

# Nutritional Child Neglect: a Review

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## Abstract

Medical scientists from all over the world, have the moral obligation to detect and report not only extreme cases of physical child abuse, but also cases of nutritional child neglect. Child malnutrition of the third world is a well-known situation in the medical community. The purpose of this report is to review some aspects of nutritional neglect in children that are often put aside, such as: child nutritional neglect from loving parents and caring medical staff, obese adults who have been nutritionally neglected in their childhood, children that becomes obese due to nutritional neglect from their parents, when severe childhood obesity becomes medical neglect and a child protection issue, alcoholic parents and if their addiction affects the nutrition of their children and social aspects of children's deaths due to nutritional negligence.

## INTRODUCTION

Neglect is a failure to provide adequate support, supervision, nutrition, medical, dental or surgical care. Neglect and therefore nutritional neglect is considered an abusive act of omission rather than one of commission. This overlapping category of child maltreatment has unique characteristics and requires individual approaches to diagnosis and management.<sup>1</sup>

In 2003, the USA Department of Health and Human Services (USDHHS) reported that there were more than 900 thousand children maltreated in the USA. The percentage of "experienced neglect" children is 61 percent. Also, an estimated 1,500 children died from physical injuries associated with child maltreatment; thirty six percent of these deaths were due to neglect.<sup>1</sup>

In the developing countries a new epidemiological method estimates the percentage of child deaths which would be attributed to the potentiating effects of malnutrition in infectious disease. The results from 53 developing countries with nationally representative data on weight-for-age indicate that 56% of child deaths were attributable to malnutrition's potentiating effects and 83% of these were attributable to mild-to-moderate as opposed to severe malnutrition (Fig.1).

## Figure 1

Fig.1. Failure to thrive in the developing countries: 2 year old girl, severely malnourished (weight 4.75 kg; before. The result of an appropriate nutritional scheme: the girl gained 32% more weight in 3 weeks (weight 6.28 kg.), but she also gained an appetite for living (www.who.org).



The results of this new epidemiological method, show that malnutrition has a far more powerful impact on involving only the screening and the treatment of the severely malnourished will do little to address this impact.<sup>2,21</sup>

## NUTRITIONAL NEGLECT

In modern times, child nutritional neglect, can lead either to malnourished children especially in the developing countries or to obese children in the developed countries. Indicators of malnutrition are the following:

- Begging for or stealing food;

- Frequently hungry;
- Rummaging through garbage pails for food;
- Gorging self, eating in large gulps;
- Hoarding food;
- Obesity;
- Overeating junk foods. <sup>3</sup>

### THE ROLE OF CARE IN NUTRITION-A NEGLECTED ESSENTIAL INGREDIENT

The role of care in child nutrition is often neglected. Care consists of the actions necessary to promote survival, growth and development, involving household food security and health promoting behaviour. Resources for improving care exist at the household level: income, food, time, attitudes, relationships, and knowledge. Care in terms of affection, emotional support, and effective allocation of resources with stability has a direct influence on child survival, growth, and development. The need for care of the young child is often greatest with cases of severe protein-energy malnutrition. Care of school age children who are not coping in schools because of malnutrition requires an appropriate response, particularly for children who do not receive breakfast or are micronutrient deficient. In both developed and developing countries about 7% of children have some form of disability. However, on average only 2-3% of children are considered disabled by the community. Nutrition can do much to prevent disabilities and ensure that the disabled child is not at a disadvantage. Urban children from the age of 6 upwards will be vulnerable to shocks from lack of supervision. Care has to be provided in some form through other community institutions. <sup>4</sup>

### THE CONUNDRUM OF CHILD MALNUTRITION WITH LOVING AND CARING PARENTS

When nutritional needs of a child are neglected, then, malnutrition connects with child neglect. This type of neglect is one of the commonest severe insults suffered by children. Thirty five per cent of the children of the world are nutritionally stunted and many more suffer from other forms of nutritional deprivation.

Mothers of malnourished children, think that they fulfil all the nutritional needs of their children. When illness follows malnutrition, they get perplexed and astonished to find that their child has needs that they have not given. Type 2

nutrient deficiency includes one losing her/his appetite. That is what happens when a child cries for food and gets only a low nutrient diet. It is the case of a monotonous diet of cheap weaning food, given to a baby. Mothers think that they are feeding their children well as food is offered frequently, but the children do not want to eat it! It is perceived as the children's fault for not taking what the mother thinks is perfectly good food. There is little point in the children's crying for they cannot signal that it is not more but better food they need. The resulting passivity leads from mild malnutrition to severe malnutrition and possibly to death. <sup>5</sup>

One of the most important attributes of a healthy child is the cry. Children that do not cry or complain are considered to be passive. Passivity is also one of the main features of severe malnutrition. When a child cries, it signals the mother or the caregiver, that something is wrong, something needs interpretation and attention. The critical corollary is that, if the child does not cry, a mother may think that her child's needs are being met and that she is doing a good job. If the child does not cry appropriately, then half of the communication between child and mother is broken. Once the child fails to communicate its needs, sustained neglect becomes inevitable. Loving mothers are not the only ones that can be accused of child nutritional neglect and therefore child malnutrition. Medical staff, such as nurses, gives little attention to newborns that do not cry or smile. It is assumed that they are not hungry or distressed. The child with the "flat affect" is left alone and becomes more isolated and neglected. The malnourished child improves in hospital partly because the special diets lead to an improved affect so that adults no longer neglect the child; one of the reasons why relapse from malnutrition is much less common than usually supposed. Neglect, by parents and medical staff, is not anyone's fault as such. It is a question of education and demonstration. When neglect is linked with the term abuse, there is less hope that loving attendants or parents will be receptive. In conclusion, nutritional neglect can represent a failure to appreciate the child's needs or a failure of communication between the child and the caregiver. From the "flat affect" of the child we could say that she/he appears to be resigned to fate; what is not often appreciated is that the parent has often reached exactly the same conclusion. <sup>5, 22, 23, 24</sup> Such a tragedy must be differentiated from willful abuse.

Other categories of children that can be nutritionally neglected are:

- Premature infants;

- Children with terminal illnesses;
- Children that suffered psychological trauma;
- Grossly abused children.

All these children experience the same sentiments. They feel abandoned, they think that nobody loves them, and react by withdrawal. From that stage on they become less noticed and the danger of being nutritionally neglected becomes a reality.<sup>5</sup>

### THE ASSOCIATION BETWEEN OBESITY IN ADULTHOOD AND NEGLECT IN CHILDHOOD

Obesity in children and in adults is well established in association with various features of family life. Recent studies have shown that there is also association of obesity in adulthood with child neglect or even child maltreatment. In 1974, 1258 pupils aged 9-10 years were randomly selected from the third grade of Copenhagen schools. Information on 987 pupils was obtained from the head teachers on family structure and the perceived support from the parents, school medical services reported on the child's general hygiene. 86% of the 881 eligible participants were followed up 10 years later. The influence of family factors in childhood on the risk of obesity (Body Mass Index >95<sup>th</sup> centile) in young adulthood was estimated by odds ratios with control for age and body-mass index in 1974, sex, and social background. Family structure (biological or other parents and number of siblings) did not significantly affect the risk of adult obesity. Parental neglect greatly increased the risk in comparison with harmonious support. Dirty and neglected children had a much greater risk of adult obesity than averagely groomed children. However, being an only child, receiving overprotective parental support, or being well-groomed had no effect. Parental neglect during childhood predicts a great risk of obesity in young adulthood, independent of age and body-mass index in childhood, sex and social background.<sup>6</sup>

During that period of time that this epidemiological study took place, only socioeconomic status and obesity in childhood were measured. There was no reference to parental obesity. The underlying mechanism by which child maltreatment may lead to later obesity is unknown. One potential mechanism is that maltreatment causes stress to children and they react to it by increasing food intake and/or decreasing activity.<sup>7, 26, 27</sup> According to many studies, childhood maltreatment is a well-established risk factor for

later depression and anxiety.<sup>8, 28</sup> Others have shown that symptoms of depression and anxiety in childhood are associated with the later development of obesity, particularly in females.<sup>9, 29, 30, 31</sup> Depression and/or anxiety resulting from maltreatment may be associated with neuro-endocrine responses that alter metabolism, activity levels or appetite.<sup>10, 32, 33, 34</sup> The impact of punishment and psychological aggression on obesity may only occur when they are of more chronic or severe nature. It is also possible that the impact on obesity does not become apparent until an older age.

Further evidence is now emerging that child maltreatment may be associated with later obesity. Child maltreatment is already established as a precursor of several mental health disorders, particularly mood and anxiety disorders.<sup>11</sup> Together these findings support other evidence that poor mental health and obesity, which are common, costly, and difficult to treat, are also related to each other.<sup>12</sup>

In conclusion, findings indicate that 3 year- old children have an increased risk of obesity if they experienced neglect in the prior year. It is also added, to the existing evidence that mental health conditions and obesity have some shared developmental origins.

### HIGHER RISK OF OBESITY FOR CHILDREN NEGLECTED BY PARENTS

The first study that shows the association between child obesity and child neglect, took place in the U.S.A., in an attempt to decrease the risk of obesity to children. Scientists focused on positive parenting, instead of improving the children's eating habits and maintaining high level of physical activity. Examples of neglect include a parent not showing enough affection to the child due to preoccupation with his/hers own problems, not taking a child to the doctor when he/she needed it, and leaving a child at home without the proper supervision.<sup>13</sup>

The data of the study included children at age 2, 3, 4, 12 and their measurements (height and weight). Their mothers answered items on the Parent-Child Conflict Tactics Scales about three types of child maltreatment in the prior year: neglect (such as not providing proper supervision for the child), corporal punishment (such as spanking the child on the bottom with a bare hand) and psychological aggression (such as threatening to spank the child but not actually doing it). 18% of the children were obese, and the prevalence of any episode of neglect, corporal punishment or psychological aggression was 11%, respectively. The odds of obesity were 50 per cent of children in the household, the

mother's race/ethnicity, education, marital status, body mass index, prenatal smoking and age, and the children's sex and birth weight (Fig.2).

### Figure 2

Fig.2. Failure to supervise the child's nutritional habits (www.sciencedaily.com).



Neither the frequency of corporal punishment nor psychological aggression was associated with the increased risk of obesity. Corporal punishment and psychological aggression are common discipline techniques resulting from child's misbehavior and the child may come to anticipate them as consequences of their misbehavior. In contrast, the child may not understand the cause of the neglect and the child might mistakenly feel at fault. These experiences of neglect could translate into a great deal of stress for the child, which might, in turn, influence mood, anxiety, diet and activity. It is a fact that adults eat in response to stress, the same could be true for children.<sup>14</sup>

### CHILDHOOD OBESITY AND MEDICAL NEGLECT

The incidence of child hood obesity has increased dramatically, including severe childhood obesity and obesity-related comorbid conditions. The question that arises is whether childhood obesity constitutes medical neglect. According to some pediatricians removal of a child from the home is justified when all 3 of the following conditions are present:

- A high likelihood that serious imminent harm will occur;
- A reasonable likelihood that coercive state intervention will result in effective treatment;
- The absence of alternative options for addressing the problem.

It is not the mere presence or degree of obesity but rather the presence of comorbid conditions that is critical for the determination of serious imminent harm. All three criteria

are met in very limited cases and a trial of enforced treatment outside the home may be indicated, to protect the child from the irreversible harm.<sup>15, 16</sup>

Severe childhood obesity and its associated commodities are increasing in prevalence. Extreme childhood obesity may be viewed as a mirror image of severe non-organic failure to thrive. Parental neglect may be causative factor in both circumstances. When suspicion of parental neglect arises, health care professionals may be both an ethical obligation and a statutory duty to notify child protection services. Guidelines on the point at which medical practitioners should seek state assistance in cases of severe childhood obesity would be helpful, not only for medical practitioners, but also for child protection services.<sup>17, 23, 24, 25</sup>

### CONSEQUENCES OF NUTRITIONAL NEGLECT ON THE ORAL HEALTH OF CHILDREN

Dental neglect, as defined by the American Academy of Pediatric Dentistry, is the "willful failure of parent or guardian to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection." Dental caries, periodontal diseases, and other oral conditions, if left untreated, can lead to pain, infection, and loss of function. These undesirable outcomes can adversely affect learning, communication, nutrition, and other activities necessary for normal growth and development. Some children who first present for dental care have severe early childhood caries (formerly termed "baby bottle" or "nursing" caries); caregivers with adequate knowledge and willful failure to seek care must be differentiated from caregivers without knowledge or awareness of their child's need for dental care in determining the need to report such cases to child protective services.<sup>1, 18, 22</sup>

Failure to seek or obtain proper dental care may result from factors such as family isolation, lack of finances, parental ignorance, or lack of perceived value of oral health. The point at which to consider a parent negligent and to begin intervention occurs after the parent has been properly alerted by a health care professional about the nature and extent of the child's condition, the specific treatment needed, and the mechanism of accessing that treatment. Because many families face challenges in their attempts to access dental care or insurance for their children, the clinician should determine whether dental services are readily available and accessible to the child when considering whether negligence has occurred.<sup>1, 18</sup>

The physician or dentist should be certain that the caregivers understand the explanation of the disease and its implications and, when barriers to the needed care exist, attempt to assist the families in finding financial aid, transportation, or public facilities for needed services.<sup>18, 22, 23</sup>

### NUTRITIONAL NEGLECT AND PHYSICAL ABUSE IN CHILDREN OF ALCOHOLICS

Scientists studied the affects of parental alcoholism on the child nutritional neglect. It is a fact, that alcoholics, like all the addicted, face their own pain and problems. Little time and energy is spared for their children's care. Economics is a field that has to be organized in order a family to be viable and useful in a community. Drinking habits add to the economic burdens for the family's welfare, including basic nutritional needs.

One of the determinants of the quality of the attachment relationship, is the parental handling from the earliest months of life. Children have emotional and physical needs that have to be fulfilled. Any inconsistent, inappropriate or punitive actions from the parental side could cause a rupture of the parent-child attachment. Warmth and consistency are two elements that are not blossomed from the part of addicted or mentally/physically-ill parents. Especially, when the child's demands are intense and frequent. In addition, alcohol may have an inhibitory and triggering influence for abuse of children. They may traumatized from verbal, physical and sexual abuse.<sup>19, 23</sup> Incomplete supervision always results in accidental general injuries and most frequently in food poisoning. Pain and hurt are two sentiments that neglected children often feel. During the period of their development, children amass defensive material so that they can face adulthood future humiliation, physical harm, frustration, fear and failure. When their environment is not safe and secure and this happens when their parents are alcoholics, children fail to end this procedure. In conclusion, neglect from alcoholic parents and abuse during childhood may be potential interactive factor in development of antisocial behavior.<sup>19, 24, 25</sup>

### THE DEATH OF CHILDREN FOLLOWING NEGLIGENCE: SOCIAL ASPECTS

Neglect and malnutrition has been the case of several studies. The figure of unreported cases of neglected children is much higher than that of physical ill-treatment of children. When nutritional neglect was traced, physical ill-treatment was proven at the same time. Symptomatic are, in the first place, intense emaciation as well as dry puckered, scaly and

extremely dirty skin, lack of subcutaneous fatty tissue and of Bichat's fat pad, matted hair, aged face, sunken eyes and eczema from urine with ulcerations in the buttock and thigh regions. Observations covered fifty four cases in which neglect and malnutrition have caused the death of the children involved. All the children had been living in extremely bad social conditions. Their mothers and their background were also extremely socially poor. One important factor that was considered, was the age of the neglected children's mother. The young age of the mothers in combination with the low economic situation leads more often to negligence. Alcoholic fathers, often young in age, unwilling to work, found it difficult to care for their family.<sup>1, 20</sup>

Having understood the importance of the early development of the child for its later social attitude, mothers with all their problems and difficulties should not be left on their own. Mother-like behavior is not necessarily programmed with the birth of a child. Mother duties should be learned as early as possible. This process should begin during pregnancy at the latest.<sup>1, 20, 24</sup>

### CONCLUSIONS

Malnutrition is a phenomenon, registered originally in the developing countries and it is accepted as an act of nutritional neglect. Still, in the 21<sup>st</sup> century, nutritional neglect that leads to malnutrition occurs, even, in families with loving parents or in medical facilities by caring medical staff.

Obesity of adults is another phenomenon of our century and, is associated with nutritional neglect during childhood. Cases of severe child obesity, emphasize the need to understand when a case of obesity in a child, is a real medical/dental neglect and when it becomes a child protection issue.

Pediatricians, dentists, general doctors and nutritionists, should be aware that nutritional neglect may lead to childhood malnutrition or obesity and furthermore to death, if left untreated.

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