The Prevalence and Impact of the Maltreatment of Child Laborers in Developing Countries: A Scoping Review Protocol

Md Abdul Ahad, Flinders University, Australia
Yvonne Parry, Flinders University, Australia
Eileen Willis, Flinders University, Australia

The Asian Conference on Education 2021
Official Conference Proceedings

Abstract
Background: Children working in the rural agricultural and domestic occupations are more prone to maltreatment than children in other settings. However, very little is known about the maltreatment of child laborers. Objectives: This protocol outlines the key components of a scoping review that explores the nature and consequences of maltreatment of child laborers in domestic and agricultural work in the South Asian rural context. Inclusion criteria: Studies that report on the prevalence, risk factors, or impact of maltreatment of child laborers aged 5 to 17 years engaged in the agricultural or domestic work, their employers or the parents of child laborers. Studies will be limited to India, Pakistan, Bangladesh, and Nepal and include both qualitative and quantitate studies. Grey literature will also be included. Methods: This review will seek pertinent studies from databases such as Scopus, PubMed, Medline, PsycINFO and ProQuest. The search strategy will include appropriate terms (and synonyms). A two-part selection process e.g., the titles and abstracts and full texts will be used for the assessment of retrieved records based on the inclusion criteria. Data from the retrieved records will be extracted using the standardised data extraction tool. The outcomes from the extraction process will be pooled in a narrative or statistical analysis depending on the quality of articles retrieved. Conclusion: The findings of this review will guide researchers on policy measures to address the issue of maltreatment of child laborers in the four countries identified.

Keywords: Child Laborer, Maltreatment, Agriculture, Domestic, South Asia and Scoping Review

iafor

The International Academic Forum
www.iafor.org

1.   Introduction

1.1   Backdrop of the Study

Child maltreatment is a global social and public health concern. The World Health Organization's (WHO) definition of child maltreatment includes all forms of 'physical or psychological harm, sexual abuse, neglect or other types of exploitation that results in potential harm to children's health, their survival or dignity in the context of a relationship of responsibility, trust or power' (WHO, 2006, p. 7). A WHO report confirms that nearly one in every four adults have experienced physical maltreatment as a child, while 5% to 10% of men and 20% of women report being sexually abused as a child (WHO, 2014). The experience of being maltreated affects children's physical, psychological, social, educational, and interpersonal functioning (Daigneault, Hebert, & McDuff, 2009; MacMillan, Fleming, Streiner, Lin, & Boyle, 2001; Al Odhayani, Watson, & Watson, 2013; WHO, 2006; Norman et al., 2012; Koizumi & Takagishi, 2014).

The WHO (2014) report states that child maltreatment can occur in any social settings either in a child's home, school or community, or in their workplace. The United Nations study on violence against children noted that 'of all the settings where children are exposed to violence, the workplace is the most challenging and difficult to address' (UNICEF, 2014, p. 13). These children are more vulnerable to maltreatment than other workers, because they are easy to manipulate, intimidate or exploit due in part to their physical immaturity and inexperience.

Child labor is hard to define, however, The United Nations Children's Fund (UNICEF) stated that a child laborer is a person who is aged between 5 to11 years and works at least 1 hour in any occupation or 28 hours in domestic work per week, or aged between 12 to14 years, who works at least 14 hours in any occupation or 28 hours in domestic work per week or aged between 15 to 17 years and works at least 43 hours domestic/other work per week (Gibbons, Hebert, & McDuff, 2003). Studies report that children engaged in labor are more susceptible to physical maltreatment (Kandel, Kunwar, & Karki, 2017; Terre des Hommes, 2017) and verbal or sexual abuse either at their home or at the workplace (Terre des Hommes, 2017). Research in this area has been neglected, although, there are around 152 million child labourers globally. Of these, around 70.9% of child laborers are engaged in agricultural activities (ILO, 2017). Rural child laborers are mostly forced to work in the agriculture sector or as in domestic laborers. They are often subject to hazardous conditions and unsafe workplace practices (Siddiqi & Patrinos, 1995; Marlenga, Berg, Linneman, Brinson, & Pickett, 2007). The Asia Pacific region accounts for a large share of the 77.7 million working children (5-17 years) (ILO, 2013). Of these, 16.7 million are in South Asian countries; India (5.8 million), Bangladesh (5 million), Pakistan (3.4 million) and Nepal (2 million) (Khan & Lyon, 2015).

It is assumed that poverty and poor socio-economic conditions expose these children to maltreatment (Celik & Baybuga, 2009; Hadi, 2000; Basu and Pham, 1998). There is ample evidence that shows risk of negative consequences of child abuse including psychiatric disorders, and social disfunction (Currie and Cathy, 2010), but little is known about the long-term consequences of the maltreatment of child laborers. This research field is underdeveloped, with little integrated, or organized or systematized knowledge that can guide development programs and policies regarding this field (National Research Council, 1993; Institute of Medicine, 2014; Jud, Fegert, & Finkelhor, 2016). The key benchmarks for measuring the maltreatment of child laborers are still unclear because of the complexity of the subject.

1.2   Why Scoping Review

This scoping review uses the standard approaches to map the underpinning issues of maltreatment of child laborers. Triccco et al. (2016) stated that a scoping review is helpful for investigate emerging evidence in topics that are still unclear. They also suggest that a scoping review provides the foundation for future systematic reviews. A priori protocol must be developed before undertaking a systematic review (Aromataris and Riitano, 2014). The development of a protocol for a scoping review is important in order to increase transparency, validity or reliability of the research. An initial search of PROSPERO, MEDLINE, the Cochrane Database of Systematic Reviews and the Joanna Briggs Institute *(JBI) Database of Systematic Reviews and Implementation Reports* was conducted and no scoping or systematic reviews were currently underway on the subject matter were identified. Therefore, we aimed to conduct this review of literature to determine the extent and nature of existing literature, to summarize the available evidence and to identify any gaps concerning the present characteristics of maltreatment against child labourers engaged in rural agriculture and domestic domain.

2.   Methods

The proposed scoping review will be conducted in accordance with the Joanna Briggs Institute methodology for scoping reviews for effective evidence. The review will follow the Arksey and O'Malley (2005) suggested methodological framework that has been further refined by the JBI. The methodological framework has five sequential steps: 1) Identifying the review question, 2) Searching for relevant studies, 3) Selecting pertinent literature, 4) Extracting or charting the data, and 5) Collating, summarizing and reporting results.

Step1: Identifying Review Questions

The overall question of this review is: To what extent and why do agricultural and domestic child laborers working in rural areas experience maltreatment resulting in adverse health impacts?

To map the evidence, the following sub-questions will be explored:
1.   What does the existing evidence tell us about the nature and prevalence of maltreatment of agricultural and domestic child laborers in the four countries identified?
2.   What are the crucial indicators responsible for the maltreatment of child laborers that have been evaluated across agriculture and domestic settings?
3.   What are the documented adverse health and social outcomes that occur as a consequence of the maltreatment of child laborers?

Step2: Searching For Relevant Studies

Inclusion and Exclusion Criteria

The 'inclusion criteria' are eligibility indicators that guide the reviewer. Based on these standards the pertinent sources or evidence will be selected for this scoping review. The present study's inclusion criteria incorporate the PCC (P: Population, C: Concept and C: Context) structure, which is recommended by the JBI for scoping reviews [Joanna Briggs Institute, 2019].

Population

The review will consider studies that include children aged 5 to 17 years, parents or employers who are involved in agricultural, or domestic labor during the reference period, the years 1992 to 2020. These dates have been selected because, the International Program on the Elimination of Child Labour (IPEC) began its operation in 1992 with a mandate to end child labor. This program resulted in an increase in in-depth statistical and qualitative research (IPEC, 2010). The agriculture sector will comprise crop production, livestock farming, fish harvesting and processing and forestry-related occupations. The domestic labor sector will involve household chores. The review will exclude papers that include child laborers aged below 5 years and above 17 years.

Concept

This review will consider studies that include any form of maltreatment of child laborers either at the workplace or at home that may impact on their physical or psycho-social health. The perpetrators would be their employers, co-workers or family members.

Context

This review will consider studies that are conducted in the context of four South-East Asian countries (Bangladesh, India, Pakistan, and Nepal). These nations have similar profiles (medium human development) on the human development indexes (United Nations Development Programme, 2019).

Type of Outcomes

This review will seek the following outcomes:
•   Prevalence outcomes of child labor' maltreatment such as types, frequency distribution of these categories, and association between various forms of maltreatment.
•   Cause-oriented outcomes, which may include both pull and push factors of maltreatment of child laborers (e.g., poverty, school dropout, cultural acceptance etc).
•   Effect-oriented adverse outcomes of maltreatment of child laborers, for instance; burn, bruises or fracture related physical injuries, psychological or trauma related disorders, mortality, social isolation, suicide.
•   Correlational outcomes including inter-cause association, cause-effect relationships.

Type of Studies

This scoping review will consider both experimental and quasi-experimental research designs including randomized controlled trials, non-randomized controlled trials, before and after studies and interrupted time-series studies. Analytical observational studies including prospective and retrospective cohort studies, case-control studies and analytical cross-sectional studies will be considered for inclusion. This review will also consider descriptive observational study designs such as case series, individual case reports and descriptive cross-sectional studies. The systematic reviews which meet eligibility criteria, will also be considered in this scoping review.

Qualitative data will also be considered, such as ethnographic, narrative, phenomenology, grounded theory, case study or action research studies. The review will also consider grey

literature including conference proceedings, technical reports, government documents, newsletters, thesis or dissertations, research reports, media articles and working papers.

Search Strategy

The search strategy will aim to locate both published and unpublished studies. An initial limited search of PubMed and PsycINFO was undertaken to identify articles on the topic. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles will be used to develop a full search strategy for reporting the name of the relevant database (see Appendix 1). The search strategy, including all identified keywords and index terms, will be adapted for each included information source. The reference list of all studies selected for critical appraisal will be screened for additional studies.

Information Sources

List of sources for all published peer-reviewed articles, books, dissertations and theses: Scopus, PubMed, Medline (via Ovid), PsycINFO (via Ovid), and ProQuest.

Sources of unpublished studies and grey literature will be the Web of science, Cochrane Library, Google Scholar, Websites of International Labor Organization (www.ilo.org), UNICEF (www.unicef.org), World Bank (www.worldbank.org), World Vision (www.worldvision.org), Save the Children (https://www.savethechildren.org.au/), Bachpan Bachao Andolan (https://www.bba.org.in/), Bangladesh Shishu Adhikar Forum (www.bsafchild.net), Ain o Salish Kendra (www.askbd.org), and Bangladesh Bureau of Statistics (www.bbs.gov.bd). Additionally, the research team will search websites of child welfare related organizations in India, Pakistan and Nepal. An advanced hand search on Google will also be performed to reach newspaper websites. The Google search will be limited to the first five screen shots or pages.

Step3: Selecting Pertinent Literature

Following the search, all identified citations will be collated and uploaded into EndNote and duplicates removed. Titles and abstracts will then be screened by two independent reviewers for assessment of retrieved records against the inclusion criteria for the review. The rationale of exclusion of titles and abstracts through screening will be recorded in the review.

The full text of selected citations will be assessed in detail against the inclusion criteria by two independent reviewers. Reasons for exclusion of full text studies that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any discrepancies that arise between the reviewers at each stage of the study selection process will be resolved and a decision reached through discussion, or with a third-party reviewer. The results of the search will be reported in full in the final review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram (Aromataris & Riitano, 2014).
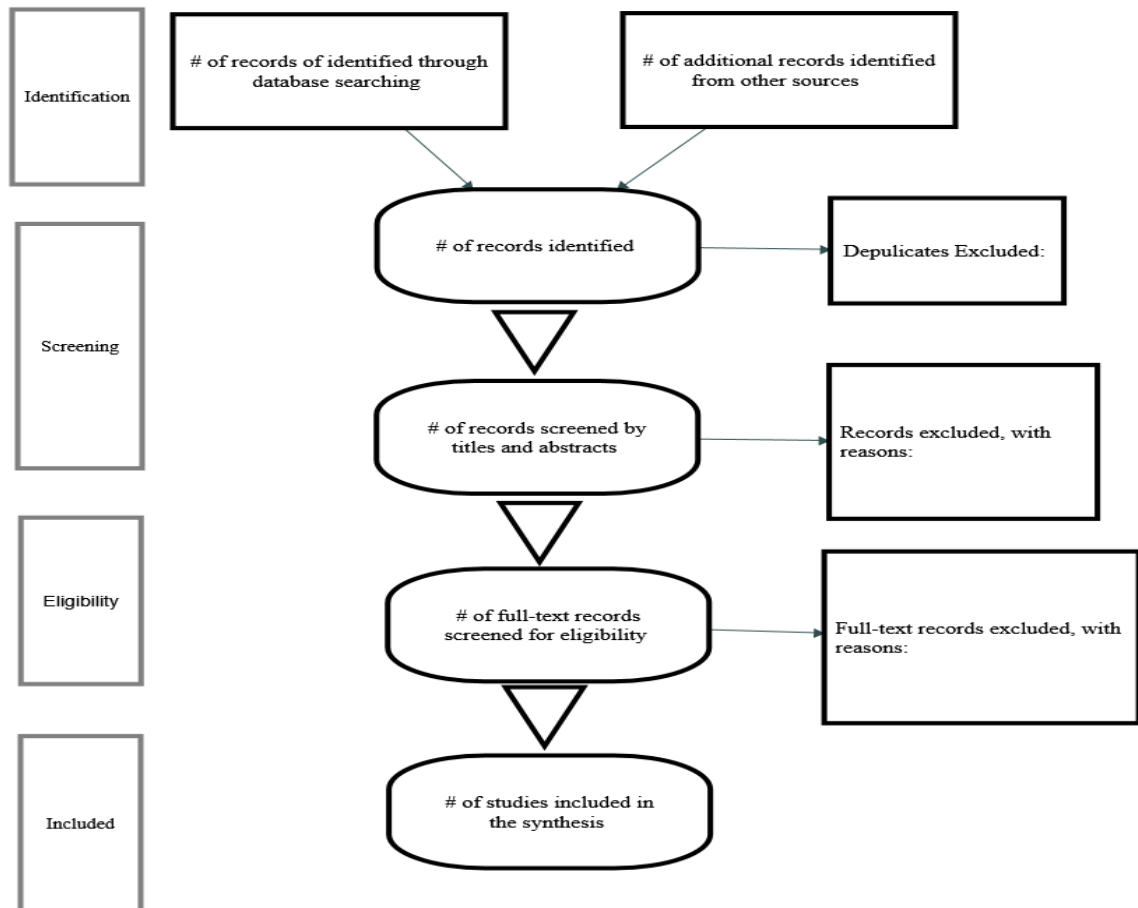
Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) Flow Diagram

Step4: Extracting or Charting the Data

Data will be extracted from studies included in the review by two independent reviewers using the standardized data extraction tools developed by the research team (reviewers).

The data extracted will include specific details concerning the study type, population, concept, context, methodology, and outcomes of study pertinent to the review objective. Any disagreements that arise between the reviewers will be resolved through discussion, or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required. A draft data extraction table with domains is provided (see Appendix II). The modification or refinement of the draft charting or extraction table will be completed by two reviewers based on the discussion and feedback for consistently. The refinement or the revision process of the extraction table will be detailed in the scoping review report.

Step5: Data Collating, Summarizing, and Reporting Results

If extracted data are found in quantitative studies, they will be combined in a meta-analysis using JBI SUMARI. Effect sizes will be expressed as odds ratios and the 95% confidence intervals will be calculated for analysis. Heterogeneity will be assessed statistically using the standard chi squared and I squared tests. Statistical analyses will be performed using multiple

regression. Where statistical pooling is not possible the findings will be presented in narrative form including tables and figures to aid in data presentation where appropriate. A funnel plot will be generated to detect publication bias if there are 10 or more studies included in a meta-analysis. Statistical tests for funnel plot asymmetry (Egger test, Begg test, Harbord test) will be performed where appropriate. SPSS (version 26) will be used for statistical analysis.

Where extracted data retrieved is qualitative in nature, studies will, where possible be pooled into a narrative account and advanced qualitative analysis provided. The quality indicators identified and extracted data will be analysed and synthesized using the reflexive thematic analysis of child labor maltreatment. The Braun & Clarke, (2006) suggested six thematic steps will be adopted in synthesising data including familiarization with the data, generating initial themes, searching for themes, reviewing themes, defining and naming themes and producing the report. The identified themes or patterns will be presented through a concept map. NVivo (version 12) software will be used to generate quality patterns or themes.

Of note, following the methodological framework of this scoping review protocol, a review paper has been published recently in the Journal of Child Abuse and Neglect (Ahad, Parry, & Willis, 2021). This paper investigated the prevalence, risk factors and impact of the maltreatment of child laborers. The prevalence measure resulted that psychological maltreatment is highly prevalent followed by sexual abuse, physical maltreatment, and neglect. The thematic synthesis of the extracted data from these limited retrieved studies further depicted that social and demographic characteristics, economic challenges, socio-cultural and power structure, dysfunctional immediate environment are the principal indicators of child labor maltreatment both at home and workplace environment. This proportional analysis of the DSM (Diagnostic and Statistical Manual of Mental Disorders) symptoms criteria revealed that the maltreated child laborers have been suffering mostly from specific phobias, social phobias, conduct disorders, and obsessions (Ahad, Parry, & Willis, 2021). It is understood that the identified gaps suggest further research on the intentional violence of child laborers.

3.   Conclusion

This protocol is a guideline to accomplish a systematic scoping review of literature on the maltreatment of child laborers. The findings of this scoping review will assist in understanding the problem and identifying the research gaps and guide prospective research in focusing on prospective policies.

References

Ahad, M. A., Parry, Y. K., & Willis, E. (2021). The prevalence and impact of maltreatment of child laborers in the context of four South Asian countries: A scoping review. *Child Abuse & Neglect, 117*, 105052. doi:https://doi.org/10.1016/j.chiabu.2021.105052

Al Odhayani, A., Watson, W. J., and Watson, L. (2013). Behavioural consequences of child abuse. *Canadian family physician, 59* (8): 831–836.

Arksey, H. and O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19–32. Doi: 10.1080/1364557032000119616

Aromataris, E. and Riitano, D. (2014). Constructing a search strategy and searching for evidence. A guide to the literature search for a systematic review. *American Journal of Nursing, 114*, 49-56.

Basu, K. and Pham, V. H. (1998) The Economics of Child Labor. *American Economic Review, 88*(3). Available at SSRN: https://ssrn.com/abstract=1318683

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–101. Doi:10.1191/1478088706qp063oa

Celik, S. S. and Baybuga, M. S. (2009). Verbal, physical and sexual maltreatment among children working on the street. *Australian Journal of Advanced Nursing, 26*(4), 14-22.

Currie, J. and Widom, C. S. (2010). Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being. *Child Maltreatment, 15* (2), 111–120. Doi: https://doi.org/10.1177/1077559509355316

Daigneault, I., Hebert, M. and McDuff, P. (2009). Men's and women's childhood sexual abuse and victimization in adult partner relationships: a study of risk factors. *Child Abuse & Neglect, 33*, 638–647. Doi: 10.1016/j.chiabu.2009.04.003

Gibbons, D. E., Huebler, F. and Loaiza, E. (2003). *Child Labor, Education and the Principle of Non-Discrimination*. United Nations Children's Fund (UNICEF). New York. Retrieved from https://www.unicef.org/protection/Gibbons_Huebler_Loaiza_2005_Childlabor.pdf

Hadi, A. (2000). Child maltreatment among working children in rural Bangladesh: prevalence and determinants. *Public Health, 114*(5), 380-4. Doi: 10.1038/sj.ph.1900664 11035460

Institute of Medicine. (2014). *New directions in child abuse and neglect research*. National Academies Press, Washington, DC.

International Labour Organization. (2013). *Marking progress against child labour: Global estimates and trends 2000-2012*. International Labour Office, International Programme on the Elimination of Child Labour (IPEC) – Geneva. Retrieved from https://www.ilo.org/wcmsp5/groups/public/ed_norm/ipec/documents/publication/wcms_221513.pdf

International Labor Organization. (2017). *Global estimates of child labor: Results and trends, 2012-2016*. International Labor Office, Geneva. Retrieved from https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575499.pdf

International Program on the Elimination of Child Labour (IPEC). (2010). Global child labour developments: Measuring trends from 2004 to 2008. International Labor Organization, Geneva, Switzerland. Retrieved from file:///C:/Users/ahad0005/AppData/Local/Downloads/Global%20child%20labour%20developments_PDF_WEB.pdf

Jud, A., Fegert, J. M. and Finkelhor, D. (2016). On the incidence and prevalence of child maltreatment: a research agenda. *Child and Adolescent Psychiatry and Mental Health,* 10 (17).

Joanna Briggs Institute (JBI). (2019). Development of a scoping review protocol. Retrieved from https://wiki.joannabriggs.org/display/MANUAL/11.2+Development+of+a+scoping+review+protocol

Kandel, P., Kunwar, R. and Karki, S. (2017). Child maltreatment in Nepal: Prevalence and associated factors. *Public Health,* 151, 106-113. Doi: 10.1016/j.puhe.2017.06.020

Khan, S. and Lyon, S. (2015). *Measuring Children's Work in South Asia: Perspectives from national household surveys*. International Labor Organization and Understanding Children's Work. New Delhi, India. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_359371.pdf

Koizumi, M. and Takagishi, H. (2014). The Relationship between Child Maltreatment and Emotion Recognition. *PLoS ONE,* 9(1), e86093. Doi: https://doi.org/10.1371/journal.pone.0086093

MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E. and Boyle, M. H. (2001). Childhood abuse and lifetime psychopathology in a community sample. *American Journal of Psychiatry,* 158, 1878–1883. DOI: 10.1176/appi.ajp.158.11.1878

Marlenga, B., Berg, R. L., Linneman, J. G., Brinson, R. J. and Pickett, W. (2007). Changing the Child Labor Laws for Agriculture: Impact on Injury. *American Journal of Public Health,* 97 (2), 276-282. Doi: 10.2105/AJPH.2005.078923

National Research Council. (1993). *Understanding Child Maltreatment and Neglect.* National Academy Press, Washington DC. Pp. 343-361. Doi: https://doi.org/10.17226/2117

Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J. and Vos, T. (2012). The Long-Term Health Consequences of Child Physical Abuse, Emotional Abuse, and Neglect: A Systematic Review and Meta-Analysis. *PLoS Medicine,* 9 (11), e1001349. Doi: https://doi.org/10.1371/journal.pmed.1001349

Siddiqi, F. and Patrinos, H. A. (1995). *Child Labor: Issues, Causes and Interventions*. Human Capital Development and Operation Policy working paper. World Bank. Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/2782001099079877269 547664-1099079934475/547667-1135281552767/Child_Labor_issues.pdf

Terre des Hommes. (2017). *Child laborers flag abuse and sexual violence as biggest fear in work*. Retrieved from https://www.terredeshommes.org/child-labourers-flag-abuse-and-sexual-violence-as-biggest-fears-in-ground-breaking-tdh-survey/

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K., Colquhoun, H., Kastner, M., . . . Straus, S. E. (2016). A scoping review on the conduct and reporting of scoping reviews. *BMC Medical Research Methodology, 16*(1), 15. doi:10.1186/s12874-016-0116-4

United Nations Development Programme (UNDP). (2019). *Human Development Index Trends, 1990-2017*. Human Development Report Office, New York. Retrieved from http://hdr.undp.org/en/composite/trends.

United Nations Children's Fund (UNICEF). (2014). Child Labour and UNICEF in Action: Children at the Centre. United Nation, New York. p, 13. Retrieved from https://www.unicef.org/protection/files/Child_Labour_and_UNICEF_in_Action.pdf

World Health Organization (WHO). (2006). Preventing child maltreatment: a guide to taking action and generating evidence / World Health Organization and International Society for Prevention of Child Abuse and Neglect. World Health Organization. P, 7. Retrieved from https://apps.who.int/iris/handle/10665/43499

World Health Organization (WHO). (2014). Global Status Report on Violence Prevention 2014. Geneva: World Health Report. Retrieved from file:///C:/Users/ahad0005/AppData/Local/Downloads/9789241564793_eng.pdf

Contact email: ahad0005@flinders.edu.au

Appendices

Appendix I: Search strategy

The combined key words are (('child labour' OR 'working children' OR 'children in hazardous job' or 'agricultural child labourer' OR 'domestic child labourer') AND ('child' OR 'under-age' OR 'adolescent') AND ('work' OR 'labour' OR 'labor') AND ('adverse childhood experiences' OR 'child abuse' OR 'physical abuse' OR 'psychological abuse' OR 'sexual abuse' OR 'workplace violence') AND ('abuse' OR 'violence' OR 'maltreat' OR 'ill-treat' OR 'ill-used') AND ('Bangladesh' OR India OR Pakistan OR Nepal)).

Name of the databases: Scopus, PubMed, Medline, PsycINFO, ProQuest, Web of science, Cochrane Library, and Google Scholar.

Appendix II: Data extraction instrument

Structure / Key domain	Extracted information which should be listed in the data collection sheet
General information	• Author, Title, Year of publication, Journal (if required), Country, Language
Study features	• Aim/purpose • Theoretical / conceptual framework
Context of research	• Research study area/geographical setting of the data taken • Subject/discipline-oriented context
Study design	• Randomized Controlled Trials • Non-randomized controlled trials, cohort, observational, cross-sectional, longitudinal studies • Single or multi-centre study • Qualitative studies • Grey literature
Setting and Population	• Socio-demographic characteristics (sex, age, ethnic background, occupation etc) • Sample size in numbers
Qualitative or quantitative analytical technique	• Grounded theory, phenomenology, content analysis, thematic analysis • Linear regression model, logistic regression model
Type of maltreatment	• Physical, Psychological, Sexual, Neglect or others
Quality appraisal (If required)	o <u>Randomized controlled trial</u> • Appropriateness of randomization • Comparability of groups at baseline • Completeness of the outcome data • Blinding of the outcome assessors • Adherence of the participants to the assigned intervention o <u>Non-randomized controlled trials, cohort studies, observational</u>

	• Representativeness of the participants of the target population
	• Appropriateness of the measurements regarding both the outcome and intervention (or exposure)
	• Completeness of the outcome data
	• Consideration of the confounders in the design and analysis
	• Administration of the intervention (or exposure occurred) as intended during the study period
	o <u>Cross-sectional, longitudinal studies</u>
	• Relevance of the sampling strategy to address the research question
	• Representativeness of the sample of the target population
	• Appropriateness of the measurements
	• extent of risk of nonresponse bias
	o <u>Qualitative studies</u>
	• Qualitative methods used
	• Phenomena of interest
	• Data analysis technique and procedure
	• Key themes
Key findings	• Type and prevalence of maltreatment-oriented outcomes • Cause-oriented outcomes • Effect-oriented adverse outcomes • Correlation/association-oriented outcomes
Remarks	• Strength, weakness • Other information