

Early Care in Children with Neurodevelopmental Disorders

Atención temprana en niños con trastornos del neurodesarrollo

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Summary

The article analyzes the importance of early care in child development, guiding a neuropsychological perspective of development. The early care model seeks to refer to the set of interventions aimed at children and their work in conjunction with a multidisciplinary team. It presents recommendations for the implementation of programs that allow early intervention in the early years, so that the process of care for the affected children can be optimized by the different early developmental and learning alterations.

Keywords: Early care, neurodevelopmental disorders, children.

Resumen

El artículo analiza la importancia de la atención temprana en el desarrollo infantil, orientando una perspectiva neuropsicológica del desarrollo. El modelo de atención temprana busca hacer referencia al conjunto de intervenciones, dirigidas a la población infantil y su trabajo en conjunto con un equipo multidisciplinar. Se presenta recomendaciones para la implementación de programas que permitan la intervención temprana en los primeros años, de tal forma que se pueda optimizar el proceso de atención a los niños afectados, por las distintas alteraciones tempranas en el desarrollo y aprendizaje.

Palabras clave: Atención temprana, trastornos del neurodesarrollo, niños.

Introduction

Integral development in childhood is fundamental for human development and the construction of human and social capital. Marcondes, Machado, Setian & Carranza (1991) point out that the concept of child development is not a simple task, and it varies according to the theoretical references that one wants to adopt and the aspects that one wants to deal with. They mention that development is the enhancement of the individual's ability to perform increasingly complex functions.

Child development is a dynamic process, which is based on its biological, psychological and social basis. It is to know that the first years of life constitute an important stage in the development of the child, because the perceptive, motor, cognitive, linguistic and social abilities that allow a balanced interaction with their social environment are configured. This process is considered as a fundamental part of the human development, during the first years the architecture of the brain is formed, based on the interaction between the genetic inheritance and the influences of the environment in which the child lives. (Shonkoff, et al., 2012), child development being a broad and complex process, including its relationship with daily care and the influence of the environment on it.

Souza (2014) child development is an active and unique process for each child, expressed by the continuity and changes in motor, cognitive, psychosocial and language skills, with acquisitions increasingly complex in the functions of daily life and in the exercise of their social role. The prenatal period and the initial early years of childhood are crucial in the development process, which is the interaction of biopsychological characteristics, genetically inherited, with the experiences offered by the environment. The extent of each child's potential depends on the care that responds to their developmental needs.

We understand, therefore, the development of the child as a continuous product of the biological, psychological and social processes of change in

which it resolves increasingly complex situations, in which the structures achieved are the necessary basis of the subsequent ones.

This perspective of development assumes its multidimensionality, as well as the indivisibility of the biological, psychic and social processes, which are summarized in a whole in which it is constituted in the child. These processes are determined by genetic information, as well as by the action of the environment and the interaction between them. The peculiarity of development is what allows the child to acquire in the process of humanization culturally accepted skills to perform adequately in context and adapt when it changes.

Early care.

The development of children during the first two years of life is fundamental because it is at this stage that the nervous tissue grows and matures and is, therefore, more exposed to suffering damage. Due to its great plasticity, it is also at this time when the child responds more to the therapies and the stimuli that he or she receives from the environment. The child's rapid development is influenced by the environment in which it develops.

Nutrition, care and breastfeeding directly affect the connections that originate in the brain during the early years (Eming & Fujimoto-Gomez, 2003).

According to Huthsson y Nicholl (1988) early care seeks to understand, through development monitoring, all activities related to the promotion of normal development and detection of developmental problems during the primary health care of the child. It is a continuous and flexible process, which includes information from health professionals, parents, teachers and others.

It can be understood as early care to the set of child interventions, between 0-6 years, the family and the environment, whose purpose is to respond, as soon as possible, to the transient or permanent needs presented by infants with disorders in their development or who have the risk of to suffer them. This type of multidisciplinary intervention is planned and accompanied, in

the intervention, by a group of specialists who seek to solve the needs of the child (Libro Blanco de Atención Temprana, 2000).

The early care process should begin as soon as possible, the first few months of life, and it must be based on a careful individual assessment of the child's abilities and difficulties. Implanting an intervention program as early as possible is very advisable, even before definitively clarifying a diagnosis with guarantees, initially treating the autistic symptoms.

Early care seeks to favor the adaptation of the child in its immediate environment; in family, care is sought to improve knowledge and strategies to help the child. To this is added a set of actions and proposals that must be made in health, educational or community contexts. This type of intervention is very important because of its relationship with aspects of neurodevelopment in the first learning opportunities, and because of its contributions to the detection and early intervention of children who present risks or alterations in development or disabilities, among others (Martínez & Matamoros, 2010).

Problems in the child's development can be presented in different ways: as alterations in motor development, in language, in personal-social interaction, in cognitive, etc. Most of the time there are commitments that affect more than one function. In this case, the child has mixed functional alterations in its development. The clinical presentation of children with developmental problems varies widely, not only in relation to the type of delay, but also in relation to the intensity of the delay.

The brain of the child is in continuous development, with a sometimes vertiginous growth, and subject to modifications and connections proper to the continuous stimulation that the environment provides. The knowledge of the nervous system will help us to understand the deficits that can appear due to an abnormal development of the brain or because of damage to the brain at an early age. Depending on when these abnormalities or damage occur (during pregnancy, perinatal period or during the course of infancy), their repercussions will vary.

Neurodevelopment can be seen as a process in which the child participates next to its environment, influencing each other and evolving in a particular direction, in this context the evaluation focuses not only on the child, but also on the interactions between the child, his or her parents, caregivers, family and immediate environment.

According to Artigas-Pallarés, Guitart, Gabau-Vila, (2013) neurodevelopment is an evolutionary process resulting from the adaptation to the environment, through behavioral patterns, in order to maintain a reproductive rate capable of sustaining the survival of the species.

In this context, the neuropsychology of child development addresses the relationship between the maturation process of the central nervous system and behavior during childhood; it considers the variables of maturation, brain plasticity and development during the early stages of the life cycle, as well as the disorders presented in them, to design or adapt models and strategies for evaluation and intervention, appropriate to the child population (Martínez & Matamoros, 2010).

Neurodevelopmental Disorders are alterations or delays in the development of functions that are associated with the maturation of the Central Nervous System and that result in the impairment of the ability of the CNS to receive, process, store and respond to information that comes from both the exterior and of the organism itself.

The relationship between early care in neurodevelopmental disorders responds to a basic demand derived from the identification of a disorder. In any alteration of the state of health, a strong and understandable pressure is generated to act as soon as possible. This helps to reduce the strong anxiety derived from the problem and allows us to open up hopeful expectations of improvement.

In the case of a neurodevelopmental disorder, early care has as a first step to reduce family stress in the face of uncertainty about the future of a child. Possibly this repercussion would justify the intervention itself, as long

as it does not generate other problems in the family environment. But apart from these nonspecific effects, there are strong arguments in favor of the therapeutic efficacy of early care (Artiga-Pallares, 2007, p.31).

The theory of this early care is based on the existence of continuous periods of learning, so early intervention techniques are those that facilitate the way to develop a correct function from the beginning, and try, if there is an injury, to mitigate its effects. In this context, it seeks that early care should reach all children who present any type of disorder or alteration in their development, be it physical, psychic or sensorial, or are considered in a situation of biological or social risk.

The importance of adequate early intervention to cushion the negative development of impaired function should be taken into account. For example, in an autistic child, it may make more sense to assess their social relationships, in a child with motor disorder it will be better to assess their adaptive capacity in their immediate environment.

Conclusions

The different child development programs remain a great challenge for all involved, it has been necessary that the support not only involves a specific area but also a multidisciplinary team. Therapeutic actions in these types of disorders require a high technical qualification of the professionals of early care, to whom it is necessary to add specific professional competences and the empathy necessary to tune with the child and with the family (Milla & Mulas, 2009). In short, the support that should receive the early care is part of a set of integral networks necessary for the sustainability of the child, favoring and making the difference in the production of significant and lasting improvements (McEachin, Smith & Lovaas, 1993).

The development of early care for health promotion comprises different peculiarities, one of which corresponds to environmental conditions (Mello, et al. 2014).

The different studies show us significant evidence that defines how interventions at early ages have a positive effect on cognitive, non-cognitive (emotional) attainment and educational achievement. In this sense, despite the prevalence of this problem, it is difficult the early identification of this disorder, so it remains a challenge for professionals and the family. Delays and slight deviations are difficult to detect.

Early intervention in childhood, according to the contributions of Cuervo (2009) define a series of characteristics to follow:

- To implement strategies for the detection and early care of children with biological risks and social risks and developmental delays or developmental alterations, this will allow us to reduce the neuropsychological and behavioral sequels.
- To design instruments and processes for the detection and care of infants with developmental risks, this will allow us to respond to the intra and interindividual characteristics and differences of development throughout childhood.
- Early detection of these disorders in early childhood also involves a responsibility of the family, caregivers and professionals in all sectors of education, health, and community, in such a way that early intervention is carried out comprehensively and in different contexts.

In short, it is important to mention that research in developmental disorders is a field with many areas of application and importance for the detection and intervention of neuropsychological disorders and development throughout the life cycle, Mustard (2003).

In our Peruvian context, it is important to bring evaluation and intervention closer to the socio-economic reality of people. The development of the infant is a result of the combination of hereditary, biological and physical factors, but also of social and cultural environmental factors, this relationship based on the principles result in a gain in the validity of tests and evaluation procedures, diagnosis and possible intervention. In all the pathological

situations, the problem tends to be solved quickly, understanding that in this way the results will be better, but will relieve the anxiety derived from the uncertainty generated by any disease. In the case of neurodevelopmental disorders, this idea becomes even more acute.

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