



The Economic Burden of Child Maltreatment in High Income Countries

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Maltreatment is a common cause of children's functional and emotional impairment.¹ Costs for the society are high, as a substantial amount of resources have been allocated for various types of services connected to maltreatment of children. These include acute treatment, long-term care, family rehabilitation programs, and judiciary activities.^{1,2} There is a long-lasting debate on how child abuse could be prevented or reduced. How can the costs of related services be contained? What is the role of pediatricians in such efforts? This article raises these important questions within the framework of the debate opened by the article by Gerber-Grote et al regarding the role of health economics in improving children's health care.³

Prevalence Rates in High Income Countries

Child maltreatment, also referred to as child abuse and neglect, includes all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that result in actual or potential harm to the child's health, development, or dignity, specifically in individuals between 0 and 18 years of age.⁴ It is estimated that, globally, 1 in 15 individuals under the age of 18 years are subjected to maltreatment annually.⁵ The comparison of child maltreatment prevalence rates and related statistics between nations is difficult because of many factors, including different legal frameworks and recording systems. However, it is recognized that this is a largely widespread phenomenon involving approximately 150 million individuals worldwide, in both low and high income countries.^{5,6} Considering the latest data from the European Union, maltreatment prevalence rates were reported to be 11.2% and 9.5%, respectively, in United Kingdom and Italy, statistics which are similar compared with data from the US (12.1%) and Canada (9.7%).^{7,8} Unfortunately, in many economically developed areas around the world, including the countries of Brazil, Russia, India, and China,⁹ statistics on the prevalence of maltreatment in children and adolescents have not been standardized, making reliable cross-national and cross-continental comparisons difficult.¹⁰

Costs of Child Maltreatment in High Income Countries

Recent studies and data analyses from different countries have reported that the costs for medical treatments, social rehabilitation programs, justice, and long-term support plans for maltreated children lead to an increase of public

expenses, which could be preventable. Implementation of preventive programs, improvement of medical care quality, and rationalization of health and social services are among the measures suggested to contain the costs.^{7,8,11}

Data from the US indicate that child maltreatment represents a serious public health and socioeconomic problem for high income countries.¹¹ The US Centers for Disease Control and Prevention reported 580 740 cases of child maltreatment in 2011, including fatal (n=1740) and non-fatal cases.¹¹ The striking economic analysis presented in that report estimated the total financial burden caused by child maltreatment to be approximately \$210 000 over the lifetime for each victim who survives, with a conservative estimated total cost of \$124 billion a year. Such figures include child and adult health care-related costs, child welfare, productivity losses, criminal justice costs, as well as special education, and have been reported to be comparable with the total lifetime costs per individual, related to other important illnesses, such as stroke (\$159 846) and type 2 diabetes (\$181 000-\$253 000).¹¹

In Europe, the situation is not dissimilar to the one observed in the US. The average economic and social costs of child maltreatment in Europe were estimated by the European Commission to be approximately 4% of the European countries' gross domestic product (GDP) each year.¹² This figure includes child health care, social welfare, justice, and loss of productivity costs. The *European Report on Preventing Child Maltreatment* estimates that altogether sexual, physical, and mental abuses affect 117 million children under 18 years of age.¹² Furthermore, the report suggests that maltreatment causes about 850 deaths per year in children under the age of 15 years. These figures seem to be an underestimation. This is due to many reasons, including the fact that pediatricians often experience difficulties in recognizing child abuse, mostly because of a lack of proper training in this matter, and to the possibility that they may fail to report child maltreatment because of the social and legal consequences of such diagnosis.¹²

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Of course, socioeconomic costs are different for each type of abuse, and usually reflect the general, social, economic, and health conditions within the states and their local communities, as well as the differences of public health programs among countries in general. Saied-Tessier reported that the total annual cost of child sexual abuse was £3.2 billion in the United Kingdom.¹³ This included criminal justice system costs (£149 million), services for children (£124 million), child depression (£1.6 million), child suicide and self-harm (£1.9 million), adult mental and physical health care (£178 million), and loss of productivity (£2.7 million).¹³ In Germany, childhood trauma as a consequence of abuse was also reported to be a relevant economic problem, and the trauma follow-up costs were estimated to be in the range of €11.1 billion to €29.8 billion, approximately €134.8 and €363.5, respectively, apiece for the German population.¹⁴

A recent study by Bocconi University, based on the official data reported in 2010 by the Italian Ministry of Health, investigated the overall costs of child abuse for the Italian Public Health system.^{7,15} The study reported a total of 100 231 maltreated children in Italy, and the costs related to maltreatment to be €13.1 billion per year, including direct and indirect costs. Direct costs included hospitalization (€49.6 million), mental health care (€21 million), welfare, facilities, and residential services (€163.8 million), foster care (€12.6 million), professional social work (€38 million), and juvenile justice (€53.4 million). Indirect costs included child special education (€209.8 million), adult and juvenile crime (€690.4 million), adult health care (€326.1 million), and loss of productivity (€6.6 billion). In summary, for each victim, Italy spends approximately €130 259, and each year the new cases of child maltreatment have a total cost of €910 million.

Contrasting Child Maltreatment

As healthcare costs continue to skyrocket, prevention programs are considered a correct cost-effective approach for contrasting child maltreatment.^{16,17} In fact, economic analyses have demonstrated the value and the cost-effectiveness under limited resources of preventive services because the costs incurred as a result of the services provided divided by the health outcomes achieved had a favorable balance.¹⁷⁻¹⁹

Prevention of child maltreatment should become a priority within child health programs worldwide. Public health preventive interventions in this area should include the strengthening or development of health care services adequate to deal with child maltreatment, and training programs for health care personnel, including pediatricians during their residency period. In particular, it has been suggested that preventive programs should put particular focus on risk factors.⁶ These include poverty, large families with low income, poor parenting social and communication skills, early parenting, parental mental health problems, parental drugs and alcohol abuse, parents who were themselves abused or neglected during childhood, domestic violence, social isolation, and marginalization.⁶

Effective prevention programs for child maltreatment are based on close interactions between State institutions, such

as Public Health, Education, and Law, and should be supported by appropriate public information programs, which can play an indisputable role in raising awareness of child maltreatment. Accurate information on the positive role of prevention programs on long-term costs and outcomes is important to help such programs make their case to civil society and policy makers.

Conclusions

Child maltreatment has a serious socioeconomic impact on society in Europe and other parts of the world.⁶ It has been demonstrated that victims develop negative outcomes, such as mental and physical health problems and behavior disorders, such as anxiety, depression, and suicidal ideation. Furthermore, destructive interpersonal relationships and delinquency were also frequent findings in these subjects.⁶ The currently available analyses show that the high long-term costs that are related to maltreatment during childhood represent a major economic challenge, which expands its impact with a long time horizon by involving various areas of child and adult health care and the social system in general, including hospitalization, mental health services, child welfare, education, socioeconomic productivity, and justice.^{7,15}

Among the 28 European Union countries, there are concerns regarding the financial resources allocated to preventive public social services, as it has been shown that the effectiveness of such services in the European Union is significantly influenced by insufficient funding.²⁰ In particular, a study on national policies by the European Commission has recently emphasized the absence of specific recommendations regarding children services and the scarcity of preventive programs, which are modestly supported by the member states, and insufficient for breaking the cycle of disadvantages.²¹ In such perspective, there is a real risk that insufficient investment in prevention will increase future demand for child health and care services when the overriding challenge is to reduce it.²²

Contrasting child maltreatment has both strong ethical and economic implications, and raising attention on this phenomenon is a contribution to the debate recently opened on how to develop proper economic models aimed at improving children's health, within the frame of the "5 rights" of protection, prevention, provision, promotion, and participation emphasized by the Council of Europe.³ ■

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