

Economic Crisis, Food Security and Hidden Hunger in Italy

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Abstract

According to data regarding 2016 collected by ISTAT, 1 million and 292 thousand children resident in Italy were in a state of absolute poverty, corresponding to one out of eight children. This represents an increase of 14% compared to the previous year. The paediatric age is an age that is particularly vulnerable to malnutrition. In the world approximately 1 million children within the age of 5 die because of malnutrition. However, in the paediatric age malnutrition is not simply a cause of death but also of many other health conditions that can be easily underestimated. It has been shown that micronutrient deficiency not only is present in developed countries, but also shows a growing trend that is causing great concern. It is very important to conduct sufficient research in order to better understand also in European countries such as Italy the impact of the current economic situation on the food security of families and on hidden hunger, especially in the paediatric population.

Keywords: *Economic Crisis; Food Security; Hidden Hunger; Children*

Introduction

According to data regarding 2016 collected by ISTAT, 1 million and 292 thousand children resident in Italy were in a state of absolute poverty, corresponding to one out of eight children. This represents an increase of 14% compared to the previous year. In the total population of children the incidence of minors in absolute poverty rose from 10.9% in 2015 to 12.5% in 2016. 2 million and 297 thousand children were in a condition of relative poverty, corresponding to 22.3% of the population within this age group, increasing compared to the 20.2% of 2015.

The absolute poverty threshold for a family of two parents and two children under 10 years of age is 1530.00 € per month in Northern Italy, 1452.00 € per month in central Italy, and 1187,00 € per month in southern Italy. Having an income below this threshold means not having the necessary money to maintain an average standard of living within the given community [1].

The paediatric age is an age that is particularly vulnerable to malnutrition. In the world, approximately 1 million children within the age of 5 die because of malnutrition [2]. However, in the paediatric age malnutrition is not simply a cause of death but also of many other health conditions that can be easily underestimated. A great challenge, therefore, is to meet the nutritional needs of every child throughout all the phases of growth so that the child can develop his/her full genetic potential [3].

Discussion

The nutritional status of a child affects all aspects of the individual's development with life-long consequences. In fact, an optimal nutrition in the early stages of life determines benefits that are evident even in adulthood. On the other hand, malnutrition in the paediatric age can determine negative out-comes on physical (skeletal, neurological, gastrointestinal, renal and metabolic), psychological and social development. The development and growth of a child determines important metabolic needs not only in terms of calories but also of micronutrients. It is also necessary to understand that growth in childhood is not a simple "increase in size" but it actually corresponds to a change in the proportions of the various parts of the body, with a variation in body composition and distribution of nutrients within the various organs and systems. As a result, a nutritional deficiency influences in a different manner the development of various organs based on the specific age of the child [3].

For example, a severe caloric restriction in a period in which a child's skeletal growth would normally be fast and the brain is developing can cause in the child an irreversible decrease in bone growth and a deficit in cognitive development [4].

Micronutrient deficiency is a common condition in developing and developed countries, both in children and in adults. It is very important to understand the importance of these forms of malnutrition even in the developed countries, as it is easy to erroneously think that those who live in these countries always benefit from an abundant and complete diet. It has, however, been shown that micronutrient deficiency not only is present in developed countries, but also shows a growing trend that is causing great concern [4].

Micronutrient deficits can unfortunately be difficult to diagnose as they negatively affect the development of the child without manifesting clear signs/symptoms before reaching very important levels. Clinically evident micronutrient deficiencies may also frequently be associated with other nutritional deficiencies that are not yet visible but which already have a negative impact on the development of the child. The consequences of micronutrient deficiencies depend on the micronutrient in question and the period of development in which it occurs. In developed countries, the most common micronutrient deficiencies that are present and that are increasing in the paediatric population are folic acid, vitamin D, iron and iodine [5]. An important concept to keep in mind is that forms of over-nutrition and under-nutrition are not mutually exclusive. A subject can easily present malnutrition by deficit for some nutrients and malnutrition by excess of others. For example, a very common situation in the paediatric population of the developed countries is the presence of excessive caloric intake in the presence of an iron and vitamin D deficiency. In fact, it is not important simply for a child to eat, but rather that the child has access to a correct, complete and balanced diet that offers all the nutrients necessary for body's correct development, especially during growth.

All that was mentioned so far highlights how important it is to look for a hidden condition of malnutrition in order for it to be diagnosed. In fact, there often can be conditions of "hidden hunger", a status of apparent well-being which, in reality, hides a chronic micronutrient deficiency. In fact, our body produces 51 essential elements from food that the body cannot produce on its own. Consequently, even in a situation characterized by a sufficient quantity of food, the body can actually find itself in a state of hunger for specific essential elements. Often nutritional status is often investigated only in terms of height, weight and BMI. The problem of "hidden hunger" is that it must first be discovered in order for it to be contrasted [5].

When studying the causes of the nutritional vulnerability of children, it is easy to guess that it partially depends on the high metabolic demands determined by the fast growth rate and the amount of metabolically active tissue per unit of mass (and eventually the presence of pathologies). In addition, this vulnerability also depends on limits in access to nutrients such as the immaturity of assimilative, metabolic and excretory systems, ability to eat, neurological limits, psychological disorders, socio-economic disadvantages, and the effects of pathologies on appetite and ability to eat. However, despite all these factors involved in determining the vulnerability of children to malnutrition, it has been shown that in fact the most important factor is simply access to food. The access to food, also known as "food security", is the condition associated with the availability of food and the access of individuals to it. According to the definition of the World

Food Summit in 1996, food security is considered to exist when “all people, at all times, have physical and economic access to sufficient, safe, and nutritionally complete food for an active and healthy life” [6].

Conclusion

With the economic crises in industrialized countries, more and more children are exposed to malnutrition. In fact, poverty often translates into a diet characterized by a low variety of low-cost food, sometimes even determining a reduction in quantities [5]. For these reasons, it is very important to conduct sufficient research in order to better understand also in European countries such as Italy the impact of the current economic situation on the food security of families and on hidden hunger, especially in the paediatric population.

Bibliography

1. ISTAT, La povertà in Italia. Anno 2016 (2017).
2. Walker WA., *et al.* “Nutrition in pediatrics: basic science, clinical application”. Hamilton: BC Decker (2008): 127-141.
3. Stein Natalie. “Public Health Nutrition: Principles and Practice in Community and Global health”. Jones and Barlett Learning (2015).
4. Victora CG., *et al.* “Maternal and Child Undernutrition Study Group. 2008 Maternal and child undernutrition: consequences for adult health and human capital”. *Lancet* 371.9609 (2008): 340-357.
5. Biesalki HK. “Hidden Hunger”. Berlin-Heidelberg: Springer-Verlag (2013): 43.
6. Food and Agriculture Organization. Rome Declaration on Food Security and World Food Summit Plan of Action (1996).

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