C., Alink, L., & Baban, A. (2016). Measuring and monitoring national prevalence of child maltreatment: a practical handbook. World Health Organization.

Moore SE, **Scott** JG …**Dunne** MP, **Erskine** HE, …, & **Norman**, R. (2015). Burden attributable to child maltreatment in Australia. Child Abuse & Neglect. 48, 208-20.

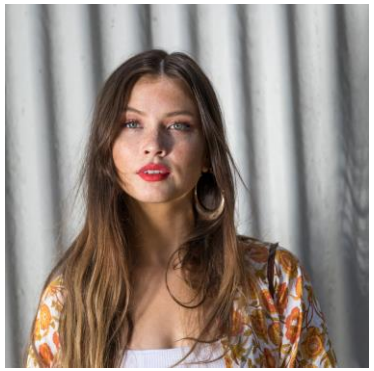
National Statement on Ethical Conduct in Human Research 2007 (Updated 2018). The National Health and Medical Research Council, the Australian Research Council and Universities Australia. Commonwealth of Australia, Canberra.

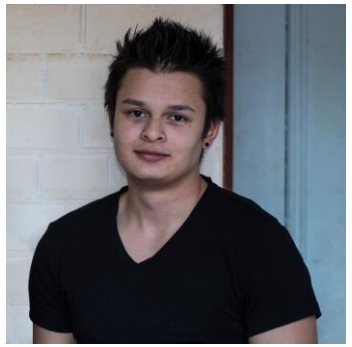
Norman RE, … **Scott**, J, & Vos T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. PLOS Med, 9: e1001349.

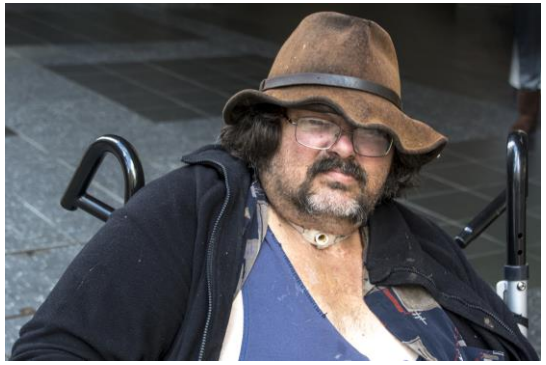
**Radford L, et al. (2013). The prevalence and impact of child maltreatment and other types of victimization in the UK: findings from a population survey of caregivers, children and young people and young adults. Child Abuse and Neglect, 37, 801–13.

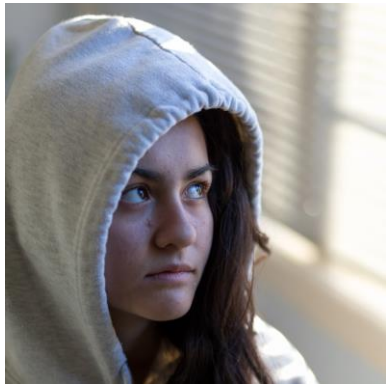
Teicher MH, et al. (2016). The effects of childhood maltreatment on brain structure, function and connectivity. Nature Reviews Neuroscience, 17, 652-66.

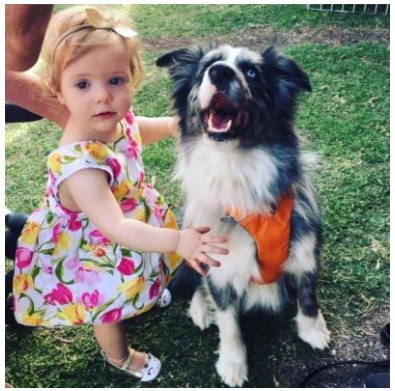
WHO and ISPCAN. Preventing child maltreatment: A guide to taking action and generating evidence. Geneva: WHO; 2006.

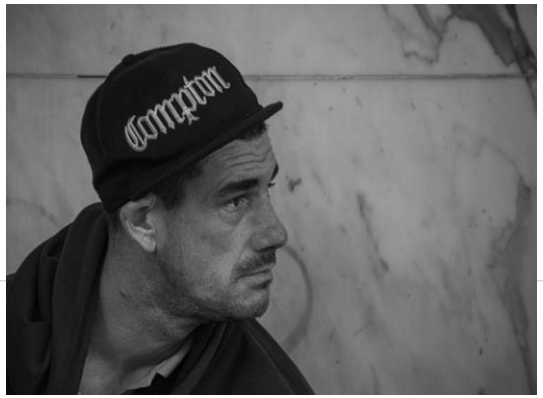












Questions?

For more information:

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