

Review Article

Child neglect - still a neglected problem in the global world: A review

Björn Tingberg¹ and Doris Nilsson^{2*}

¹Education Unit for Children's and Adolescent's Health, Department of Women's and Children's Health, Karolinska Institute, Sweden

²Institution of Behavioral Sciences and Learning, Department psychology, Linköping University, Linköping, Sweden

Summary

Child neglect is a global problem that involves large costs for both the individual and for society. This article is based on published reviews and meta-analyses in the field of child neglect between 1980 and 2018. Of a total of 433 articles, 13 was included, main Data bases has been PubMed, Scopus, Web of Science, Psych Info, ERIC, CINAHL. The prevalence in the normal population was found to be between 16 and 26 percent, while the prevalence in clinical groups seem to be significantly higher. For example, was the prevalence of neglect 50% among patients with eating disorder. It is especially important to know who is reporting neglect. Research shows that neglect is strongly associated with among other things, depression, one of the most common illnesses among the general public. The theoretical models that are used are ecological. Risk factors can be found at all levels when using ecological models. Research shows that factors involving the relationship parent-child are among the most important. Neglect is more common in low-income countries than in high income countries.

Most studies point to the importance of prevention. Existing preventive programs are most often of family and parental character.

More research is needed, especially as concerns the development of preventive programs that can identify specific types of neglect and present suitable preventive measures, both at the societal and family level.

Key points

1. Neglect is a global problem.
2. Prevalence depends on the measurement method and can vary between about 16% and 76%.
3. Prevalence is higher when negligence is self-reported than when reported by professionals.
4. The most common and most serious risk factors are present in the microsystem. Parenting and interactions between child and parent are considered important.
5. There is a link between neglect and, above all, depression, but also anxiety, self-harm and eating disorders.

Introduction

The concept *child maltreatment* can be seen as an umbrella concept, and neglect is one way for children to be hurt. Neglect can be divided into several distinct subgroups [1]:

- Physical neglect.
- Emotional neglect.
- Medical neglect.
- Neglect of psychological health.
- Educational neglect.

More Information

***Address for Correspondence:** Doris Nilsson, Institution of Behavioral Sciences and Learning, Department psychology, Linköping University, Linköping, Sweden, Tel: 46-13 284429; Email: doris.nilsson@liu.se

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ORCID: orcid.org/0000-0002-7796-0873

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Neglect also has to do with a lack of supervision, or that responsible adults do not see to it that a child is given adequate food, living space, clothes, education, or basic health care. It can also have to do with a lack of emotional support and love, chronic inattention to the child, caregivers who are psychologically or mentally inaccessible as indicated by failure to observe signs and signals, or that the child is exposed to the effects of adults' abuse of narcotics or alcohol [1,2].

In contrast with other types of abuse, neglect is a matter of the absence of things, an omission of care that the child needs [2]. We know that neglect can appear in many different forms and can result in a variety of both short-term and long-term consequences [3].

Several organisations such as WHO and UN (UNICEF) report that neglect is a global problem that results in extensive suffering for the individual and even in large-scale costs for society. Many researchers take as their starting point the WHO's definition from 1999 that includes neglect and also has to do with organisations including schools and health care institute and even society at all levels from village to city and a failure to recognize children's fundamental needs and failure to support or aid children who are in need of help. According to many researchers, the greatest challenge faced by professionals who meet children in their profession is to find the most appropriate boundaries between sufficiently satisfactory (good-enough) parenting and neglect [3]. To map the extent of neglect, prevalence, risk factors, costs, and possible interventions, it is necessary to be able to identify where neglect is present and what it looks like in a specific setting. For this purpose, different scales have been used and, the Childhood Trauma Questionnaire (CTQ) and Adverse Childhood experience (ACE) are common instruments. Woodman and colleagues [4] showed that it was very difficult to identify neglected children among a larger group, for example at an emergency care unit. They were unable to find a satisfactory and secure method for screening a population to identify neglected children [4].

Research on the prevalence of neglect displays varied results and outcomes depending on how a study is designed and carried out [5]. The economy of a country, the groups chosen for a study, and how the study is carried out (measuring instruments, interviews, or other means) strongly affect the results [5]. Twenty-six percent of children in a normal population experience neglect at some time during their lives [5]. This may be compared with the finding that approximately 10% have been exposed to sexual abuse, and almost 22% have been exposed to physical violence [5].

There are many risk factors for neglect, and often there are several that interact. Risk factors are to be found at every level in the ecological system at the family and/or societal level. Research places poor psychological health in parents in a prominent place, and violence among closely related family

or group members, and even the child's own problems as risk factors at the family/individual level. Risk factors that have shown to be important at the societal level can be poverty, dangerous or insecure living areas, and few possibilities for recreation [6].

What is known is that to be neglected results in an increased risk for several difficult effects both short and long term [3]. Many researchers emphasize that it is an equally serious problem to be neglected as it is to be subject to physical or sexual abuse [2,3,7-9].

The consequences of neglect can be quite different depending on the particular type of neglect in question. There is a difference between not getting enough food and not being given sufficient love, both are "dangerous" but have completely different consequences both short and long term. Neglect is therefore to be seen as extremely heterogeneous [2,3,7].

Concerning prevention it has been found that programs of early home visits have a desirable effect [10].

Aim

The aim of this study was to investigate how neglect has been handled in research up to now, globally and to review findings on definitions, prevalence, risk, consequences, prevention, and costs to the individual and to society.

Method

Given the breadth and depth of this field, we have chosen in this review to examine only review and meta-analysis studies. The field is quite broad and has not been so clearly researched in the sense that child neglect has not been the specific goal of studies but rather that child neglect is often examined as just one form of child mistreatment.

This article is based on a systematic review of the literature published between 1988 up to Dec. 2018.

Search terms: Review, reviews, meta-analysis, prevalence or incidence, neglect, infant, child, adolescent, teenager, pediatric, child neglect, emotional neglect, educational neglect, fatal neglect, supervisory neglect, physical neglect,

Data bases: PubMed, Scopus, Web of Science, PsychInfo, ERIC, CINAHL

The total number of hits was 428 after duplicates had been removed. An additional 269 articles were sampled, the abstract read, and in the case of uncertainty sometimes the article was read in its entirety by both researchers.

An additional 63 articles were identified by examination of lists of references and journals such as *Child Abuse & Neglect* and of these, five were included in our study.

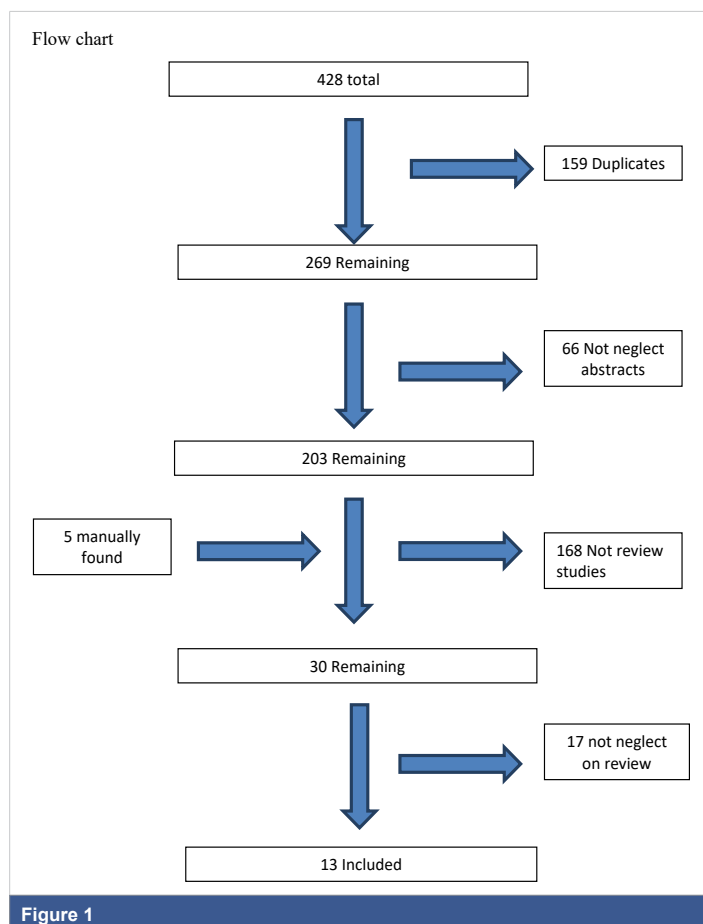
Inclusion criteria have been that the studies were review studies of empirical research where neglect was treated in at least a part of the review.

Exclusion criteria were that the studies were only based on the literature and that neglect was not considered or had been seen as one of many kinds of mistreatment of children.

Both authors have each read all the abstracts in all the articles. The authors then independently passed judgement on the abstract and dismissed articles that were not compatible with the criteria for inclusion and were thus excluded as not being essential for this review. The included reviews in this study have been evaluated according to AMSTAR concerning usefulness and bias [11] and shown in table 1. The level of agreement between both authors on which articles were to be part of the review was 95%. In cases where we engaged in discussion, we were able to reach a consensus view. The final result was that we reached complete agreement on which articles were to be included in this review of existing knowledge (Figure 1).

Results

The studies included in this review can be seen in table 1, they differ in such a way that some are meta-analyses and some are reviews and have different focus concerning neglect, such as, prevalence, societal costs, consequences, risk factors and prevention.



All studies emphasize the importance of defining the concept of neglect carefully and emphasize the importance of explaining the perspective from which the research formulates a study. Most of the studies have used the WHO's definition of neglect as starting point.

"Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power" [12, p 15].

There is consensus on these categories of neglect: physical, emotional, medical, and educational neglect and neglect of psychological health.

A global problem

The studies in this review showed that child neglect is a global problem and occurs in all countries and societies [13-15] something which is also pointed out by WHO [16]. However, Stoltenborgh and colleagues [17] found that most studies were carried out in North America with 11 studies, 3 in Asia, 2 in Europe and 2 in Australia.

Prevalence

Prevalence rates were found to be between 16% [17] and 26% [13] in normal populations. It was shown in an Australian study that neglect is complex phenomenon [18] and it was found that prevalence of neglect only, was 26,4%; neglect and physical abuse 8,5 %; neglect and sexual abuse 4,5%; neglect and emotional abuse 13,7%; neglect and sexual abuse, and physical abuse. 1,9%; neglect, emotional abuse, and physical abuse 27,9%, and neglect, physical abuse, sexual abuse, and emotional abuse 13,0%.

Many of the studies were made by using the Childhood Trauma Questionnaire (CTQ), and those that did use this found higher values of prevalence than if the Adverse Childhood Experiences- Scale (ACE-questionnaire) was used. Fu, et al. [15] found that prevalence of physical neglect measured with CTQ gave 67,2%, and with ACE 19,5%. Emotional neglect measured with CTQ found a value of 73,9% but with ACE 18,3%.

Costs

Several studies [6,13,16,18] point out that neglect entails economic costs not only to the single individual, but also costs society large amounts of money. The costs at the societal level are measured in the number of Disability Adjusted Life Years, DALYs.

Consequences and relationship with mental illness

The connection between neglect and mental illness or other behaviours and problems in adulthood is taken up



Table 1: All in this review included articles.

Studies	Num-ber of stud-ies	Type of article	Specific	Type of ne-glect	Pre-va-lence	Pre-vention	Treat-ment/ inter-ven-tion	Measurement method cost	Effect of neglect	Risk-factors	Quality Evalua-tion AM-STAR
Fang X, et al. [14]	68	Review study	Yes, 18 studies (but mixed in the results)	Not specified	Yes 26%	No	No	Cost Look at DALY and the enormous costs that "child maltreatment" causes. Present, however, emotional abuse that caused 26,3% of lost DALYs	Yes Show a specific type of neglect. Do not specific type but link emotional abuse to mental disturbance 26,3% and self injury 18% av DALYs	No	Useful Low bias
Fang X, et al. [13]	169	Review study	15 studies of neglect	Health, Edu-cation, de-velopment, nutrition, and	Yes Women between 17,7-39,8% Men 23,0-39,9%	No	No	C	Yes Connection with self injury 2,6-30,5% and mental illness 1,4-22,2%. Drug abuse 1,3-21,3%	Yes	Useful Low bias
Fu H, et al. [15]	32	Review study meta-analysis	20 studies physical neglect / 20 studies emotional neglect	Physical and emotional	Yes Physical/neglect CTQ= 67,2% ACE= 19,5% Emotional neglect CTQ= 73,9% ACE= 18,3%	No	No	Yes, CPANS, CTQ, ACE, PRCA and CECA.Q	No	No	Useful Low bias
Lane W, et al. [23]	23	Review study	3		No	No	No	No	No	Yes Gaming abuse	Useful Low bias
Maguire SA, et al. [19]	30	Review study	All 30 about emotional abuse as being the same thing as neglect	Emotional neglect	No	No	Yes	Yes Associations with externalized behavior, ADHD, difficulties regulating feelings, lowered IQ, difficulties with math, reading, language. Low self esteem, depression. Girls with relational aggression and boys with more physical aggression.	Yes Presents long-term effects on behavior, emotional, cognitive, and social development	ja	Useful Low bias



Moore SE, et al. [18]	23	Review study	<p>Yes</p> <p>Only neglect (1) Neglect and physical violence + (2) neglect + sexual abuse (3) neglect + emotional abuse (4) neglect +2+3 neglect +3+4 Neglect +4+2 Neglect+2+3+4</p> <p>36 studies</p>	<p>Yes</p> <p>26,4% 8,5% 4,5% 13,7% 1,9% 4,1% 27,9% 13,0%</p>	No	No	<p>Yes</p> <p>Cost "child maltreatment" where neglect is present DALYs 1,4% for men 2,4% for women</p>	<p>Yes Looks at Child maltreatment's effect on DALYs</p> <p>For men Anxiety 15,7% Depression 20,9% Self injury 23% For women Anxiety 22,8% Depression 30,6% Self injury 33%</p>	<p>Yes</p> <p>Sees child maltreatment where neglect is present as a risk factor</p>	Useful Low bias	
Mulder TM, et al. [6]	36	Review Studie/ meta-analysis		No	No	No	No		<p>Yes</p> <p>Presents force in 24 risk domains small r=.110-large r=.372 Example of parental level History of antisocial behavior/ criminal r=.372 Bakck-ground of mental/ psychiatric problems r=.272 Mental/ physical problems r=.207 Experience of oneself being exposed r=.182</p>	<p>Yes</p> <p>Presents force in 24 risk domains small r=.110-large r=.372 Example of parental level History of antisocial behavior/ criminal r=.372 Bakck-ground of mental/ psychiatric problems r=.272 Mental/ physical problems r=.207 Experience of oneself being exposed r=.182</p>	Useful Low bias
Nelson J, et al. [20]	184	Review Study/ Meta analysis	<p>Yes</p> <p>Physical neglect 12 Emotional 14</p>	<p>Yes</p> <p>43,2% of those who were depressed had experienced neglect in childhood</p>	No	Yes	<p>Yes</p> <p>Looks at how often neglect occurs among those who are depressed</p>	<p>Yes</p> <p>Of adults with depression had experienced neglect</p>	<p>Yes</p> <p>More difficult and earlier debut of depression with neglect</p>	Useful Low bias	



Author	Year	Study Type	Number of Studies	Physical Neglect	Emotional Neglect	Physical + Emotional Neglect	Yes/No/Noj	Yes/No	Clear connection between Physical abuse, emotional exploitation, neglect and: Depression, anxiety, suicide, drug use and STI (sexually transmitted disease) and Eating disorders	Yes	Useful / Low bias
Norman R, et al. [21]	124	Review study/ Meta analysis	3 + 1 about emotional abuse 26 studies with physical abuse + neglect	Physical	Emotional	Physical + Emotional	No	No	Yes Clear connection between Physical abuse, emotional exploitation, neglect and: Depression, anxiety, suicide, drug use and STI (sexually transmitted disease) and Eating disorders	Yes	Useful / Low bias
Pignatelli AM, et al. [24]	7	Review Study/ Meta-analysis	7	Yes Physical	Emotional	Physical + Emotional	No	Yes	Yes Among those with eating disorder Physical neglect 20.6-74.0% and emotional neglect 33.3-69.0%	Yes Eating disorders	Useful / Low bias
Stoltenborch M, et al. (2015). The Prevalence of Child Maltreatment across the Globe: Review of a Series of Meta-Analyses. Child Abuse Review 24: 37-50.	244	Review of meta Analyses	17 + 15 studies	Physical neglect Emotional neglect Educational neglect	Physical neglect Emotional neglect	Physical + Emotional neglect	No	No	Yes Emotional neglect 18.4% Physical neglect 16.3%	No	Useful / Low bias
Stoltenborch M, et al. (2013). "The neglect of child neglect: a meta-analytic review of the prevalence of neglect." Soc Psychiatry Psychiatr Epidemiol 48: 345-355.	16	Meta analysis	Yes 13 studies with physical neglect in 16 emotional neglect	Yes Physical neglect Emotional neglect	Yes Physical neglect Emotional neglect	Yes Physical neglect Emotional neglect	No	No	Yes Emotional neglect 18.4% Physical neglect 16.3%	No	Useful / Low bias
Viola TW, et al. [22]	288	Review study/ meta-analysis	Not stated	Yes Physical neglect Emotional neglect	Yes Physical neglect Emotional neglect	Yes Physical neglect Emotional neglect	No	Yes	Yes CTQ	More neglect in low-income countries	Useful / Low bias



in several of the studies [14,15,19]. The reports showed among other things that there are many who have mental illness, drug abuse, or have self-harm behaviour among individuals who have been subjected to neglect compared with individuals who have never experienced neglect [13,18]. Several research groups report that there is a definite increase in risk of developing depression as an adult if one has been neglected during childhood [20,21]. Those who had been neglected responded less well to treatment than those in a group of depressed individuals who had not been neglected [20]. One review study showed that neglect can result in long lasting effects on the child's emotional, cognitive, and social development [19]. Clear associations were found between neglect and ADHD, lower IQ, reading difficulties, and delayed language development [19]. The earlier the neglect begins in a child's life, the greater the difficulty for the child to control aggression later in life as shown by Maguire and colleagues [19] in their report. Experiencing depression after being neglected has been shown to be related to dose – if the child has been neglected over a longer time there is an increased risk of developing depression later in life [21].

Risk factors

Risk factors can occur at the societal level, and in this literature, review it was also shown that the factors that involve the parent-child relationship, that is the microsystem, are those that seem to have the greatest importance. This indicates that the largest, and perhaps most serious, part of neglect occurs in the home at the hands of the parents or caregiver [6].

Prevention

In order take protective measures in an effective manner there is a need to develop instruments for measuring risk factors according to Mulder, et al. [6]. Other research groups call attention to the fact that early interventions that support the parents are effectful and important in protective work [17,21].

Discussion

In this review of reviews and meta-analyses up to 2018 it has clearly been shown that child neglect is a global problem and needs to be taken seriously. The costs of neglect for both the single individual and societies are large counted in DALY's. However, the figures concerning prevalence can vary and it is important for clinicians and researchers to investigate which instruments have been used in the presentation of prevalence. The assessment scale CTQ has been used in many studies and have shown to give much higher prevalence rate than for example the ACE scale [15]. This shows that it is extremely important to recognize this difference when one is concerned with the ability of different measuring instruments to identify problems, and to take this into consideration when one is reading prevalence values [15,22].

Other factors that influence prevalence values depend on the presence of different systems in for example, psychiatry and general health care or if the study group already exists in reports by the police or social services. Prevalence rates have also shown to be different depending on if it is self-report which shows to be higher than if it is professionals who report [17].

The consequences on mental health have also in this review shown to be large [18-21,23,24]. Pigantelli and colleagues [24] found for example that about 50% of persons with eating disorder reported themselves to have been emotionally neglected as children.

It has been found indications that people who had been neglected in childhood earlier in life develop chronic depression more often than those who are given a diagnosis of depression but who have not been neglected in childhood. In addition, it was shown that the consequences of neglect could be such as low self-regard, periods of depression, and a difficulty in keeping friends, worse record of school attendance and in increased risk and an addiction to computer games [23].

In several studies a connection was found between neglect during childhood and being plagued with anxiety as an adult [18]. The same is true for being afflicted with eating disorder where the risk is 3 times greater for children who have been neglected [24]. Studies have also shown that neglect during childhood increases the risk of having a sexually transmissible illness (STI) later in life [21]. The earlier the neglect begins in a child's life, the greater the difficulty the child will have in controlling aggression later in life as shown by Maguire and colleagues [19] in their report.

Researchers want it understood that it is important to know risk factors in order to be able to understand the aetiology associated with neglect.

Based on the ecological models, it appears that risk factors are found in the microsystem, i.e. in the family, especially in the parents but also in the interaction between children and parents. The risk factors are there, but also the protection factors, and this is an area in which there is unfortunately a lack of research. An important perspective is also how does the focus lie in the specific needs of the child or in the deficiencies of the parents and their failures?

Absence of research and possible distortion in research on neglect

When it comes to macro, exo and meso systems, more neglect is found in low- and middle-income countries [22]. Thus, it can be said that geographical and economic factors affect the variations in *child maltreatment*. An example of global differences is access to school. To not be allowed to go to school is to be neglected according to the WHO definition.



Overall, there is not much research in this area, and few have examined these areas in the research we reviewed.

An additional type of distortion in research, which we named earlier may be that most studies are carried out in countries that are not so densely populated, and there is to a large extent a lack of studies from the African continent (with the exception of South Africa). The majority of studies have been carried out in North America, above all in the USA. Even a study by Viola, et al. [22] shows that there is distortion as concerns where studies are carried out.

Limitations in this review

This review is a systematic review of the literature and specifically a review based on previous reviews and meta-analyses. As a result, single articles may have been missed depending on the search terms used in the review articles and meta-analyses. Stiths, et al. [25] is a review article that was discovered late in the process when reading Mulders et al. from 2018 [6]. However even if we read Stiths, et al. [25] later no result had to be changed. We have tried to minimize the risk of missing important elements by searching in other summaries of research.

In addition, we found in Fangs, et al. [14] references to several articles that were only published in Chinese that made it impossible for us to read them.

Conclusion and future research

Neglect is a global problem and the most common and most serious risk factors are present within the family system. It is a higher prevalence in clinical groups and in self-reported studies. There is a link between neglect and health problems in adulthood, especially with depression, anxiety, self-harm and eating disorders. There is a lack of knowledge about neglect in densely populated countries and from the African continent. So future research must explore the situation in those countries.

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