ABSTRACT

Objectives In this review we: (1) identify and describe nationally representative surveys with child maltreatment (CM) questions conducted by governments in low-income, middle-income and high-income countries and (2) describe procedures implemented to address respondents' safety and minimise potential distress.

Design We conducted a systematic search across eight databases from 1 January 2000 to 5 July 2021 to identify original studies with information about relevant surveys. Additional information about surveys was obtained through survey methods studies, survey reports, survey websites or by identifying full questionnaires (when available).

Results Forty-six studies representing 139 surveys (98 youth and 41 adult) conducted by governments from 105 countries were identified. Surveys implemented a variety of procedures to maximise the safety and/or reduce distress for respondents including providing the option to withdraw from the survey and/or securing confidentiality and privacy for the respondent. In many surveys, further steps were taken such as providing information for support services, providing sensitivity training to survey administrators when interviews were conducted, among others. A minority of surveys took additional steps to empirically assess potential distress experienced by respondents.

Conclusions Assessing risk and protective factors and developing effective interventions and policies are essential to reduce the burden of violence against children. While asking about experiences of CM requires careful consideration, procedures to maximise the safety and minimise potential distress to respondents have been successfully implemented globally, although practices differ across surveys. Further analysis is required to assist governments to implement the best possible safety protocols to protect respondents in future surveys.

INTRODUCTION

International calls for child maltreatment (CM) data are prompted by increasing awareness and acknowledgement of the interpersonal, human rights, public health and economic consequences of CM.1–3 Population-based surveys are a valuable methodological approach used to determine estimates of CM and its associated risks and allow for international comparisons. Both the United Nations Convention on the Rights of the Child and the Sustainable Development Goals (SDG), among other international policy statements, underline the importance of data to understand the scale of CM, to identify associated risk and protective factors and to specify priority areas for effective interventions and services.4–5

Asking youth and adults about sensitive topics, such as experiences of maltreatment in nationally representative surveys raises ethical considerations,6 which vary depending on the context. However, the following practices are consistently emphasised in the literature: informed consent, providing the option to withdraw from the survey, minimising possible harm or distress and securing respondent confidentiality and privacy.7–8 Ethics review boards and organisations implementing surveys sometimes hold perceptions that research that asks people about their experiences of CM has a greater potential for harm compared with other commonly studied areas.9 Concerns may be
Research suggests a favourable risk-benefit ratio of asking survey respondents about their experiences of violence, abuse, suicide or self-harm, and that youth are generally disposed to answer such questions. Participants in a community and undergraduate study about trauma history described the experience, on average, as neutral, compared with other day-to-day encounters and rated the importance of the research higher than any distress they experienced. Benefits of participating in surveys that ask sensitive questions, such as subsequent help-seeking behaviours, have also been reported. It is important to protect the safety and to minimise the distress of vulnerable research participants. Equally important is to recognise that distress may be short-lived and is not necessarily a reason to preclude youth and adults from answering CM questions. Not asking questions about difficult events does not mean they do not happen; rather, not knowing the extent of traumatic events serves to increase risks to vulnerable people.

This review builds on previous studies of international practices followed in collecting CM data from survey respondents, with a focus on the practices of national government organisations that compile statistics. Many governments have the infrastructure, resources, authority and public trust to collect population based high-quality survey data on social justice and public health issues, making them well positioned to inform best public health practice. However, governments must consider potential risks to the public, when asking about experiences of violence, as well as the risk of lacking appropriate data to inform policy and programming. In order to support governments to collect quality data on CM, the objectives of this review are to: (1) identify and describe nationally representative self-report surveys that include questions about CM conducted by governments in low- and middle-income countries (LMICs) and high-income countries (HICs) and (2) describe procedures implemented to address respondents’ safety and reduce potential distress.

METHODS

Search strategy

Results are presented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist (see online supplemental material 1).

We conducted a systematic search across eight databases from 1 January 2000 to 27 January 2020 to screen research articles that analysed potentially eligible surveys: Embase, Global Health, Medline (OVID), PsycINFO, Cumulative Index of Nursing and Allied Health Literature, EconLit, Education Resources Information Center and Social Sciences Citation Index. Before submission for publication, the search was updated to 5 July 2021. Given similarities in inclusion criteria, the search strategies from Hovdestad et al were employed for this review, with the exception that Social Science Citation Index (a more comprehensive database) was searched in place of Social Policy and Practice (due to lack of access) (see online supplemental material 1). Search terms can be found in online supplemental material 1.

Eligibility criteria

To be eligible for inclusion, surveys had to (see online supplemental material 1 for exclusion criteria):

1. include at least one measure of maltreatment experienced before age 18 years: physical (including corporal punishment), sexual or emotional maltreatment; neglect and exposure to family violence. For this review, ‘exposure to family violence’ was used instead of ‘exposure to intimate partner violence’ and was defined as exposure to violence between adults in the home (see online supplemental material 1);
2. use a nationally representative population. The Youth Risk Behaviour Surveillance System surveys, the US state-based surveys jointly conducted by the Centers for Disease Control and Prevention (CDC), were included because many states participated;
3. be conducted by a national government organisation that compiles statistics; this includes official government surveys or surveys conducted by a government agency on behalf of another group. Multinational surveys conducted by national governments (eg, CDC) or an international organisation (eg, WHO, United Nations Children’s Fund) in partnerships with national governments were also included;
4. have a cross-sectional, longitudinal or cohort study design;
5. include data collected after 1999;
6. be identified in an English language peer-reviewed publication or governmental report/website.

Screening

Figure 1 illustrates the process of selecting studies that were used to identify surveys. Studies were identified through database searches, expert consultation and reviewing relevant systematic reviews.

Two reviewers (MT paired with CMcK, HMacM, TOA or AS-T) independently screened titles and abstracts of all identified studies. A study proposed for inclusion by one or both screeners was included for full-text review. Because information about government involvement in surveys was often lacking from abstracts, many studies were screened in at this stage.

One reviewer (MT) screened full texts for inclusion based on the eligibility criteria. A second reviewer (AC) independently verified the eligibility of screened-in surveys. Disagreements were resolved through discussion. At this stage, additional information was often required to establish survey eligibility, including a complete list of CM measures (studies did not always identify all CM measures that fit inclusion criteria). This additional information was obtained from survey methods studies or
survey reports, survey websites or by examining full questionnaires (when available). Some study and/or survey experts were contacted by AC, especially if the study did not specify a survey name for follow-up. Five of the 15 authors/survey experts who were contacted responded to our requests for verification (in some cases, email addresses were no longer valid).

**Data extraction**

Variables for surveys focused on youth and adult populations were coded separately. Because age ranges varied, some ‘youth’ surveys included respondents up to age 25 years, and some ‘adult’ surveys included respondents as young as age 15 years. For all surveys, data items were extracted describing the survey (eg, administration methods, age range, response rates, CM questions).

Following the systematic review conducted by Laurin et al,

information about the use of protocols for increasing the comfort and safety of respondents was extracted (coded yes/no), including assent/consent, confidentiality, privacy, anonymity, voluntary participation and the option to withdraw from the survey or skip questions. The following additional procedures were assessed: (1) information for support services was provided to respondents; (2) follow-up was provided if respondents indicated distress; (3) sensitivity training was provided to interviewers; (4) interviewers had relevant knowledge or specific characteristics (eg, social workers; only women interviewed women).

We recorded whether a survey included questions about respondents’ reactions to being asked sensitive questions. For youth surveys, we recorded whether mandatory reporting of suspected CM applied to researchers in the jurisdiction where the survey was conducted.

Two reviewers (AC, MT) independently extracted data to populate the coding keys—one for youth and one for adult surveys. When completed, reviewers switched coding keys and checked the other’s work. Disagreements about data extraction were resolved by discussion.

**Patient and public involvement**

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**RESULTS**

**Study selection**

A total of 4901 records were retrieved; after de-duplication, 3343 were screened by title and abstract (figure 1). From this number, 1476 full-text studies were reviewed for eligibility. Forty-six studies, which comprised 139 surveys (98 youth and 41 adult), were confirmed as eligible.

In addition to screened-in studies, we identified secondary methods studies or government reports/websites to obtain detailed information about surveys, including survey questionnaires for 84 of the 98 youth surveys (86%) and 32 of the 41 adult surveys (78%) (see online supplemental material 2 for references). Where survey instruments were not available for review, information was extracted based on descriptions in available
resources. Four screened-in studies that analysed youth surveys did not specify the name of the survey; in these cases, we were restricted to the information in those studies.

**Youth surveys**

Online supplemental table 1 (see online supplemental material 2) summarises the 98 youth-focused surveys identified in 24 studies. Governments from 20 HICs and 67 LMICs asked those aged 12–25 years about CM in population-representative surveys. Ninety-six (98%) surveys were cross-sectional; two were longitudinal. Eighty-two (84%) surveys (77% in HIC, 86% in LMIC) were conducted in a school setting. Eighty-two (84%) surveys were health-focused, including mental health.

Survey sample sizes ranged from 697 (Qatar) to 102,301 (Brazil). The lowest individual response rate (60%) was reported in the Global School-based Student Health Survey (GSHS) in the Maldives. The highest individual response rate (99.9%) was reported in the National Survey on Social Relations in Peru.

Sixteen surveys used interviews (paper/pencil personal interview, n=4; computer-assisted personal interview, n=8; personal interview of undetermined type, n=5 and a telephone interview of undetermined type, n=1). Eighty-three surveys used self-administration methods (paper/pencil self-completed questionnaires, n=79; computer-assisted self-interview, n=1 and/or other self-administered survey of undetermined type, n=3).

Forty-five (46%) surveys asked about sexual abuse alone or in addition to other types of maltreatment; 24 (24%) about physical abuse; 37 (38%) about emotional maltreatment; 7 (7%) about exposure to family violence and 75 (77%) about neglect. Forty-one (42%) surveys asked about one type of CM; 31 (32%) about two types; 19 (19%) about three types and 7 (7%) about four types. No youth surveys asked about all five types of CM.

In cases where the questionnaire was available, we found that 14 surveys (17%) used 10 or more CM questions to assess one type of CM; this could include severity of maltreatment, age of onset and/or perpetration.

Ninety surveys (92%) had protocols to obtain some form of consent from youth, parents or schools; 91 (93%) specified confidentiality; 98 (95%) had protocols regarding respondents' privacy; 80 (98%) that used computer/self-administered questionnaire specified anonymity; 85 (87%) confirmed the voluntary nature of participation and 87 (89%) specified that respondents could withdraw from the survey or skip questions.

In the youth surveys (n=98), 16% had protocols for providing information about support services and 11% offered follow-up for respondents who indicated distress. Among the 16 surveys that conducted personal interviews (eg, paper/pencil, computer-assisted), 75% provided interviewers with sensitivity training (eg, to support participants' privacy and safety, and to approach participants with empathy and mindfulness of their level of comfort) and 13% ensured that interviewers had relevant knowledge or background (eg, social workers).

Five Violence Against Children Surveys (VACS) country reports included the number of participants who received referrals and/or counselling or requested counselling. In the VACS Cambodia (n=2376), the survey team made 26 referrals to support services, and all respondents who requested face-to-face support were reached within 48 hours. No respondents self-identified as being in immediate danger. In the VACS Tanzania (n=3739), 16 respondents requested services. In the VACS Haiti (n=2916), 156 respondents who met eligibility criteria for referrals for support (experienced violence in last 12 months; asked for services; became upset during the interview) received counselling through direct referrals; another 23 were referred but did not receive counselling because of the inability to follow-up (eg, incorrect phone number).

In the VACS Kenya (n=2683), 26 respondents received counselling. Four other children were referred but did not receive counselling because of difficulty contacting them. In the VACS El Salvador (n=2436), 85 accepted the referral plan. If participants self-identified as being in immediate danger (11 cases), the service provider attempted to reach them within 72 hours.

Six of the 98 youth surveys (6%) addressed mandatory reporting obligations. Three of these surveys (Zimbabwe, Nigeria, Peru) had procedures for reporting suspected CM, one of which (Zimbabwe) reported 62 referrals (6%) to the Department of Social Services; details about referrals were not available for the other two surveys. The remaining three surveys indicated that mandatory reporting was not applicable. A household survey in South Korea indicated that researchers had a waiver for this obligation; a self-administered survey in Qatar reported a lack of child protection legislation, and a survey in Malaysia stated that mandatory reporting is not possible for a self-administered survey.

Eleven (11%) surveys asked about respondents' reactions or potential distress in answering sensitive questions; among them, seven VACS also asked interviewers if respondents indicated distress during the administration of the survey.

**Adult surveys**

Online supplemental table 2(see online supplemental material 2) summarises the 41 adult-focused surveys identified through 19 studies and the three identified through citation chaining. Thirty-five (85%) of these surveys included participants aged 15, 16 and/or 17 years with no upper age limit or defined up to ages 49–85 years. National governmental agencies from eight HICs and 28 LMICs asked respondents aged 15 years or older about CM in representative population-based surveys. Thirty-nine (95%) surveys were cross-sectional; two were longitudinal. Thirty-five (85%) of these surveys were health-focused and six focused on experiences of victimisation (15%).
Sample sizes ranged from 1540 (Japan) to 248 934 (USA). The lowest individual response rate (43%) was reported in the Survey of Safety in Public and Private Spaces (Canada); the highest individual response rate (99% for both females and males), was in the Rwanda Demographic and Health Survey.

A total of 38 surveys used interviews (paper/pencil personal interview, n=1; computer-assisted personal interview, n=5; computer-assisted telephone interview, n=3; personal interview of undetermined type, n=28 and telephone interview of undetermined type, n=2). Five surveys were self-administered (computer-assisted self-interview, n=1 and/or other self-administered survey of undetermined type, n=4).

Thirty-eight surveys (93%) asked about sexual abuse alone or in addition to other types; 36 (88%) asked about physical abuse; 5 (12%) about emotional maltreatment; 33 (80%) about exposure to family violence and 3 (7%) about neglect.

Two surveys (5%) asked about one type of CM; 5 (12%) about two types; 27 (66%) about three types; 3 (7%) about four types and 2 (5%) about five types. In two surveys, type was unspecified. Where the questionnaire was available, four surveys (10%) used >10 items to assess a single type of CM.

In the adult surveys (n=41), 31 (76%) surveys had protocols to obtain consent, and 35 (85%) had protocols for confidentiality. Thirty-one (76%) specified privacy for respondents; 3 (7%) specified anonymity; 35 (85%) specified the voluntary nature of the survey and 30 (73%) specified that respondents could withdraw from the survey or skip questions.

Ten surveys (24%) had protocols to provide information about support services, and one (2%) offered follow-up for respondents who indicated distress during the survey. Of the 38 surveys that conducted personal interviews, 23 (61%) gave interviewers sensitivity training, and 6 (15%) ensured that individuals with relevant knowledge or background conducted interviews.

No adult surveys assessed respondents’ potential distress to sensitive questions.

**DISCUSSION**

In our review, we identified 139 nationally representative surveys conducted by governments in 105 countries in the past 20 years that included questions about CM. We found that governments in LMICs and HICs collected data on various types of CM and that many governments have established procedures to responsibly and ethically collect CM data, although these procedures may vary and may be inconsistently reported.

**Notable survey characteristics**

Our review found that CM questions were asked on surveys with different themes (eg, health or victimisation), designs (eg, cross-sectional or longitudinal) and settings (eg, school-based or household). Youth surveys outnumbered adult surveys conducted since 2000, and a high percentage of adult-focused surveys included respondents as young as age 15 years. Surveys that focused on the theme of victimisation or safety tended to ask about more types of CM and have more follow-up questions. For example, the VACS assessed various aspects of violence, victimisation and perpetration, as well as other contextual factors. However, while victimisation surveys tended to include more questions overall, our review found that the majority of youth (84%) and adult surveys (85%) were health-focused. Health surveys with even a modest number of CM questions can provide important data on prevalence and identify associated health-related risk and protective factors.

Declining response rates are a concern of governments and survey administrators. Our review found that response rates of youth surveys were high (60%–99.9%); adult survey response rates were more varied (43%–99%) across countries. As noted, 84% of the youth surveys were conducted in school settings which may positively impact response rates. Our findings suggest that including CM questions, particularly in youth surveys, is not a deterrent to children and youth’s participation in a national survey, although response rates as high as nearly 100% should be considered with caution as they may indicate the possibility of coercion, or undue influence.

**CM types**

There were notable differences related to the number and the types of CM assessed. Seventy-eight per cent of adult surveys asked about three to five types of maltreatment, while about a quarter of youth surveys (26%) asked about three to four types; no youth surveys asked about all five types. Many youth surveys (42%) assessed only one type of CM. Because CM types commonly co-occurred, assessment of all five types of CM is needed in national surveys in order to understand the prevalence and impact of CM globally. Assessment of only one or two types results in under-reporting of CM in those countries.

Sexual abuse was assessed most frequently in adult surveys and second most frequently in youth surveys. This finding is consistent with other international studies and may be due to our use of a broader definition of sexual abuse (eg, the perpetrator was not limited to a family member/caregiver). In youth surveys, neglect was the most commonly assessed CM type. How we define types of CM requires consideration. For example, in this review, youth survey questions about access to adequate food at home was considered physical neglect; however, the same question was used in some studies’ analyses as a proxy for socioeconomic status. Defining CM in culturally appropriate ways can present challenges to creating standardised definitions, so continued open dialogue and information sharing are essential.

**Procedures to address respondent safety and comfort**

Implementation of sound survey procedures provides confidence for respondents and survey administrators.
that CM questions can be asked in a safe and ethical manner,3 support the research process and contribute to data quality. Certain routine practices include obtaining consent and/or assent, informing respondents that their participation is voluntary and taking steps to maximise the confidentiality of the information provided. In Canada, questions identified as sensitive for minors on a Statistics Canada survey cannot be disclosed to parents through Access to Information requests.74 75 In practice, this means that responses provided by minors are kept confidential.

Further steps to support respondents’ comfort to answer questions include guaranteeing anonymity. Ninety per cent of all youth surveys in our review were anonymised. Allowing respondents to skip questions and providing a private (safe) environment to answer questions are also important practices. In our review, taking steps to confirm that respondents are alone, or relocating away from others, were also notable procedures.

Additional procedures that were less consistently reported included the provision of information for support services and follow-up for respondents who experienced distress or indicate safety issues. In our review, 16% of youth surveys and 24% of adult surveys provided information about support services. In some instances where interviews were conducted with youth, referrals and follow-up procedures were provided in the context of an anonymous survey. In these cases, respondents were asked if they consented to provide personal information in order to refer them to local social services. The five youth surveys (Cambodia, Tanzania, Haiti, Kenya and El Salvador) that reported respondents who received or requested referrals and/or counselling found that these instances were infrequent, compared with the total number of respondents. However, 23 youth in Haiti and 4 youth in Kenya did not receive requested support because of inability to follow-up. Protocols are necessary to prevent this outcome and to help respondents obtain the help they need.

Training interviewers to engage respondents in a skilled and sensitive manner, and to recognise signs of distress, are established practices3 10 that are not specific to CM surveys.15 Customising interviewer characteristics to a local setting is also important to support respondents’ comfort.3 In our review, few surveys (13% each for youth and adult) employed individuals with relevant knowledge or specific characteristics to conduct interviews. For example, respondents may feel more comfortable speaking with same-sex interviewers about sexual assault. Sensitivity training may also support interviewers and survey administrators from experiencing their own negative outcomes, including distress, as they are better prepared to support respondents in meaningful ways.

A minority of youth surveys (and no adult surveys) in our review asked respondents about their reaction to being asked violence-related questions, although not specific to CM. Although analysing the findings of these questions is beyond a scope of this review, the collection of such information could facilitate evidence-based decision-making about the potential risks and harms of CM research. Research indicates that distress associated with answering sensitive questions tends to be low and that even if distress is experienced, respondents prioritise their participation above their discomfort.3 12 13 Including similar questions on surveys could be a strategy to empirically assess and evaluate the potential impact on respondents where governments perceive CM questions as problematic or controversial content.

Future research

A number of areas warrant further study. One is the potential re-victimisation of youth by caregivers because they disclosed ongoing maltreatment.11 12 Specific protocols to protect youth who participate in household surveys with CM content should be explored. Asking youth about their perspectives with regard to answering questions about CM could enhance our understanding of how to support their safety in different settings (household vs school-based). Moving surveys online, and requiring the use of respondents’ personal devices, such as their computers and/or smartphones could also affect the nature of safety measures required. Personal devices, as a mode of administration, may support respondents to answer sensitive questions, although disparities in access exist.76

As suggested by Finkelhor et al11 survey researchers should evaluate participants’ feedback about who uses support services offered to them in the course of participating in a national survey with CM questions in order to enhance knowledge about the utilisation and effects of study-based referrals. Assessing follow-up procedures by interviewers or survey administrators with respondents who indicated distress, or current maltreatment, warrant further evaluation.

Finally, a future review could compare national surveys conducted by governmental versus non-governmental organisations (eg, universities, community or private agencies) to empirically evaluate whether survey characteristics and safety procedures are employed differently.

Limitations

This study has a number of limitations. We did not conduct a critical appraisal of surveys, including whether standardised CM questions were used, or the content and quality of the sensitivity training given to interviewers. Information sources and details of data collection processes varied. For some surveys, we obtained the full questionnaire or detailed reports that included survey procedures, but we could not obtain the instruments for 14% and 22% of youth and adult surveys, respectively. Therefore, some surveys likely incorporated more procedures than presented. We reviewed only one data cycle per survey (the cycle year identified in a screened-in study). This may have yielded limited information for multiyear surveys. For example, our search identified the 2014 General Social Survey—Victimisation cycle, but the 2019 cycle has additional CM questions (eg, physical
neglect). Surveys that were part of large international data collection initiatives may have biased our summary statistics. For example, the 75 versions of the GSHS developed by WHO comprised 77% of the youth surveys identified by this review, and the 26 versions of the Demographic and Health Survey funded by the United States Agency for International Development and other international donors comprised 65% of adult surveys. Response rates calculation formulas may vary across surveys which limits comparability.

We did not include forms of childhood victimisation such as bullying, dating violence, peer violence or violence experienced in the community. Future reviews on these topics are warranted. We defined CM as abuse or neglect perpetrated by adult(s) in the home, except for sexual abuse. This excluded exposure to other forms of family violence, such as those between adults and siblings or between other children in the home. Studies published in non-English peer-reviewed publications were excluded, limiting the international scope of this review, which may have resulted in an underestimate of the number of surveys conducted by governments that included CM questions.

CONCLUSION

National estimates of CM allow countries to understand factors that affect children’s safety, health and development to create evidence-based interventions and policies, and to facilitate children’s and families’ access to protection and other services. When governments conduct surveys on CM, they help to validate the need to measure and address this public health, social and safety issue. Our review found that governments from at least 105 countries have investigated the prevalence of CM in population-representative surveys in the last two decades. The description we have provided indicates that practices differ across surveys. Further analysis is required to assist governments to implement the best possible safety protocols to protect respondents in future surveys. Given that the SDGs aim to end all forms of violence against children by 2030, more surveys are expected in the next years to establish baseline prevalence data on all types of CM.

Author affiliations

1Health Promotion and Chronic Disease Prevention, Public Health Agency of Canada, Ottawa, Ontario, Canada
2Department of Psychiatry and Behavioural Neurosciences, Offord Centre for Child Studies, McMaster University, Hamilton, Ontario, Canada
3Departments of Psychiatry and Behavioural Neurosciences, and Pediatrics, Offord Centre for Child Studies, McMaster University, Hamilton, Ontario, Canada
4Departments of Community Health Sciences, and Psychiatry, University of Manitoba, Winnipeg, Manitoba, Canada
5Faculty of Social Work, University of Manitoba, Winnipeg, Manitoba, Canada

Acknowledgements We thank Mary Sue Devereaux for editing early drafts of the manuscript.

Contributors WH, LT, HM, AG, JRMCt and AC contributed to conceptualisation and study design. JRMCt conducted database searches. MT paired with CMCK, HMacM, TOA or AS-T to independently screen titles and abstracts for eligibility.

MT screened full texts for inclusion and AC independently verified the eligibility of screened-in surveys. AC conducted citation chaining including contacting some study and/or survey experts to determine the eligibility of surveys. Data extraction was conducted by AC and MT independently and both verified the original data. Writing the first draft of manuscript, including table and figure, was led by AC and MT. All authors contributed to the review and editing of the manuscript. AC and MT are responsible for the overall content as guarantors by accepting full responsibility for the finished work.

Funding Public Health Agency of Canada provided funding to Dr Harriet MacMillan at McMaster University to coordinate the database search and screening of studies.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article or uploaded as supplementary information.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/

ORCID iDs

Aimée Campeau http://orcid.org/0000-0003-3457-1613
Jill R McTavish http://orcid.org/0000-0002-3009-9622
Andrea Gonzalez http://orcid.org/0000-0003-0087-830X
Lil Tonmyr http://orcid.org/0000-0002-8722-7616

REFERENCES


Pratta DG, Antunes JT, Furtado JR. Factors associated with family violence against adolescents based on the results of the National school health survey (PeNSE). *Ciencia Saude Coletiva* 2019;24:1287–98.


68 Gonçalves DC, Byrne GJ. Sooner or later; age at onset of generalized anxiety disorder in older adults. *Depress Anxiety* 2012;29:39–46.


