Child abuse: measuring a global problem

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Introduction

Child abuse has been noted as a societal phenomenon for centuries *(1)*. Nevertheless, since the original clinical reports by Henry Kempe and others 30 years ago *(2)*, the magnitude of the problem has not been well defined, and the lack of epidemiological data limits the extent to which sound public health and social welfare policies and intervention programmes could be developed, implemented and evaluated.

Child abuse and neglect (sometimes known as "CAN") includes four distinct conditions: physical abuse, neglect, emotional abuse and sexual abuse *(3) (See Box 1 for definitions)*. The epidemiology of each differs widely within countries, although it appears that even between countries some underlying factors may be common among different cultural settings. Child abuse and neglect occur within and outside of family settings. Extra-familial child abuse and neglect may occur in an institutional or non-institutional setting.

In recent years two approaches have been developed to document the magnitude and nature of child abuse and neglect: regional or national case registers, and a screening instrument for suspected cases of child abuse and neglect (SCAN) for use in health service facilities. We are proposing an additional approach for monitoring presumed child abuse and neglect-related mortality. The combination of the three approaches will provide a better profile of the epidemiology of child abuse and neglect, a crude means by which reliability of the information could be estimated, and tools for the evaluation of various community-based intervention programmes.

Box 1

Definitions of the different forms of child abuse in the registers of the National Society for the Prevention of Cruelty to Children (England and Wales)

Physical abuse: Physical injury to a child, including deliberate poisoning, where there is a definite knowledge, or a reasonable suspicion, that the injury was inflicted or knowingly not prevented.

Neglect: The persistent or severe neglect of a child (for example, by exposure to any kind of danger, including cold and starvation) which results in serious impairment of the child's health or development, including non-organic failure to thrive.

Emotional abuse: The severe adverse effect on the behaviour and emotional development of a child caused by persistent or severe emotional ill-treatment or rejection. All abuse involves some form of emotional ill-treatment or rejection; this category should be used where it is the main or sole form of abuse.

Sexual abuse: The involvement of dependent, developmentally immature children and adolescents in sexual activities they do not truly comprehend, to which they are unable to give informed consent, or that violate the social taboos of family roles.

The NSPCC studies in England and Wales included a fifth category, "Grave concern" in which social and medical assessment suggested that children were at significant risk of abuse. This category has been dropped in subsequent data collection.

Source: Ref. *(3)*

Community-based registers

The reporting systems for child abuse and neglect from 30 countries have been recently described in a survey conducted by the International Society for Prevention of Child Abuse and Neglect *(4)*. These included 16 from developed and 14 from developing countries, 10 of the former and 5 of the latter having been described as mandatory. In many of the countries, reporting is limited to specific regions and is the mandatory or voluntary responsibility of different individuals or sectors. The reporting system or registers are most often maintained by ministries or departments of child or social welfare, or law enforcement authorities. The effectiveness of such reporting systems in measuring the magnitude of the problem and in serving as the basis for interventions is dependent on three factors: awareness of the reporting systems and the obligations of potential contributors of information; the ease with which information passes from one sector to another; and the ability of the local community to respond with either public or voluntary services to ameliorate the problem.

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One of the early community-based registers was developed by the National Society for the Prevention of Cruelty to Children (England and Wales) (NSPCC) *(3)* in 1973. It initially covered about 13% of the child population under 18 years. In the last several years, the Department of Health has published national statistics on child abuse, based on local authority registrations. A comparison is shown *(Table 1)* of the rate of registrations by age in England according to the NSPCC and Department of Health registers in 1990. The physical injury rate among children 0-4 from the NSPCC ranged from 1.0 to 1.5 per 1 000 population from 1980 through 1990. Approximately 0.5% of such injuries were recorded as being fatal, i.e., 0.5-0.75 per 100 000 children 0-4 years of age.

Table 1
Rate of registrations in the child protection registers by the Department of Health and the NSPCC in 1990 (per 1 000 population)

Tableau 1
Taux d'inscription sur les registres de la protection de l'enfance par le Ministère de la Santé et le NSPCC en 1990 (pour 1 000 habitants)

Age – Ages	Department of Health – Ministère de la Santé	NSPCC
Under 1 year – Moins d'1 an	6.15	7.91
1-4 years – 1-4 ans	3.29	3.76
5-9 years – 5-9 ans	2.65	2.92
10-15 years – 10-15 ans	2.07	2.58
16 and over – 16 ans et plus	0.67	0.44
Total (under 18 years) – Total (moins de 18 ans)	2.60	3.02

Source: Ref. *(3)*.

Facility-based data from standardized assessment: suspected child abuse and neglect (SCAN)

Within a country, facility-based data can provide reasonable information on the trends and patterns of child abuse, if standardized definitions and methods of data collection are used, and the data are obtained from institutions covering defined populations. Such a scheme has been developed and evaluated in a number of settings *(Table 2)*, and more recently has been adapted by WHO[b] as a standardized protocol. Comparison of such data between countries should be interpreted with caution since facility-based data is dependent on the level of awareness, concern and action by the child care provider or other responsible person in bringing the abused child to the attention of the medical care system.

Reports from individual facilities, usually hospital emergency rooms, have been used to make estimates of the incidence of child abuse in different communities. One such study from a defined urban population in the United States of America reported an annual incidence rate of 9.19 per 1000 population for violence-related injuries in children under 5 years, with an overall rate of 3.28 per 1000 for those under age 19 *(5)*. A comparable report from three populations of Danish children under age 15 years is shown in *Table 3*.

Presumed child abuse and neglect mortality

While child abuse and neglect have been classified into four categories, in order to derive estimates of

[b] *Protocol for the study of interpersonal physical abuse of children*, Maternal and Child Health and Family Planning, Global Programme for Injury Control and Division of Mental Health, World Health Organization, Geneva, MCH/92.1, 1992

Table 2
The Montreal Children's Hospital Accident-SCAN

Tableau 2
Enquête sur les accidents à l'hôpital des enfants de Montréal

Has the patient:	Est-ce que le patient/la patiente:
Reported that she/he has been physically ill-treated?	a signalé qu'il/elle avait été victime de sévices?
Shown evidence of neglect?	présentait des signes d'une absence de soins?
Shown evidence of repeated injury?	présentait des signes de traumatismes répétés?
Has the parent/caretaker:	Est-ce que le parent/l'accompagnateur:
Reported that the child has been abused or neglected?	a signalé que l'enfant était victime de mauvais traitements ou d'une absence de soins?
Delayed unduly in seeking medical attention for treatment?	a trop attendu avant de demander des soins médicaux?
Shown detachment or hostility?	s'est montré indifférent ou hostile?
Presented contradictory history and/or unsatisfactory explanation of the injury?	a présenté une anamnèse contradictoire et/ou des explications peu satisfaisantes pour le traumatisme?
Been reluctant to give information or refused consent for further studies?	a été réticent au cours de l'interrogatoire ou a refusé de donner son accord pour des examens plus approfondis?
Is there any other reason to suspect that this incident was non-accidental?	A-t-on d'autres raisons de soupçonner que cet incident ait pu ne pas être accidentel?
Was a skeletal survey required?	A-t-il fallu procéder à une radiographie du squelette ?

Source: Ref. *(6)*

Table 3
Violence against children under 15 years of age as registered at 3 Danish emergency wards: annual incidence rate per 1 000 population

Tableau 3
Violences contre des enfants de moins de 15 ans enregistrées dans trois services d'urgence danois: taux d'incidence annuel pour 1 000 habitants

Population	Boys – Garçons	Girls – Filles
Provincial/rural district – Provinciale/rurale	0.6	0.7
Urban – middle income area – Urbaine à revenu moyen	2.8	0.6
Urban – low income area – Urbaine à faible revenu	4.0	0.9

Source: Ref. *(7)*.

mortality from all reported deaths it is necessary to assess whether specific categories of injury and injury-related deaths are likely to have resulted from intentional, unintentional or neglectful behaviour. Based on clinical experience, a "likelihood of intent" model is proposed in *Table 4* for the classification of the external causes of deaths of children under 5. In a long-term review of homicide deaths of children of all ages in a metropolitan area of the United States of America, nearly one-fourth of childhood homicide deaths was associated directly with the "battered" child syndrome *(8)*. The categories of injury-related mortality in infants and young children provide a useful indicator of such mortality for purposes of trend analysis in a specific country, and between countries, assuming reasonably complete and reliable registration of causes of death. In the Ninth International Classification of Diseases (ICD) these include categories of homicide (B55), accidental poisoning (B48), accidental falls (B50), accidents caused by fire and flames (B51), and injury undetermined whether accidentally or purposely inflicted (B56). Limiting an analysis of such deaths in reference to children under the age of 5 may provide a reasonable estimate of SCAN deaths based on the assumption that such deaths are more often the result of actions or the environment established by those responsible for, or in regular contact with those providing for the child's care. Limiting such analysis further to infant deaths probably increases the specificity of the estimates, but would underestimate the magnitude of the problem, particularly as registry-based data suggest that a higher incidence occurs between 2 and 4 years than during infancy.

Physical abuse

The use of the homicide category (B55) as an indicator of death by physical abuse appears to work in some countries but not others. A few countries, such as Colombia, Cuba, Greece and Ireland, consistently fail to report either homicide or deaths from injury of undetermined origin in infants. Other countries classify all infant and young child deaths into known categories of cause, including homicide, while others have varying, sometimes large proportions of deaths from external causes grouped in the category of undetermined cause (B56). While it is accepted that not all deaths either from homicide or undetermined external causes are as a result of physical abuse, the reporting patterns appear consistent over time, and the grouping of homicides and deaths due to undetermined causes appears to give a more consistent

Table 4
Classification of external causes of death of children under 5 years of age as a measure of suspected child abuse and neglect mortality

Tableau 4
Classification des causes extérieures de décès d'enfants de moins de 5 ans comme mesure de la mortalité par maltraitance présumée

Cause of Death – Causes de décès	Intentional – Volontaire	Neglect – Manque de soins	Unintentional – Involontaire
Poisoning (B48) – Empoisonnement (E48)	possible but less likely – possible mais assez peu probable	possible	probable
Falls (B50) – Chute (E50)	possible but less likely – possible mais assez peu probable	possible	probable
Fires (B51) – Incendie (E55)	possible but less likely – possible mais assez peu probable	possible	probable
Homicide (B55) – Infanticide (E55)	most likely – tout à fait probable	unlikely – peu probable	possible but unlikely – possible mais peu probable
Other, unknown (B56) – Autre, inconnue (E56)	very likely – très probable	possible	possible but less likely – possible mais assez peu probable

pattern, with one exception (Chile), for comparison among countries.

There are several advantages in using the categories of homicide and death by external violence from undetermined causes as indicators of child abuse mortality in the under-5 age groups. By combining the two categories one "captures" the cases that might be less likely to be classified as homicide, either because of failure to satisfy full judicial definitions of homicide, or because of the caution or discretion of the medical authorities. The case definition is reasonably clear and unlikely to be confused with other causes of death except perhaps the sudden infant death syndrome (SIDS), which usually has a different clinical pattern and age distribution. Limitation to the under-5 age group covers the period of greatest vulnerability to fatal injury, and minimizes the contribution of other forms of external violence to mortality. Furthermore, the use of these categories as indicators eliminates the requirement of a detailed case-by-case investigation which may be beyond the means or technical capacity of the authorities in many places. The latter, however, should be the goal for all programmes.

Some of the disadvantages of using the homicide and death due to undetermined causes categories as surrogate indicators of child abuse mortality are obvious: in most settings, child abuse deaths constitute an unknown proportion of homicide deaths in children; the case-fatality ratio may vary widely in different countries and communities so that the use of such an indicator for comparative purposes for characterizing the epidemiology of child abuse and neglect should be undertaken only with caution. Finally, in most settings, the age group of greatest vulnerability to fatal injury, i.e., those in the first year of life, does not correspond to the period of highest incidence, in the second to fourth years. The most recent reports available for infant deaths in the categories of homicide and death due to undetermined causes for 64 countries are presented by WHO region in *Table 5*.

A more complete indicator of presumed child abuse mortality would be the cumulative incidence in a cohort of children born in a specific year *(Table 6)*. For analytical and comparative purposes such a cohort analysis should be limited to those under the age of 5 since the patterns of interpersonal violence and of homicide among older children resemble the patterns of the adult population *(5,7)*. Although the data are limited to only three developed countries, they suggest that the cumulative risk of death from presumed child abuse by exact age 5 is two to three times the risk in the first year of life. Applying this figure to the presumed child abuse mortality rate for infants in regions or groups of countries for which there are sufficient data, e.g., the industrialized countries, Latin America, and the Caribbean, at 6.8 *(Table 6)*, the expected cumulative risk of presumed child abuse mortality by age 5 would be between 11 and 20 per 100 000 live births. These estimates are at least 10 times higher than those made either from community-based registers *(3)* or forensic reporting systems *(9)*. In view of the discrepancy between these two levels of estimates, further efforts are required to validate the use of the "presumed rate of child abuse mortality" indicator.

Neglect mortality

Mortality figures do not measure the incidence or prevalence of child neglect, but only deaths from the problem. Death from physical abuse represents a wilful act or series of actions. Death from neglect may arise from wilful behaviour but may also arise from ignorance and irresponsible behaviour. These include failure to recognize hazardous circumstances or children's nutritional, health and developmental needs, and leaving infants and children unattended or inadequately supervised. Thus, in some circumstances, one could interpret deaths from falls, burns and poisoning in children under 5 as neglect-related. Nevertheless, the same behaviour in a hazardous environment may result in death, while in a less hazardous environment the same neglectful behaviour could easily go undetected and without obvious physical consequences. Consequently, the application of the model proposed in *Table 4* would require more research and evaluation before one could apply such an approach to the analysis of the problem of child neglect.

Measuring sexual abuse

Mortality data provide virtually no measure of sexual abuse. In contrast to physical abuse, sexual abuse is defined on the basis of reports by the child or adult victim and not generally confirmed by physical examination. At the same time, whereas sexual abuse is included in many national and regional child abuse registers, it is difficult to ascertain what proportion of the "true" level of sexual abuse comes to the attention of those agencies or individuals maintaining such registers. Estimates of the prevalence or incidence of sexual abuse are derived from surveys of adult populations, child abuse registers, or populations referred for evaluation and treatment following the disclosure of sexual abuse. Data from adult surveys may vary widely according to the methodology used and the manner of formulating the interview questions. The methodological problems are further compounded by the time elapsed since the event, and the operational definition of sexual abuse that is used. Estimates of the magnitude of the problem based on referrals for evaluation and treatment are not reliable since the majority of child victims of sexual abuse do not seek care. At the same time, allega-

Table 5 –Tableau 5

Presumed child abuse mortality for infants based on the ICD classification B55 and B56 for selected countries reporting both B55 and B56 and having at least 50 000 births per year during the period 1985-1990

Mortalité infantile par maltraitance présumée sur la base des rubriques E55 et E56 de la liste de base de la CIM pour certains pays ayant notifié à la fois les rubriques E55 et E56 et ayant eu au moins 50 000 naissances par an au cours de la période 1985-1990

Country and region Pays et régions	Births per year (in thousands) per 100 000 live births less than 1 year Naissances par an (en milliers) pour 100 000 naissances vivantes	Homicide deaths – age less than 1 year Décès par infanticide – nourrissons de moins d'un an	Homicide rate for infants less than 1 year per 100 000 live births Taux d'infanticide chez les nourrissons de moins d'un an pour 100 000 naissances vivantes	Number of deaths from injury of undetermined origin – age less than 1 year Nombre de décès par traumatismes d'origine indéterminée – nourrissons de moins d'un an	Presumed child abuse death rate of infants under one year per 100 000 live births Taux de décès par maltraitance présumée chez les nourrissons de moins d'un an pour 100 000 naissances vivantes
AMERICAS –AMÉRIQUES					
Argentina – Argentine	698.9	36	5.2	52	12.5
Brazil – Brésil	2647.5	54	2.0	129	6.9
Canada	371.2	8	2.2	2	2.7
Chile – Chili	269.9	5	1.9	121	46.7
Colombia – Colombie	783.7	0	0.0	0	0.0
Costa Rica	80.5	2	2.5	1	3.7
Cuba	182.1	0	0.0	0	0.0
Ecuador – Equateur	338.4	4	1.2	0	1.2
Mexico – Mexique	2414.7	69	2.9	47	4.8
Panama	56.6	2	3.5	2	7.1
Puerto Rico – Porto Rico	75.3	3	4.0	8	14.6
United States of America – Etats-Unis d'Amérique	3945	335	8.5	51	9.8
Uruguay	56.6	1	1.8	1	3.5
Venezuela	540.2	6	1.1	11	3.1
EASTERN MEDITERRANEAN – MÉDITERRANÉE ORIENTALE					
Egypt – Egypte	1735	0	0.0	248	14.3
Iran-cities – Iran-villes	454.9	1	0.2	10.5	2.5
Kuwait – Koweït	52.9	1.3	2.5	0	2.5
WESTERN PACIFIC – PACIFIQUE OCCIDENTAL					
Australia – Australie	145.4	8	5.5	0	5.5
Hong Kong	77.6	1.6	2.1	0	2.1
Japan – Japon	1209.4	50	4.1	39	7.4

Table 5 –Tableau 5 *(continued – suite)*

Country and region Pays et régions	Births per year (in thousands) per 100 000 live births less than 1 year Naissances par an (en milliers) pour 100 000 naissances vivantes	Homicide deaths – age less than 1 year Décès par infanticide – nourrissons de moins d'un an	Homicide rate for infants less than 1 year per 100 000 live births Taux d'infanticide chez les nourrissons de moins d'un an pour 100 000 naissances vivantes	Number of deaths from injury of undetermined origin – age less than 1 year Nombre de décès par traumatismes d'origine indéterminée – nourrissons de moins d'un an	Presumed child abuse death rate of infants under one year per 100 000 live births Taux de décès par maltraitance présumée chez les nourrissons de moins d'un an pour 100 000 naissances vivantes
New Zealand – Nouvelle-Zélande	57.6	46	9	0	6.9
Rep. Korea – République de Corée	664.2	2	0.3	0	0.3
Singapore – Singapour	50.4	1	2.0	1	4.0
SOUTH EAST ASIA – ASIE DU SUD-EST					
Sri Lanka	433.3	8	1.8	7	3.5
Thailand – Thaïlande	843.4	6	0.7	3	1.1
EUROPE					
Austria – Autriche	92.1	3	3.3	1	4.3
Belgium – Belgique	116.1	5	4.3	0	4.3
Bulgaria – Bulgarie	107.2	4	3.7	1	4.7
Czechoslovakia – Tchécoslovaquie	207.4	14	6.8	7	10.1
Denmark – Danemark	62	2	3.2	3	8.1
Finland – Finlande	64.2	3	4.7	1	6.2
France	750.7	13	1.7	10	3.1
Germany – Allemagne	901.7	25	2.8	7	3.5
Greece – Grèce	104.2	0	0.0	0	0.0
Hungary – Hongrie	122.7	75	7	0	5.7
Ireland – Irlande	50.8	0	0.0	0	0.0
Italy – Italie	567.2	1	0.2	1	0.4
Netherlands – Pays-Bas	192.4	4	2.1	0	2.1
Norway – Norvège	59.9	1	1.7	0	1.7
Poland – Pologne	552.5	8	1.4	5	2.4
Spain – Espagne	414.6	0	0.0	1	0.2
Sweden – Suède	113.9	1	0.9	0	0.9
Switzerland – Suisse	81.9	2	2.4	2	4.9
USSR – Russie	4868.1	148	3.0	275	8.7
United Kingdom – Royaume-Uni	775.5	8	1.0	22	3.9

Table 6 — Tableau 6
Cumulative rate through age 4 of presumed child abuse mortality of the cohort of children born in 1985 and 1986 for Czechoslovakia, Hungary and the United States of America

Risque cumulatif de mortalité par maltraitance jusqu'à l'âge de 4 ans dans une cohorte d'enfants nés en 1985 et 1986 aux Etats-Unis d'Amérique, en Hongrie et en Tchécoslovaquie

Country, year of birth Pays et année de naissance		Presumed child abuse death rate of infants under 1 year per 100 000 live births Taux de décès par maltraitance présumée chez les nourrissons de moins d'un an pour 100 000 naissances vivantes	Cumulative presumed child abuse death rate up to age 5 years per 100 000 live births Risque cumulatif de mortalité par maltraitance jusqu'à 5 ans pour 100 000 naissances vivantes
Czechoslovakia – Tchécoslovaquie	1985	7.6	13.6
	1986	5.9	11.0
Hungary – Hongrie	1985	12.0	17.1
	1986	12.6	19.3
United States of America – Etats-Unis d'Amérique	1985	6.8	18.7

tion of sexual abuse is neither always true nor easily substantiated. In a prospective study based on the mandatory reporting system in New York State, about 40% of reports of sexual abuse were substantiated *(10)*. Reports that were not mandated had a significantly lower rate of substantiation.

The presence of a sexually transmitted disease (STD) in a child has been suggested as an objective measure of sexual abuse *(11)*. While the isolation of a microorganism, such as *Neisseria gonorrhoea,* from the genital or anal tract of a child may be construed as evidence of sexual abuse, other infections may be less specific and cannot be taken as presumptive evidence *(12)*. Furthermore, in instances where large registers of child sexual abuse have been maintained, the diagnosis of an STD usually occurs in no more than 1-2% of cases or cultures taken *(3,13,14,15)*. In order to use age-specific infection rates for country comparisons and to take account of the variation in STD patterns between such countries, some authors have proposed using the ratio of pediatric gonococcal (GC) infection cases to 1 000 adult male GC cases *(11)*. The overall ratio was 4.6 in that study. The incidence rate for GC in children 1 month through 9 years was 11 per 100 000 (18.2 for girls and 4.1 for boys). Using the figure of 1% of sexual abuse cases having a positive isolation of GC, the overall annual incidence rate of sexual abuse in the latter population would be around 1%.

Surveys of adults in several industrialized countries suggest that 10 to 15% of children are victims of sexual abuse *(16)*. The surveys of adults reporting sexual abuse rarely provide an indication of the age at which abuse occurred. However, several of the community-based registers and larger community-based studies describe a bimodal distribution with peak occurrences from 2 to 4 and from 12 to 15 years of age *(3,10,11,12)*. While all reports indicate that the majority of victims of sexual abuse are girls, this difference is less pronounced in the younger age group.

Discussion

The use of "presumed child abuse mortality" data, though available and easily defined and assuming that further research establishes its validity, provides a picture of only the severest form of child abuse and neglect. Alone, such data are insufficient to define the nature of the problem in any community, or to monitor progress in programmes designed to address the problem. Child abuse deaths are rare events. With the presumed child abuse mortality rates for infants in most countries at around 6 to 7 per 100 000 live births, such data provide a global estimate and a notion of the size of the "tip of the iceberg." The size of the "hidden" portion of the problem is still ill-defined and may vary from setting to setting. The observation that the presumed child abuse mortality (PCAM) rate for infants rose from 6.8 to 9.8 per 100 000 live births in the United States, but fell from 4.2 to 0.9 per 100 000 in Sweden from 1985 through 1989 could be interpreted as improved reporting, an increase in the case-fatality ratio, or an overall increase in the problem in the United States, and in Sweden as a lowering of the case-fatality rate or a decline in the overall problem. Until the case-mortality can be related to the incidence of child abuse, use of presumed child abuse mortality rates will not provide an accurate measure of the magnitude of child abuse and neglect in general.

Summary

Child abuse and neglect include four distinct conditions: physical abuse, neglect, emotional abuse and sexual abuse. The magnitude of the problem is not well defined.

The lack of epidemiological data limits the extent to which sound public health and social welfare policies and intervention programmes could be developed, implemented and evaluated. In recent years two approaches have been developed to document the magnitude and nature of child abuse and neglect: regional or national case registers; and a screening instrument for suspected cases of child abuse and neglect (SCAN) for use in health service facilities. We are proposing an additional approach for monitoring presumed child abuse and neglect-related mortality. Applying this approach to regions or groups of countries for which there are sufficient data, the expected under-5 rate of presumed child abuse and neglect would be between 13 and 20 per 100 000 live births. These estimates are higher than those made either from community-based registers or forensic reporting systems. Differences in these estimates will need to be resolved through further research.

Injury and injury-related mortality can be classified as intentional, unintentional or resulting from varying degrees of neglect. Death from physical abuse represents a willful act or series of actions. Death from neglect may arise from wilful behaviour but may also arise from ignorance and irresponsible behaviour. These include failure to recognize hazardous circumstances or children's nutritional, health and developmental needs, and leaving infants and children unattended or inadequately supervised. Mortality data provide virtually no measure of sexual abuse. In contrast to physical abuse, sexual abuse is defined on the basis of facts reported by the child victim or an adult which are not generally confirmed by physical examination. Estimates of either the prevalence or incidence of sexual abuse are derived from surveys of adult populations, child abuse registers or populations referred for evaluation and treatment following the disclosure of sexual abuse. Data are presented on the levels of presumed child abuse and neglect mortality for 64 countries and territories for which recent data are available. For several countries, time trends are presented in the cumulative 5-year rate of presumed child abuse and neglect of mortality. The methodological issues in assessing the levels of child abuse and neglect are discussed.

Résumé

La maltraitance des enfants: mesurer un problème mondial

La maltraitance comprend quatre catégories distinctes: les violences physiques, le manque de soins, les violences psychologiques et les abus sexuels. On connaît mal l'ampleur du problème et le manque de données épidémiologiques ne permet pas de bien formuler, appliquer et évaluer des politiques de santé publique et de protection sociale et des programmes d'intervention valables. Ces dernières années, deux méthodes ont été élaborées pour documenter l'ampleur et la nature de la maltraitance: les registres régionaux ou nationaux de cas et un instrument de dépistage des cas suspects de maltraitance à l'usage des établissements de santé. Nous proposons une nouvelle approche pour déterminer la mortalité par maltraitance présumée. Si l'on applique cette approche aux régions ou groupes de pays pour lesquels on possède des données suffisantes, le taux prévisible des cas de maltraitance chez les enfants de moins de 5 ans se situe entre 13 et 20 pour 100 000 naissances vivantes. Ces estimations sont supérieures à celles qui ont été faites à partir soit des registres communautaires, soit des rapports de médecins légistes, et des recherches plus poussées devront être entreprises pour expliquer ces différences.

La mortalité directement ou indirectement liée aux traumatismes peut être classée comme intentionnelle, accidentelle ou résultant d'un manque de soins à des degrés divers. La mort par violence physique provient d'un acte ou d'une série d'actes intentionnels, tandis que la mort par manque de soins peut être la résultante aussi bien d'un comportement intentionnel que de l'ignorance ou de l'irresponsabilité — on ne sait pas reconnaître les situations dangereuses, on ne connaît pas les besoins de l'enfant au niveau de la nutrition, de la santé et du développement, on laisse les nourrissons et les enfants seuls ou mal surveillés. Les données sur la mortalité ne fournissent pratiquement aucune indication de l'importance des abus sexuels qui, contrairement aux sévices physiques, sont définis sur la base de faits relatés par la jeune victime ou par un adulte et qui ne sont pas confirmés de façon générale par l'examen physique. Les estimations de la prévalence ou de l'incidence des abus sexuels sont dérivées d'enquêtes sur les populations adultes, des registres sur les enfants maltraités ou de l'examen et d'un traitement des personnes en cause après la divulgation d'abus sexuels. Des données sur le niveau de la mortalité présumée par maltraitance dans 64 pays et territoires pour lesquels on dispose de chiffres récents sont présentées dans cet article. L'évolution sur une certaine période est également indiquée pour plusieurs pays ainsi que le risque cumulatif de mortalité par maltraitance à l'âge de 5 ans. Enfin, les problèmes de méthodologie que pose l'évaluation de l'ampleur de la maltraitance sont analysés.

References/Références

1. **Lynch, M.** Child Abuse before Kempe: An historical literature review, *Child abuse and neglect*, **9:** 7-15 (1985).
2. **Kempe, C.H. et al.** The battered child syndrome. *Journal of the American medical association*, **181:** 17-24 (1962).
3. **Creighton, S.J.** *Child Abuse Trends in England and Wales 1988-1990: And an Overview from 1973-1990*, National Society for the Prevention of Cruelty to Children, London, 1992.
4. **National Committee for Prevention of Child Abuse.** *World Perspectives on Child Abuse: An International Resource Book*, National Committee for Prevention of Child Abuse, Chicago, Illinois, 1992.
5. **Wishner, A.R. et al.** Interpersonal violence-related injuries in an African-American Community in Philadelphia, *American journal of public health*, **81:** 1474-1476 (1991).
7. **Pless, I.B. et al.** A reappraisal of the frequency of child abuse child abuse seen in pediatric emergency rooms, *Child abuse and neglect*, **11:** 193-200 (1987).
8. **Brieting, V.B. et al.** Injuries due to deliberate violence in areas of Denmark. V. Violence against women and children. Copenhagen Study Group. *Forensic science international*, **41:** 285-294 (1989).
9. **Adelson, L.** Pedicide revisited. The slaughter continues, *American journal of forensic medicine and pathology*, **12:** 16-26 (1991).

10. **Merrick, J.** Child abuse and the lack of care. 2. An epidemiologic and social pediatric study of fatal child abuse and neglect in Denmark in 1970-1979, *Ugeskr. Laeger*, **151:** 874-877 (1989).
11. **Eckenrode, J. et al.** The nature and substantiation of official sexual abuse reports, *Child abuse and neglect*, **12:** 311-319 (1988).
12. **Desenclos, J-C. A. et al.** Pediatric gonococcal infection, Florida, 1984 to 1988, *American journal of public health*, **82:** 426-428 (1992).
13. **Estreich, S. & Forster, G.E.** Sexually transmitted diseases in children: Introduction, *Genitourinary medicine*, **68:** 2-8 (1992).
14. **Cupoli, M.C. & Sewell, P.M.** One thousand fifty-nine children with a chief complaint of sexual abuse, *Child abuse and neglect*, **12:** 151-162 (1988).
15. **Dube, R. & Hebert, M.** Sexual abuse of children under 12 years of age: A review of 511 cases, *Child abuse and neglect*, **12:** 321-330 (1988).
16. **Merrick, J.** Child abuse and the lack of care. 1. An epidemiologic study from the Danish forensic officers, Institute of Forensic Medicine and the Medico-legal Council during 1970-1979, *Ugeskr. Laeger*, **151:** 870-874 (1989).
17. **Feldman, W. et al.** Is childhood sexual abuse increasing in prevalence? An analysis of the evidence, *Pediatrics*, **88:** 29-33 (1991).