

# Medical Neglect Towards Children: Causes, Impacts, Prevention

## Çocuğa Yönelik Tıbbi İhmal: Nedenleri, Etkileri ve Önlenmesi

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**ABSTRACT** The concept of neglect is defined as the failure of adults to meet the needs, ensure the well-being and protect the children whose care is their responsibility. It is classified as a type of child maltreatment and is grouped into 6 categories, namely physical, cognitive, supervisory, cognitive, educational and medical neglect. Medical neglect is of significant importance due to its probable consequences and is defined as the failure to provide medical care and the inability to meet the child's basic health needs. While some cases of medical neglect may emerge due to reasons such as the loss of family function as a result of domestic violence, poverty, parental mental health issues, or parents use of drugs and alcohol, in some cases, it occurs when the parents or caregivers actively reject the administration of medical care to the child. It can lead to severe health problems and even fatality and emerges as a public health concern. Despite the fact that the concept of medical neglect towards children is assessed within the scope of child abuse and neglect, it is of crucial importance to evaluate its origins and consequences within its own dynamics. Considering that the concept has become a severe social problem, the realization of preventive programs becomes a necessity. Within this context, in this study, the subject of medical neglect towards children will be addressed and suggestions for prevention will be made in line with its causes and effects.

**ÖZET** Erişkin bireylerin bakmakla yükümlü oldukları çocuklarının iyilik hallerini sağlamak, ihtiyaçlarını karşılamak ve korumakta yetersiz kalmaları durumu olarak tanımlanan ve çocuk istismarı türlerinden biri olan çocuk ihmal kavramı, genel olarak duygusal, fiziksel, denetimsel ve bilişsel ihmal; eğitimin ihmali ve tıbbi ihmal olmak üzere 6 gruba ayrılmaktadır. Olası sonuçları açısından ele alındığında önemle üzerinde durulması gereken bir ihmal türü olarak ortaya çıkan tıbbi ihmal kavramı; çocuk için gerekli olan tıbbi bakımın temin edilmesinde yetersizlik, çocuğun zarar göreceği biçimde temel sağlık bakımı gereksinimlerinin karşılanamaması ve devam ettirilememesi gibi durumlar olarak tanımlanmaktadır. Bazı tıbbi ihmal olguları, aile içi şiddet, yoksulluk, ebeveyn ruh sağlığı sorunları, ebeveynin uyuşturucu ve alkol kullanımı sonucunda aile işlevlerinin bozulması gibi nedenlerle ortaya çıkabilirken, bazı durumlarda ise ebeveynler veya bakım verenler tarafından çocuklar adına tıbbi tedavinin aktif olarak reddedilmesi sonucu gerçekleşmektedir. Sonuçları açısından çocuğun sağlığının bozulmasına ve hatta ölümüne yol açabilmekte, yaygınlığı giderek artan bir halk sağlığı sorunu olarak görülmektedir. Çocuğa yönelik tıbbi ihmal kavramının, çocuk istismarı ve ihmal kapsamında ele alınmakla birlikte, ortaya çıkış nedenleri ve sonuçları bakımından kendi dinamikleri içinde değerlendirilmesi önem taşımaktadır. Olgunun önemli bir sosyal soruna dönüştüğü kabul edilecek olursa, önleyici programların hayata geçirilmesine büyük ihtiyaç duyulmaktadır. Bu noktadan hareketle bu çalışmada, çocuğa yönelik tıbbi ihmal kavramının üzerinde durulacak, nedenleri ve etkileri doğrultusunda tıbbi ihmal önlemeye ilişkin öneriler sunulacaktır.

**Keywords:** Child; medical neglect; causes; impacts; prevention

**Anahtar Kelimeler:** Çocuk; tıbbi ihmal; nedenler; etkiler; önleme

The family has a crucial role in the healthy development of a child. Starting from birth, children's basic needs should be met, all developmental areas need to be fostered and they need to be educated in light of their needs.<sup>1,2</sup> During this process, families may experience inadequacies in meeting their child's

needs sufficiently and on time. In this regard, the concept of child neglect is defined as when parents and adults are inadequate in maintaining the well-being and safety of the children for whom they are responsible as well as meeting their basic needs and is classified as a type of child abuse.<sup>3</sup> Beyazova, on the

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other hand, defines child neglect as the situation where the child's development and health are negatively affected as a result of the individual who is responsible for the child's care not sufficiently meeting the child's emotional, physical and cognitive needs.<sup>4</sup> While abuse means "harming the child", neglect means "not doing the thing that is good for the child". In other words, abuse is defined as an active action, whereas neglect is a passive action.<sup>5</sup>

It is reported that the cases of neglect that emerge together with abuse are ten times more common, it is seen in all social strata, and poor children are exposed to more abuse than other children.<sup>6</sup> Children from all ages are exposed to neglect. However, younger children are at greater risk of losing their lives as they are more vulnerable and cases are difficult to reveal. It is stated that millions of cases of exist around the world that are believed to carry the risk of child abuse and neglect; however, only about one third of these cases are diagnosed and officially recorded.<sup>7</sup> UNICEF has described child abuse and neglect as a global issue in modern society and reported that this issue is widely seen in both developing and developed countries.<sup>8</sup> In its report on child abuse and neglect, the World Health Organization (WHO) reported that one out of every two children was exposed to maltreatment every year, 41,000 children under the age of 15 lose their lives as a result of the maltreatment to which they are exposed.<sup>9</sup> As for the cases in Turkey, according to the Children under the Risk in Turkey report published by TOÇEV (Tuvana Association for Children Eager to Read) in 2019, 137,482 children came or were brought to security units as victims.<sup>10</sup> The report, which was based on Turkish Statistical Institute data for 2017, also stated that the data had not been updated, meaning that it was not possible to access data for the previous two years; this underlines the fact it is extremely challenging to access the official numbers regarding child abuse and neglect. While the report included numbers and assessments regarding the cases of physical, emotional and sexual abuse, no information was provided on the cases that can be diagnosed as neglect.

Different from the cases of abuse, it is reported that it is difficult to differentiate cases of neglect as it generally occurs in a chronic manner and various

types of neglect are often seen together.<sup>11,12</sup> Child neglect, which is generally grouped under different headings as emotional, physical, supervisory and cognitive neglect, is a very broad concept. Parents are primarily responsible for meeting the child's medical needs as much as other basic needs; hence, not meeting the child's basic medical needs is also considered to be a type of neglect. Cases of medical neglect are also important as they can have consequences that present the same level of risk to life as the outcomes of other types of neglect.<sup>13</sup> In this regard, the concept of medical neglect, which first emerges within the family, is defined as parents and care givers being inadequate in terms of seeking the medical care needed for the child despite having sufficient financial resources, or not meeting the child's basic health care needs in a way that could cause harm.<sup>14</sup> On the other hand, the American Pediatric Association defined medical neglect as cases where parents or caregivers do not clearly recognize the signs of severe illness or do not follow a doctor's orders after receiving medical advice.<sup>15</sup> In order for a case to be evaluated as medical neglect, the child must have been harmed or at risk of being harmed due to insufficient health care; the recommended medical procedures and treatments should be necessary for the child's health care, the benefits of the medical procedures and treatments should be more than their unwanted negative affects; the child does not benefit from health care services despite them being available and accessible and the caregiver fully understanding the scope and significance of the recommended procedures and treatment.<sup>16</sup> According to the US Department of Health Child Protective Services, medical neglect occurs in two ways. The first one is when the parent or legal guardian does not seek appropriate medical care for a serious health problem in a timely manner, while the second one is the recommendations of medical professionals for the treatment of the child's physical injury, disease, medical condition or disorder are not followed. In line with these definitions and criteria, the cases of medical neglect recorded in the United States account for 2.3% of all cases involving the maltreatment of children.<sup>17</sup> According to the U.S. Administration on Children, Youth and Families Bureau, there were more than 5,000 reports for medical neg-

lect in the United States in 2018.<sup>18</sup> However, it is highlighted that this rate is low as only the most horrifying and difficult cases are reported to the authorities. In a study by Parmeter et al., it was found that out of all the cases reported to the Child Protective Services, 4.1% were medical neglect cases, and the majority of these cases involved the caregivers not following the recommendations of health professionals (45.9%) and not being able to provide adequate health care (26.2%).<sup>19</sup> In another study by Fortin et al. in which the reasons for medical neglect and features of children reported to Child Protective Services were evaluated, it was stated that in 90.9% of the cases, the child's medical condition was chronic, while in 9.1% of cases, it was acute.<sup>20</sup>

Although medical neglect shares similar foundations with other types of child neglect, it may also emerge with its own unique dynamics. While some cases of medical neglect may emerge due to reasons such as the loss of family function as a result of domestic violence, poverty, parental mental health issues, or parents use of drugs and alcohol, in some cases, it occurs when the parents or caregivers actively reject the administration of medical care to the child.<sup>21</sup> It is highlighted that believing in non-medical alternative treatments also causes medical neglect.<sup>22,23</sup> For instance, in some cases, the parent or adult responsible for the child's care may prefer to end the medical treatment due to lifestyle preferences or beliefs.<sup>24</sup>

The mother's use of tobacco, alcohol or substances, not receiving the necessary medical care, not receiving sufficient nutrition during pregnancy, and not taking the baby to regular health check-ups after birth are listed as examples of medical neglect.<sup>4</sup> The mother not receiving sufficient nutrition, using harmful substances and not receiving necessary medical care are defined as examples of "intrauterine neglect", which refers to the neglect of an unborn baby. The neglect of an unborn baby influences the intrauterine development of the baby as well as the post-natal health of the child.<sup>5</sup> Parents not taking the child to the doctor on time despite the child being hurt or injured, not getting the child vaccinated, not properly giving prescribed medications for the treatment of the child or giving the medication in a way that

would delay the child's recovery are evaluated within the scope of medical neglect.<sup>25</sup>

## REASONS FOR MEDICAL NEGLECT

Child neglect is described as an ecosystem emerging from the combination of multiple risk factors.<sup>26,27</sup> When these risk factors are reviewed, it is suggested in the literature that there are various common factors related to neglect, such as child, family, environment and culture. The risk factors determined in terms of child neglect are believed to also pose a risk for medical neglect, which is a dimension of child neglect. The limited number of studies on determining medical neglect may cause difficulties in terms of specifically identifying the risk factors for medical neglect. Although no studies have been on the reasons for child medical neglect in Turkey, the affecting factors for medical neglect are stated as follows in various publication from the United States:

## PATIENT AND PARENT FACTORS

*Poverty or Financial Difficulty;* it is reported that many families experience problems due to the lack of sufficient financial resources for the care of children with acute or chronic diseases. For some parents, making time to take care for their sick child leads to a reduction in income and even the loss of employment.

*Lack of Access to Care Services;* it is estimated that the number of children without health insurance in the United States is between 8.7 and 11.1 million. Also, among the other reasons that cause difficulty to access medical services are geographical limitations (such as long distances for care and lack of access), lack of adults to take over siblings' care, lack of available health experts and linguistic barriers. As for Turkey, it is seen that access to health care services varies according to the patients' individual and demographic features. Difficulties in meeting health care needs can be experienced due to various reasons such as being deprived of health insurance, unbalanced distribution of human resources and technical equipment in different areas, cost of travel expenses, and payment challenges. The levels of unmet health needs are particularly high among women and individuals with low income and education levels.

*Disordered Family Structure*; it is underlined there is inconsistent interaction within some families due to a lack of order and routine in their lives. It is reported that in such families, parents do not behave appropriately in cases of medical emergency, and have difficulty in meeting the needs of children with chronic diseases that require medication and treatment.

*Lack of Awareness, Knowledge or Skill*; sometimes, parents may not be aware of symptoms that may indicate serious diseases in their children; they also may not fully comprehend why a certain medication or treatment is requested or why following a doctor's orders is important.

*Mistrust to Health Professionals*; some families may reject medical help due to mistrust in doctors or medical approaches as a result of what they hear from friends or the media or their previous negative health care system experiences.

*Parent-based deficiencies*; some parents being inadequate in terms of their mental or physical health may cause problems in recognizing the child's health care needs. Additionally, in Turkish culture, grandparents play an important role in the family social support system. Hence, within this system, there can be inconsistent approaches between the parents and the grandparents regarding the decisions made and practices of child care; grandparents not adapting to the decisions and approaches adopted for the child's care and education by the parents is a frequently observed problem.

*Parents' Belief System*; some parents who reject medical care due to their beliefs have certain expectations, such as hoping to be treated through religious practices. The parent of the child with a serious disease may decide to trust in untested medications or alternative treatments.

*Child's Attitudes and Behavior*; in some cases, especially when the patient going through puberty, the child might reject medical treatment. Children may not cooperate, argue for their independence or use the disease to attract attention from their parents. Children might be influenced by their peers and may not want to accept the fact that they are sick and require treatment.

## DOCTOR-BASED FACTORS

*Misunderstanding of Different Cultures by the Doctors*; it is important for pediatricians to be aware of families' beliefs and practices regarding medical neglect. If the children are in danger, the doctors need to make the necessary interventions to protect the children even if the parents believe they are making the right decisions. Additionally, pediatricians try their best to understand parents' perspectives and cultural sensitivities so that they can train the families more effectively regarding the disease process. It is reported that, in some cultures, adolescents are encouraged to make their own decisions regarding medical care. It is reported that in situations where adolescents make decisions that could pose a danger for themselves, the parents should be informed about the possible consequences of such decisions and should be guided towards trying to convince their children.

*Parental Health Literacy and Lack of Communication in the Medical Setting*; the communication between pediatricians and parents might be affected by the parents' level of health literacy. Health literacy is defined by the US Department of Health and Human Services as the "individual's level of receiving, processing and understanding capacity regarding basic health information and services in order to make suitable medical decisions". Parents generally have difficulty in understanding complex medical instructions and explanations for why the treatment should be given. Similarly, doctors may not clearly report or sufficiently evaluate caregivers' understanding of complex medical instructions and the judgments needed for the treatment. If the parents and the doctors do not speak the same language, this may also impair the communication. In such situations it might be beneficial for the doctor to give the treatment to the patient in a written format.<sup>16,28-30</sup>

It should be noted that the studies on the reasons of medical neglect towards children are very limited. The factors discussed above partly rely on empirical evidence along with personal experiences of health care professionals. It might be helpful to stress the multidimensional nature of medical neglect through a number of cases from the relevant literature. In a case report of Ertem et al., the medical history of a 4-

year-old boy living in Turkey who had been diagnosed as acute lymphoblastic leukemia was discussed in terms of the reasons and management of medical neglect. In the case, it was reported that the boy had received chemotherapy for a while, but the family rejected a further treatment and took the child back to home, ending all the interventions and treatment. The child was reported to live without treatment for 10 months, until severe symptoms of heart failure and fever have occurred. The child was brought back to hospital by the parents, but they were not cooperative with the treatment team and refused to obtain some documents to provide the medication for the child. Despite the fact that the family was living poverty, all of the family members had health insurance as the father was a retired employee. An examination of the family history revealed that the two other siblings were also at risk of being neglected by the parents and the father was suffering from alcoholism. The treatment team concluded that the case was a severely life threatening incidence of medical neglect which needed to take immediate actions such as supporting and encouraging the parents in terms of their beliefs, concerns and experiences about the treatment procedure, besides the urgent notification of the local child protection and social services. The case was argued to be an example of cultural beliefs and defective parental systems which may have paved the way for medical neglect of a child in a developing country.

In a more recent case, Geffken et al. reported a fatal incidence of child with insulin-dependent diabetes mellitus. The girl was born and raised in the USA. Her parents were divorced when she was two years old and the father had moved out. She had been taken to hospital for thirteen times due to her diabetic condition. During her treatment, the mother was reported to refuse to collaborate with the treatment team, and rejected to participate in family therapy and diabetes education. On a few occasions of home visits by the health specialists, she even did not show up and was intoxicated whenever she was present. In the psychological assessment of the child, it was seen that the girl displayed severe behavioral problems such as intense aggression and temper tantrums. She was reported to be oppositional and refuse communication. Consequently, the local agency of child protection was

contacted a medical neglect report was officially filed. The child was placed out of home, and was taken into protection of health services. However, it was found out that the girl continued to suffer from neglect, even when she was under the governmental protection. The caseworkers did not obey the recommendations of treatment team despite the fact that intensive efforts were made in order to educate the caseworkers through consultations and repeated phone calls. Quite a short time after the girl was hospitalized, she died. A number of reasons have been reported to cause fatal consequence including, the parental dysfunctions, and insufficient care of the child protection workers.<sup>31</sup> These two cases stress out that the children who suffer from chronic illnesses are at great risk of being medically neglected; and that, they may not receive the care and protection they need due to the factors both related to the child and parental characteristics and the factors related to health care.

## CONSEQUENCES AND PREVENTION OF MEDICAL NEGLECT

It is emphasized that the first years of life are critical for the child's development, the development of a child who is exposed to neglect is permanently hindered and the effects of neglect mostly last for a lifetime. Even if neglect stops later on, in most cases, the damage becomes permanent.<sup>5</sup> The effects of neglect on the child can be physical/developmental, behavioral, and emotional, and consequences of neglect may emerge as both developmental and physical findings.<sup>9,32</sup> In terms of physical findings, the majority of neglected children experience physical and developmental consequences such as growth retardation.<sup>33</sup> Neglect also causes just as much damage as physical abuse on children. Studies have suggested that as a result of neglect, various problems can be experienced such as dental problems, wounds and poisoning cases, issues related to brain growth and development, and lagging behind in terms of linguistic development.<sup>34,35</sup> In addition to these, other studies have indicated a relation between neglect experiences during childhood and health problems related to high blood pressure and lung disorders, as well as obesity, eating disorders and malnutrition.<sup>36-39</sup> Nutritional deprivation causing malnutrition is reported to be among the most com-

mon consequences of neglect world wide, which is related to negative health consequences as well as death. According to WHO, malnutrition is responsible for the 35% of deaths among all children under five years old all around the world.<sup>40</sup>

In addition to the physiological consequences, neglect generally causes various psychological difficulties such as learning challenges, depression and anxiety disorders, bed-wetting, violence, anxiety, objection and behavioral disorders, alcohol and substance abuse, suicidal thoughts and attempts, and can have negative effects on the child's social-emotional development.<sup>41-43</sup> In families with cases of neglect, the main causes of developmental deficiencies include the lack of stimuli, opportunity and incentive. Children who have been neglected were reported to have normal developmental features at birth but grow without realizing their full potential and subsequently exhibit growth retardation.<sup>44</sup> While the cognitive levels of such children lag behind in the long run, they may also experience outcomes such as deficiencies in cognitive abilities and failure in school subjects.<sup>45</sup>

The medical neglect of children is one of the types of neglect with the highest risk of death. Not receiving the necessary medical procedures and interventions on time or parents rejecting these initiatives and treatments may also decrease the success rate of future interventions.<sup>46</sup> Thus, it is of vital importance that the situation causing neglect is recognized so it can be prevented.<sup>47</sup> It is reported that children who are medically neglected commonly experience various acute and chronic health problems such as diabetes and organ failure, obesity, growth retardation, diseases related to the immune system, asthma, orthopedic and metabolic disorders.<sup>19,31,48</sup> Such children may also not adapt to the treatment, reject or delay the treatment during adulthood and their lives could still be under risk in their later years.<sup>49</sup> It is highlighted that medical neglect is intertwined with the other types of neglect and children who are medically neglected are at risk in terms of educational neglect and supervisory neglect.<sup>50</sup>

It is reported that in addition to having negative effects on children and adults, medical neglect also presents severe public health risks, and that the anti-

vaccination movement that has been rapidly increasing in recent years has become an issue with social and legal dimensions.<sup>49</sup> An increasing number of parents object to their children being compulsorily vaccinated at school.<sup>51</sup> This is claimed to be associated with the rise in the number of diseases that could be prevented through vaccines.<sup>52</sup> As a response to this, there is a view that suggests that in the face of the increasing risk to public health, anti-vaccination behavior should be considered as medical neglect and reported to the child protective units.<sup>53</sup> Around 20 million of infant around the world have difficulty in access to vaccines, resulting in 2-3 million deaths every year whereas only in the US, a number of 103 million cases of childhood diseases have been prevented since 1924, by vaccination.<sup>54</sup> According to the retrospective descriptive study of Dubé et al., vaccine refusal had impacts in measles outbreak in France in 2011, major pertussis outbreaks in the US in 2012 and outbreaks of meningococcal disease in the US in 2014.<sup>52</sup> In the last twenty years, particularly in the African and the Asian countries, vaccination controverseries caused a decrease in rates of vaccination, resulting in failures of health care programs such as in Cameroon and Philippines in 1990s, and in Nigeria in 2003.<sup>53</sup> According to WHO diseases such as measles, pertussis, diphtheria, and neonatal tetanus are still among the major causes of child mortality at a number of 0.4 millions around the world. Indonesia, India and Nigeria, which are impacted by insufficient health care systems and parental refusal of vaccination, are the three countries that 55% of the unvaccinated children live.<sup>55</sup> In Turkey, it is reported that the number of parent who refuse to vaccinate their children has dramatically increased from 1,370 in 2014 to 23,000 in 2017. Recently, the vaccination rate in Turkey for each vaccine has been over 98% in the last 10 years. The Expanded Programme on Immunization was launched and successfully implemented, resulting in considerable decrease of infant mortality. Despite of this overall success, the vaccination rate has dropped to 96% in 2017. In 2018, the number of measles cases has increased 10 times, compared to previous years, and this increase point out serious public health problem if this pattern sustains.<sup>56</sup>

The refusal of treatment due to lifestyle preferences or beliefs seem to be one of the major controversies related to medical neglect, recently. According to Baysal, not providing medical treatments that are recommended based on scientific evidence can be harmful to the child's health and this needs to be dealt with as medical neglect; treatment can be ensured via court order when the parents or the caregiver decide to end the traditional medical treatment or not seek the treatment at all due to lifestyle preferences or beliefs in order to prevent the life-threatening damage to the child and save the child's life.<sup>57</sup> A study stated that 172 children died between 1975 and 1995 after their parents rejected medical care due to religious reasons. It was reported that families' choice of belief and spiritual recovery methods over medical care caused the deaths of their children and it was argued that 140 of those children would have had a higher chance of survival if the appropriate medical intervention had been administered on time.<sup>58</sup> The lack of legal regulations or the exemptions for religious beliefs in the existing regulations have easing impact on belief-based medical neglect. For instance in some countries, parents have the right to reject preventive and diagnostic measures and medical care being given to their child.<sup>26</sup> Nevertheless, the increasing mortality rates due to medical neglect set the ground for the need to make legal arrangements that would not allow the decision to give medical care to be determined by parental preference.

Poor access to health care systems, and poverty, hardens the efforts for strengthening public health not only in Turkey but all around the world. According to UNICEF, a number of 290,000 mothers have lost their lives before and during birth due to complications in 2018 and every year, 2.8 million pregnant women lose their lives due to preventable reasons. Early medical examination and regular prenatal care is of crucial importance and may save the lives of millions of children and mothers every year.<sup>59</sup> The problem of access to health care and refusal of vaccination arising recently, is just few dimensions of the concept of medical neglect which is comprised of a combination of different social, cultural, environmental and individual factors. Due to this multi-di-

mensional nature, the assessment of medical neglect cases is difficult and requires team work. It is expressed that early diagnosis of neglected children and timely interventions result in less harm.<sup>57</sup> It is especially important to identify the families in the risk group in order to effectively implement prevention and treatment actions before any serious damage is inflicted on the child.

The dimensions of child neglect have recently been understood in Turkey and importance has started to be given to preventive and protective measures as well as treatment services.<sup>60</sup> The strategies toward the prevention of neglect are divided into three groups, namely individual, social and global.<sup>5</sup> For individual protection, the importance of the healthy implementation of diagnostic and reporting processes is stressed. It is stated that the reporting of the identified cases to the Child Monitoring Center will ensure the assessment of both the medical, social and legal aspects of the neglect by the experts.<sup>61</sup> Social protection involves the determination of risk groups. Unemployment, homelessness, alcohol and drug addiction, domestic violence and psychiatric disorders in the family are the most important factors causing child neglect. Global protection, on the other hand, includes the protective measures at a macro level. This type of protection concentrates on the importance of regular health care, parental education, family planning, and the fight against poverty and unemployment. Resolving problems such as poverty, unemployment, providing support for families at low socio-economic levels with vocational programs, the prevention of gender inequalities, and the encouragement of population planning are highlighted as important steps for the prevention of child neglect.<sup>62</sup> All these protective and preventive services primarily require the identification of medical neglect cases. Methods and techniques such as observation, checklists, house visits and face-to-face meetings can be used in the evaluation of neglect cases.<sup>63</sup>

## CONCLUSION AND RECOMMENDATIONS

In addition to dealing with the concept of medical neglect towards children within the scope of child abuse and neglect, this study is also significant as the first study in the Turkish literature to evaluate

its origins and consequences within its own dynamics. If the concept is acknowledged as a public health issue, the realization of preventive programs becomes a necessity. As the first step, it is crucial to determine the cases in order to record those cases that can be defined as neglect towards children, and also prepare and implement action plans effectively to prevent child neglect across the country.<sup>64</sup> In this regard, it is first necessary to develop assessment tools that are valid, reliable and culture-sensitive to evaluate the cases of medical neglect as it is a concept that is not sufficiently studied by researchers and thus neglected due to the lack of attention as well as the challenges in defining and identifying such cases.<sup>65</sup>

There are studies available in the literature showing that informative and awareness-raising training programs for parents are effective in the prevention of child neglect.<sup>66,67</sup> In this regard, there is a need to develop, implement and spread preventive training programs towards families with a risk of medical neglect. Additionally, preventive programs need to adopt a holistic approach to improve and foster health literacy among the public. It is underlined that the most effective programs for the prevention of the maltreatment of children are those that aim to improve parental skills by taking action at multiple levels targeting the reduction the level of risk to which the child is exposed as well as preventive programs comprised of a multidisciplinary approach in addition to actions taken at family and environmental levels by combining house visits with medicine, social service, child development and pedagogy.<sup>65</sup> As the factors causing neglect vary depending on the needs and features of the child and the families; emphasis should be placed on the importance of the evaluation of such factors in the prevention of neglect cases and the necessary interventions to be implemented for the neglected children and their families.<sup>11</sup> Descriptive and overall studies should be conducted to acquire a complementary comprehension of the problem globally. The public education, in general, should be targeted in line with the attempts of preparing and effectively implementing support programs on the prevention of medical neglect.

The definition and of medical neglect towards children may vary from culture to culture. It is fundamental to have a thorough understanding of that culture, to be sensitive to social and cultural differences, and to be respectful to the parents' religious beliefs and attitudes during medical practices and treatments in order to differentiate the forms of neglect towards the child from each other as accepted by the culture. Making necessary legal arrangements to prevent medical neglect has significant importance when faced with risks such as severe health problems and death as a result of not adequately meeting children's medical needs as well as the spread of diseases which can be prevented by vaccination programs. In Turkey, there are child protection laws and regulations. However, there is not a specific definition of child maltreatment, or child neglect in particular, unlike the examples in the Western World. It is of crucial and prior importance to eliminate this legal absence, to strengthen the efforts for battling against medical neglect. Despite child neglect being phenomenon seen at all levels of society, families with low socio-economic status are under greater threat.<sup>68,69</sup> Consequently, the need for medical care needs to be handled by taking the environmental conditions that cause neglect beyond family boundaries into account as well as dealing with the difficulties in reaching the services that meet basic needs primarily within the context of poverty, unemployment, financial challenges, social isolation, migration and disadvantaged groups.

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*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

#### **Authorship Contributions**

*All authors contributed equally while this study preparing.*

## REFERENCES

1. McCoy M, Keen SM. Child Abuse and Neglect. 2<sup>nd</sup> ed. New York: Psychology Press; 2013. [Crossref]
2. Tuğrul B. [Why is it important to know about child's development?]. Derman O, editör. Çocuk İstismarına ve İhmaline Yaklaşım. 1. Baskı. Ankara: Akademisyen Tıp Kitabevi; 2014. p.9-16.
3. Beyazıt U, Bütün Ayhan A. The examination of parents' neglectful behaviors towards their children according to their own childhood history of neglect. 5th International Symposium on Social Sciences, 27-29 April, Proceedings, 2019, Antalya, Turkey. p.1863-72.
4. Beyazova U. [Neglect]. Derman O, editör. Çocuk İstismarına ve İhmaline Yaklaşım. 1. Baskı. Ankara: Akademisyen Tıp Kitabevi; 2014. p.35-6.
5. Şahin F. [Child neglect: Evidences for diagnosis and treatment for medical doctors]. Klinik Pediatri. 2002;1(3):103-6.
6. Küpeli S, Kanbur N, Derman O. [Child abuse: a case presentation]. STED. 2003;12(4):129-30. [Link]
7. İnsan Hakları Derneği. Çocuk İhmal ve İstismarını Önleme: Öğretmenler ve Aileler İçin Eğitim Kılavuzu. Ankara: Berkay Ofset; 2008. [Link]
8. UNICEF. Annual results report 2017. Child protection. 2017. [Link]
9. World Health Organization. Global Status Report On Preventing Violence Against Children 2020. Geneva: World Health Organization; 2020. [Link]
10. TOÇEV. Türkiye'deki Risk Altındaki Çocuklar Raporu. TOÇEV: İstanbul; 2019. [Link]
11. Gershater-Molko RM, Lutzker JR, Sherman JA. Assessing child neglect. Aggression and Violent Behavior. 2003;8(6):563-85. [Crossref]
12. Dubowitz H, Pitts SC, Litrownik AJ, Cox CE, Runyan D, Black MM. Defining child neglect based on child protective services data. Child Abuse Negl. 2005;29(5):493-511. [Crossref] [PubMed]
13. Committee on Child Maltreatment Research, Policy, and Practice for the Next Decade: Phase II; Board on Children, Youth, and Families; Committee on Law and Justice; Institute of Medicine; National Research Council. New Directions in Child Abuse and Neglect Research. Petersen AC, Joseph J, Feit M, editors. Washington (DC): National Academies Press (US); 2014. [PubMed]
14. Boos SC, Fortin K. Medical neglect. Pediatr Ann. 2014;43(11):e253-9. [Crossref] [PubMed]
15. Religious objections to medical care. American Academy of Pediatrics Committee on Bioethics. Pediatrics. 1997;99(2):279-81. [Crossref] [PubMed]
16. Jenny C; Committee on Child Abuse and Neglect, American Academy of Pediatrics. Recognizing and responding to medical neglect. Pediatrics. 2007;120(6):1385-9. [Crossref] [PubMed]
17. Child Welfare Information Gateway. Acts of omission: An overview of child neglect. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. 2018. [Link]
18. U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. Child maltreatment 2013. 2015. [Link]
19. Parmeter J, Tzioumi D, Woolfenden S. Medical neglect at a tertiary paediatric hospital. Child Abuse & Neglect. 2018;77:134-43. [Crossref]
20. Fortin K, Kwon S, Pierce MC. Characteristics of children reported to child protective services for medical neglect. Hosp Pediatr. 2016;6(4):204-10. [Crossref] [PubMed]
21. Linnard-Palmer L, Kools S. Parents' refusal of medical treatment based on religious and/or cultural beliefs: the law, ethical principles, and clinical implications. J Pediatr Nurs. 2004;19(5):351-6. [Crossref] [PubMed]
22. Young BR. Defending child medical neglect: Christian science persuasive rhetoric. Rhetoric Review. 2001;20(3-4):268-92. [Crossref]
23. Sinal SH, Cabinum-Foeller E, Socolar R. Religion and medical neglect. South Med J. 2008;101(7):703-6. [Crossref] [PubMed]
24. Myers JEB. Neglect of children's health: too many irons in the fire. 8 J. L & Fam Stud. 317. 2006. [Link]
25. Polat O. [Definitions.]. Tüm Boyutlarıyla Çocuk İstismarı-1. 2. Baskı. Ankara: Seçkin Yayıncılık; 2017.
26. Guterman NB, Tabone JK, Bryan GM, Taylor CA, Napoleon-Hanger C, Banman A. Examining the effectiveness of home-based parent aide services to reduce risk for physical child abuse and neglect: six-month findings from a randomized clinical trial. Child Abuse Negl. 2013;37(8):566-77. [Crossref] [PubMed]
27. Bérubé A, Lafantaisie V, Dubeau D, Coutu S, Caron J, Devault A. Using implementation evaluation to uncover a child neglect prevention program. Eval Program Plann. 2014;45:1-8. [Crossref] [PubMed]
28. Dubowitz H, Black MM, Starr RH, Zuravin S. Conceptual definition of child neglect. Criminal Justice Behav. 1993;20(1):8-26. [Crossref]
29. Dubowitz H. Neglect in children. Pediatr Ann. 2013;42(4):73-7. [Crossref] [PubMed] [PMC]
30. Yetim B, Çelik Y. [Access to healthcare: the issue of unmet needs]. Toplum ve Sosyal Hizmet. 2020;31(2):423-40. [Crossref]
31. Geffken G, Johnson SB, Silverstein J, Rosenbloom A. The death of a child with diabetes from neglect. A case study. Clin Pediatr (Phila). 1992;31(6):325-30. [Crossref] [PubMed]
32. Tyler S, Allison K, Winsler A. Child neglect: Developmental consequences, intervention, and policy implications. Child & Youth Care Forum. 2006;35(1):1-20. [Crossref]
33. Homan GJ. Failure to thrive: a practical guide. Am Fam Physician. 2016;94(4):295-9. [PubMed]
34. Brown RC, Heines S, Witt A, Braehler E, Fegert JM, Harsch D, et al. The impact of child maltreatment on non-suicidal self-injury: data from a representative sample of the general population. BMC Psychiatry. 2018;18(1):181. [Crossref] [PubMed] [PMC]
35. Bick J, Nelson CA. Early experience and brain development. Wiley Interdiscip Rev Cogn Sci. 2017;8(1-2). [Crossref] [PubMed]
36. Grilo CM, Masheb RM. Childhood psychological, physical, and sexual maltreatment in outpatients with binge eating disorder: frequency and associations with gender, obesity, and eating-related psychopathology. Obes Res. 2001;9(5):320-5. [Crossref] [PubMed]
37. Allison KC, Grilo CM, Masheb RM, Stunkard AJ. High self-reported rates of neglect and emotional abuse, by persons with binge eating disorder and night eating syndrome. Behav Res Ther. 2007;45(12):2874-83. [Crossref] [PubMed] [PMC]
38. Allen DB, Fost N. Obesity and neglect: it's about the child. J Pediatr. 2012;160(6):898-9. [Crossref] [PubMed]
39. Nikulina V, Widom CS. Do race, neglect, and childhood poverty predict physical health in adulthood? A multilevel prospective analysis. Child Abuse Negl. 2014;38(3):414-24. [Crossref] [PubMed] [PMC]
40. WHO. Severe Acute Malnutrition 2019. Available at [Link]
41. Widom CS, Czaja S, Wilson HW, Allwood M, Chauhan P. Do the long-term consequences of neglect differ for children of different races and ethnic backgrounds? Child Maltreatment. 2013;18(1):42-55. [Crossref]
42. Lippard ETC, Nemeroff CB. The devastating clinical consequences of child abuse and neglect: increased disease vulnerability and poor treatment response in mood disorders. Am J Psychiatry. 2020;177(1):20-36. [Crossref] [PubMed] [PMC]

43. Norman RE, Byambaa M, De R, Butchart A, Scott J, Vos T. The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. *PLoS Med.* 2012;9(11):e1001349. [[Crossref](#)] [[PubMed](#)] [[PMC](#)]
44. O'Hara M, Legano L, Homel P, Walker-Descartes I, Rojas M, Laraque D. Children neglected: where cumulative risk theory fails. *Child Abuse Negl.* 2015;45:1-8. [[Crossref](#)] [[PubMed](#)]
45. Spratt EG, Friedenber SL, Swenson CC, Larosa A, De Bellis MD, Macias MM, et al. The effects of early neglect on cognitive, language, and behavioral functioning in childhood. *Psychology (Irvine).* 2012;3(2):175-82. [[Crossref](#)] [[PubMed](#)] [[PMC](#)]
46. Roberts GM, Wheeler JG, Tucker NC, Hackler C, Young K, Maples HD, et al. Nonadherence with pediatric human immunodeficiency virus therapy as medical neglect. *Pediatrics.* 2004;114(3):e346-53. [[Crossref](#)] [[PubMed](#)]
47. Welch GL, Bonner BL. Fatal child neglect: characteristics, causation, and strategies for prevention. *Child Abuse Negl.* 2013;37(10):745-52. [[Crossref](#)] [[PubMed](#)]
48. Harper NS. Neglect: failure to thrive and obesity. *Pediatr Clin North Am.* 2014;61(5):937-57. [[Crossref](#)] [[PubMed](#)]
49. Keeshin BR, Dubowitz H. Childhood neglect: the role of the paediatrician. *Paediatr Child Health.* 2013;18(8):e39-43. [[PubMed](#)] [[PMC](#)]
50. Mennen FE, Kim K, Sang J, Trickett PK. Child neglect: definition and identification of youth's experiences in official reports of maltreatment. *Child Abuse Negl.* 2010;34(9):647-58. [[Crossref](#)] [[PubMed](#)] [[PMC](#)]
51. Hornsey MJ, Harris EA, Fielding KS. The psychological roots of anti-vaccination attitudes: A 24-nation investigation. *Health Psychol.* 2018;37(4):307-15. [[Crossref](#)] [[PubMed](#)]
52. Dubé E, Vivion M, MacDonald NE. Vaccine hesitancy, vaccine refusal and the anti-vaccine movement: influence, impact and implications. *Expert Rev Vaccines.* 2015;14(1):99-117. [[Crossref](#)] [[PubMed](#)]
53. Chervenak FA, McCullough LB, Brent RL. Professional responsibility and early childhood vaccination. *J Pediatr.* 2016;169:305-9. [[Crossref](#)] [[PubMed](#)]
54. UNICEF. Immunization Agenda 2030: A Global Strategy To Leave No One Behind. 2019. [[Link](#)]
55. WHO. Global vaccine action plan decade of vaccine collaboration. *Vaccine.* 2013;31(2):B5-B31. [[Crossref](#)]
56. Gür E. [Vaccine hesitancy - vaccine refusal]. *Türk Pediatri Ars.* 2019;54(1):1-2. [[Link](#)]
57. Baysal SU. [Medical neglect]. Polat O, editör. *Tüm Boyutlarıyla Çocuk İstismarı-1*. Ankara: Seçkin Yayıncılık; 2007. p.265-75.
58. Asser SM, Swan R. Child fatalities from religion-motivated medical neglect. *Pediatrics.* 1998;101(4 Pt 1):625-9. [[Crossref](#)] [[PubMed](#)]
59. UNICEF. More women and children survive today than ever before - UN report. 2019. [[Link](#)]
60. Şahin F. [Physical, sexual and emotional abuse of the child]. *Çocuk ve Şiddet Çalıştayı Raporu*; 2009.
61. Kara B, Biçer Ü, Gökalp AS. [Child abuse]. *Çocuk Sağlığı ve Hastalıkları Dergisi.* 2004;47:140-51. [[Link](#)]
62. Öncü E, Kurt A, Esenay FI. [Abuse of working children within the family]. *Türkiye Halk Sağlığı Dergisi.* 2012;10(3):128-40. [[Link](#)]
63. Stowman SA, Donohue B. Assessing child neglect: a review of standardized measures. *Aggression and Violent Behavior.* 2005;10(4):491-512. [[Crossref](#)]
64. Beyazıt U, Bütün Ayhan A. The psychometric properties of the Turkish version of the multi-dimensional neglectful behavior scale-child report (10-15 years form). *Current Psychology.* 2019;38:1099-109. [[Crossref](#)]
65. Beyazıt U, Bütün Ayhan A. The psychometric properties of the Turkish version of the multi-dimensional neglectful behavior scale-parents form. *Current Psychology* 2019;38:1121-30. [[Crossref](#)]
66. Keser N, Odabaş E, Elibüyük S. [The evaluation of parents' knowledge about child abuse]. *Turkish J Pediatr Dis.* 2010;4(3):150-7. [[Link](#)]
67. Beyazıt U, Bütün Ayhan A. A study on the mother education program for the prevention of child neglect. *Psychological Reports.* 2019;122(6):2178-200. [[Crossref](#)]
68. Mian M, Boothby MRK. [Multi-sectorial approach to the prevention of child abuse]. Dağlı ET, editör. *Çocuk Koruma Sistemleri*. 1. Baskı. İstanbul: Çocuk Koruma Merkezlerini Destekleme Derneği; 2016. p.38-53. [[Link](#)]
69. Beyazıt U, Bütün Ayhan A. [The comparison of children's neglect status according to socioeconomic level]. *Türkiye Klinikleri J Health Sci.* 2019;4(2):107-16. [[Crossref](#)]