Promoting Research to Prevent Child Maltreatment

summary report | workshop on international epidemiological studies

XIXth ISPCAN International Congress on Child Abuse and Neglect | September 2012
Overview

Leading child protection researchers from around the world met in September 2012 for a workshop on the international epidemiology of violence against children held during the XIXth ISPCAN International Congress on Child Abuse and Neglect in Istanbul, Turkey.

This workshop convened for the first time most of the leading global experts on the epidemiology of violence against children. Participants exchanged information regarding the current state of international epidemiological research about child protection and discussed methodological problems involved in trying to arrive at the most accurate estimates of the prevalence of different forms of child maltreatment around the world. The attendees also presented the findings of meta-analyses they had carried out on the prevalence of violence against children around the world and discussed methodological problems in conducting meta-analysis and in the cross-national epidemiology of violence against children. Their aim was to identify areas in the field that need strengthening, promote exchanges between researchers and greater coordination of their efforts, and formulate recommendations for future research activities.

The workshop was funded by UBS Optimus Foundation and organized by the Crimes against Children Research Center and the World Health Organization.

The following report includes a summary of the context of the problem and presented research, as well as an interview with Dr. Christopher Mikton of the World Health Organization (WHO).

Context

Studies indicate that 25 to 50 percent of children around the world suffer from physical abuse, and that around 20 per cent of girls and 5 to 10 per cent of boys experience sexual abuse. There are substantial consequences not only for the affected persons, but also for society as a whole, and these can no longer be ignored.

This urgent situation has now been recognized in many countries, many of which are responding with a diverse range of prevention and intervention programs.

However, designing effective child protection measures requires a reliable understanding of the extent of the problem and its context. Dr. David Finkelhor, a leading scientist specializing in this area at the Crimes Against Children Research Center in Durham, New Hampshire notes that, “In order to correctly and effectively use available resources for child protection, we need data about where the problem is most acute and deeper understanding of risk and protective factors.”

Globally, the number of studies on the prevalence of different forms violence against children has been growing. It has now become possible to synthesize the findings of the many different studies to arrive at more accurate estimates of prevalence and to compare studies from different regions of the world. Quantitative syntheses of findings from many different studies are called meta-analyses.
Finkelhor emphasizes, “There are still many places where it is claimed that there is no abuse. But we don’t know if this is being said because the cases haven’t been reported or because there aren’t any studies available. Epidemiological studies and meta-analyses help us to distinguish between these cases,” adding that meta-analyses, “have the potential to promote social change by showing decision-makers that the problem exists, that people are being affected, and that money is needed to do something about it.”

According to Finkelhor, Zimbabwe is one example of this. A study of sexual abuse in the country motivated the government to seriously address the problem, providing one example of how research has important implications for policy and practice, and that it can contribute to ultimately providing better protection for children against violence, abuse and neglect.

Despite the growing body of research, however, in many places there is a lack of reliable studies. Finkelhor notes that this is particularly true for Latin America, many African countries and Eastern Europe.

**Recognized Challenges**

According to David Finkelhor, the main challenge to improving the evidence base is the range of different definitions of child abuse and neglect. Because individual studies often use different definitions of the term, the results cannot be compared with each other. The same is true if different data collection methods are used.

The discussion of the current state of research underscored that there continues to be a lack of understanding around certain thematic areas, particularly in the case of child neglect. This lack of understanding persists even though it is known today that neglect can cause long-term mental and physical harm to a child’s health. It is also clear that boys and young men have received too little attention in research work on sexual abuse. Even though it has now been verified that girls are more at risk of sexual abuse than boys, both sexes should be included in studies so that comparisons can be made regarding gender differences and the respective risk and protection factors in various regions around the world.

A further challenge is selecting the region in which to conduct the studies and the associated cultural, religious, social and economic differences that could have an impact on the results. If studies can be conducted across multiple countries, contextual factors should also be taken into account or it becomes impossible to make any statements about regional differences in the subsequent meta-analyses.

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Crimes Against Children Research Center

Recommendations

The researchers made the following recommendations regarding how the challenges identified could be addressed:

Guidelines | Guidelines must be created for epidemiological studies on child abuse and neglect, with standard definitions of the different types of violence against children and detailed methodological guidance. This would increase the comparability of research. WHO could take a leading role in developing such guidelines.

Instrument Standardization | To avoid an accumulation of findings that cannot be compared, sustained efforts should be made to either develop one set of standardized instruments or develop a method of calibrating the different instruments so that their results can be compared.

Reporting Standardization | Many studies are missing basic information. To avoid this, adherence to reporting standards for epidemiological studies (e.g. STROBE) and meta-analyses (e.g. PRISMA) should be encouraged.

Dissemination | In order to make existing research available internationally, dissemination standards, such as those developed by the Equator Network, should be more widely followed.¹

Web Site | Create a Web site that summarizes all available data from around the world on the main aspects of violence against children, including prevalence, risk and protective factors, and effective interventions.

Convening | Meetings are also important. Conferences provide a platform for promoting exchange among the researchers currently active in this area, creating synergies and reducing duplication and enabling discussion regarding the potential for improvements listed here. This point was underscored by this workshop. In addition to the rich discussion on methodological factors involved in international meta-analyses of studies on the prevalence of violence against children and the

¹ http://www.equator-network.org/resource-centre/library-of-health-research-reporting/
identification of future research direction, this workshop allowed experts who had not met before to convene and showed that considerable data is available internationally.

This workshop was an important milestone in international research on violence against children and has thus contributed to improving child protection throughout the world.

**Interview with Dr. Christopher Mikton, WHO**

Dr. Christopher Mikton answers questions on the relevance of science for child protection, the challenges in the fields of meta-analyses and the outcomes of the workshop.

**Q | How can research contribute to an improvement of child protection?**

**A |** Effective prevention and protection of children from all forms of violence and abuse is not possible unless certain types of data are available, and only scientific research can provide these data. They include, for instance, accurate data on the magnitude of child maltreatment, on its distribution (e.g., does it occur more frequently in certain sub-populations than in others), and on its consequences. Without these data points it is difficult to know, for example, which population interventions should target.

One of the best ways of arriving at accurate estimate of the magnitude of the problem is by conducting meta-analyses, the topic of this workshop. To develop effective prevention measures, it is first necessary to do research on the risk factors for, and causes of, child maltreatment. Then the interventions developed – either to prevent child maltreatment before it happens or to treat the victims of child maltreatment – need to be rigorously evaluated to see if they work or not. Research has shown that many interventions that were widely assumed to be effective were in fact either ineffective – and hence a waste of time and money – or, even worse, sometimes harmful. These evaluations can only be done by conducting scientific studies. So, research is critical at every step along the way to effective child protection.

**Q | Based on recent studies, what can you say about the situation of child abuse and violence against children worldwide?**

**A |** Based on a summary of existing studies, WHO estimates that between 25 to 50 percent of children are victims of physical abuse. Approximately 20 percent of girls and 5 to 10 percent of boys are victims of sexual abuse.

These estimates are very approximate since there are no prevalence studies for many countries in the world. Recent high-quality studies conducted by UNICEF, the US Centers for Disease Control and Prevention (CDC), and national governments in a number of eastern and southern African countries found the following ranges of rates:

<table>
<thead>
<tr>
<th>For girls:</th>
<th>For boys:</th>
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<tr>
<td>• child physical abuse: 25 to 73 percent</td>
<td>• child physical abuse: 61 to 73 percent</td>
</tr>
<tr>
<td>• child sexual abuse 28 to 33 percent</td>
<td>• child sexual abuse: 9 to 18 percent</td>
</tr>
<tr>
<td>• child emotional abuse: 24 to 30 percent</td>
<td>• child emotional abuse: 28 to 29 percent</td>
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The Optimus Study on the sexual assault of children and adolescents in Switzerland found that 22 percent of girls and 8 percent of boys reported having experienced sexual assault with physical contact at least once in their lives.

**Q | The workshop showed that a lot of epidemiological data from different countries are available. Do we need more studies? If yes, why?**

**A |** It showed that there is a lot of data from certain countries, mainly high-income countries, but much less from others. In fact, for many countries in Africa, Latin America, and Asia there is simply no good data on child maltreatment. So, yes there is a need for more epidemiological data. But the CDC/UNICEF and the Optimus Studies launched by the UBS Optimus Foundation I mentioned earlier are slowly starting to address this dearth of data in many parts of the world.

**Q | As discussed in the workshop, several challenges have been identified when conducting meta-analyses. What were the most significant ones?**

**A |** The most significant challenges identified were, I think, the following: First, that much of the heterogeneity in prevalence estimates of child maltreatment remains unaccounted for. By this I mean that there are lots of differences in the prevalence estimates that we cannot at present explain. We do not know if they are due to, for instance, differences in the types of relationships between perpetrators and victims, to the age of onset of the abuse, or unidentified methodological features of the studies. Second, different studies use different definitions of child maltreatment and different types of questionnaires. This makes it difficult to compare the findings and synthesize the results in a meta-analysis. Third there is a need to bring together the fast accumulating data in this field in one single place – such as a Web site – in a user-friendly way so as to make it accessible to all those to whom it could be of use.

**Q | Are there any recommendations on how these challenges can be overcome?**

**A |** Yes, this workshop ended up making several recommendations, but some of these challenges will take a while to overcome. For instance, we recommended that future meta-analyses investigate more of the factors that might explain the difference in estimates; this requires, however, that quite a large number of studies be available – and this for complicated statistical reasons. We also recommended that a standard protocol and glossary for research on the prevalence of child maltreatment be developed to ensure more consistency in the use of definitions and even instruments. And we suggested that a Web site be created which bring together in a highly accessible form all the data currently available.
Q | Another challenge is bridging from theory and practice. Do you see potential for improvement in this domain?

A | There is no doubt that too often interesting and important research results fail to be translated into practice. So, yes, there is much room for improvement in this area and knowledge translation should be a priority. One way to improve this is by bringing researchers and policy-makers, program commissioners and developers, and practitioners together more often – through meetings, conferences, publications, and electronic media so that research findings are more likely to inform practice, and the needs and priorities of practitioners and policy makers are communicated more clearly to the research community. In fact, bridging the research and policy and practice divide is one of our main activities in the Prevention of Violence Unit at WHO.

Q | What do you think were the most important outcomes of the workshop?

A | I think that this workshop brought together, for the first time, all the main researchers working on synthesizing data on the prevalence of child maltreatment. It allowed the many disparate efforts in this area to begin to be pulled together and for the different research teams to connect. Important obstacles in this area – and possible solutions – were also identified. But the most important outcome was probably a determination on the part of most participants to act on some of the workshop recommendations with a long-term view to, ultimately, reduce the number of children who are maltreated.

Acknowledgements

Funding and support for this workshop was provided by the UBS Optimus Foundation (www.ubs.com/optimus), the World Health Organization WHO (www.who.int), and the International Society for the Prevention of Child Abuse and Neglect, ISPCAN (www.ispcan.org).

Many thanks go to David Finkelhor and Chris Mikton for facilitating the workshop, the participants of the workshop, and Franziska Reich von Ins, Chris Mikton, David Finkelhor, Jürgen Barth, Noemi Pereda, Karen Devries and Michelle Milford Morse for contributing to the report.
Appendix

Summary of Presentations
Please contact the authors directly if you are interested in reviewing the full presentation.

Results from a series of meta-analyses on sexual, physical and emotional abuse, and physical and emotional neglect

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Marije Stoltenborgh from Leiden University (Netherlands) presented results from a series of meta-analyses on sexual, physical and emotional abuse, and physical and emotional neglect. These studies aimed to establish the prevalence of maltreatment globally, and explored methodological differences between studies that could partly account for variations in prevalence. 244 studies reporting 577 prevalence rates met the inclusion criteria.

The largest number of studies focused on childhood sexual abuse (more than 120 publications), and the vast majority of studies used self-report to measure child sexual abuse (CSA) experience. A small number used data from registries. Studies using registries reported uniformly lower prevalence rates versus studies using retrospective self-reports. In studies using self-report, higher prevalence rates were reported among women. Geographical area was also related to prevalence. Few studies were found from Africa and South America, and few studies investigated neglect. The authors concluded that comparative studies using similar methodologies are needed. This research group worked also on reviews about neglect and other types of child maltreatment (see references at the end of this report).

Meta-analysis on child sexual abuse

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Jürgen Barth from the Institute of Social and Preventive Medicine, University of Bern (Switzerland) reported on his meta-analysis on child sexual abuse (CSA). The prevalence for forced intercourse in females was nine percent and three percent for males. The question of whether different regions have different prevalences of CSA could not be answered due to predominantly small studies from specific regions. Since study size is associated with lower prevalence estimates in epidemiology and lower effect estimates in intervention studies, this facet should be taken into account when interpreting data from low- and middle-income countries. A second problem when pooling prevalence estimates in
such a meta-analysis is the heterogeneity of estimates among studies included. Such heterogeneity is reflected by large I² values (> 50 percent), so the use of random effects models in these studies seems warranted. The large amount of heterogeneity has two implications: 1) pooled estimates should be interpreted with caution and 2) small studies tend to be weighted in the same way as larger studies. The second consequence can be reduced by using fixed effect models, which in turn violates the prerequisite of homogenous prevalence estimates between studies. Since there is no easy solution for this problem, a presentation of results from both random effect models and fixed effect models may be useful for pooled prevalence estimates. The comparison between regions and especially between countries is hindered by the large heterogeneity, which leads to large confidence intervals in random effects meta-analysis. Since contextual factors of a specific region may affect prevalence estimates, it is necessary to minimize such variation between countries of a specific region. This can be done by focusing on specific time frames of data acquisition, eliminating studies in a very specific cultural context in a country (e.g. war), and improved reporting of prevalence estimates in primary studies (e.g. in conference presentations).

Meta-analysis on child sexual abuse and systematic review about Spanish epidemiological studies on violence against children

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Noemi Pereda from the Research Group on Child and Adolescent Victimization at the University of Barcelona summarized the main results from her meta-analysis on child sexual abuse, and also presented her new systematic review about Spanish epidemiological studies on violence against children. The first meta-analysis about the prevalence of CSA was published in 2009 and included sixty-five articles covering 22 countries. The analysis showed that 7.9 percent of men (7.4 percent without outliers) and 19.7 percent of women (19.2 percent without outliers) had suffered some form of sexual abuse prior to the age of 18. Moderator variables such as continent and sex were found to account for some differences among primary studies. There were also differences in prevalence rates observed when comparing countries, even though no statistical analyses were conducted. The systematic review about the victimization of children and youth in Spain is a consequence of the slightly delayed academic interest on this topic in Spain compared to other countries. Earlier systematic reviews seldom included data from Spain or Latin American regions, since articles from Spanish-speaking countries are mostly published in Spanish language and in national journals without being indexed in electronic literature databases. This makes it difficult to get a complete picture of child victimization around the world.

Modeling the global prevalence of exposure to childhood sexual abuse

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Devries presented work in progress on modeling the global prevalence of exposure to childhood sexual abuse. As part of the 2010 Global Burden of Disease Project, this analysis involves two steps, and has some advantages over traditional meta-analyses for estimating prevalence. For step one, all
available prevalence estimates from surveys representative at the national or sub-national levels have been compiled, and secondary analyses of large international datasets have been commissioned. To date they have compiled 165 studies with 500 estimates for prevalence in women, and 96 studies with 287 estimates for men.

The second step involves correcting these existing estimates for differences in definitions of childhood sexual abuse, quality of measures, quality of data collection, the age of study participants and the age at which childhood is defined. They will then use different modeling strategies (both Bayesian and classical meta-regression techniques) to estimate global, regional and age-specific prevalence of childhood sexual abuse.

**Child Maltreatment: variation in trends and policies in six developed countries**

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John Fluke from the American Humane Association (US) and Melissa O’Donnell from Western Australia talked about “Child maltreatment: variation in trends and policies in six developed countries.” Their study explored trends in six developed countries using three types of indicators of child maltreatment for children younger than 11 years, since the inception of modern child protection systems in the 1970s. They found no consistent decline in child maltreatment indicators despite policies aimed at achieving this.

While policies might be effective in protecting some vulnerable groups of children, they may be failing to reach others, particularly younger children. Comparisons of mean rates between countries showed five-fold to ten-fold differences in rates of agency indicators, but less than two-fold variations in violent deaths or maltreatment-related injury, apart from high rates of violent child death in the USA. These analyses draw attention to the need for robust research to establish whether the high and rising rates of agency contacts and out-of-home care in some settings are effectively reducing child maltreatment.

**Cross-national differences in cyber-bullying: procedures, prevalence and predictors**

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Anke Goerzig from the University College London & Anna Freud Centre talked about “Cross-national differences in cyber-bullying: procedures, prevalence and predictors.” She presented a study looking at cross-national differences in bullying via the Internet and mobile phones (i.e., cyber-bullying) and exploring possible explanatory factors for the differences among nine- to 16-year-old Internet users across 25 European countries. Prevalence of cyber-bullying varies across countries and ranges from two percent to 14 percent, while rates in cyber-bullying perpetration are less, ranging from one percent to nine percent. Hence, in most countries victimization rates are higher than perpetration.
rates (average ratio 2:1). Cyber-bullying is highest in Estonia, Romania, Denmark and Sweden; and lowest in Italy, Portugal, Turkey and Greece. Higher incidence of cyber-bullying can be partially explained by negative attitudes towards equality, lower religiosity, and higher crime rates.

Additionally, cyber-bullying can be predicted by individual level factors. Female sex, older age, psychological difficulties, sensation seeking and self-efficacy as well as being a cyber-bully are risk factors to becoming a victim. However, the importance of psychological risk factors for cyber-bullying victimization varies across countries and explanations for such cross-country variations are not clear so far.

**Bullying**
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Michal Molcho from the National University of Ireland Galway presented her results about bullying, which were based on the Health Behaviour in School Aged Children study (HBSC). An important strength of the HBSC study is the use of core items across different European countries. This improves the interpretation of findings, but nevertheless cultural differences in the interpretation of items should be taken into account. Children of age 11, 13, and 15 participated in this questionnaire-based survey. The variation in bullying among countries is huge (8.6 percent to 45.2 percent among boys (five-fold), and from 4.8 percent to 35.8 percent among girls (seven-fold). Gender seems to explain variation in the risk of bullying victimization: Boys reported higher rates. For girls the rate of bully victimization was considerably higher across countries. Having a disability or handicap in younger age increases the risk to be bullied.

**Systematic review of studies on the prevalence, incidence and consequences of child maltreatment in the East Asia and Pacific Region**

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Amalee McCoy from UNICEF presented work by herself and Deborah Fry from the NSPCC Child Protection Research Centre at the University of Edinburgh on a systematic review of studies on the prevalence, incidence and consequences of child maltreatment in the East Asia and Pacific Region. They found 364 studies that met their inclusion criteria. Studies showed a wide range of prevalence estimates, with some indication of higher prevalence of CSA and Child Physical Abuse (CPA) in males versus females. A wide variety of mental and physical health impacts were also studied. Next steps for this work will involve estimation of the economic costs of child maltreatment in the region.
Quality checklist for causal conclusions from observational studies

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Manuel Eisner from the Institute of Criminology at the University of Cambridge was involved in the development of a quality checklist for causal conclusions from observational studies (Cambridge Quality Checklist, CQCL). He defined the term risk factor and showed limitations of observational studies. The CQCL aims to give guidance in the critical appraisal of primary studies on the causality of risk factors. Therefore three levels of associations between two variables are specified: a) Studies on correlations, b) studies on risk factors and c) studies on causal risk factor. The quality of studies in these three domains can be rated with the CQCL. Dr. Eisner discussed advantages and limitations of this tool in the context of CSA.


