BIRTH DEFECTS

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Nowadays the cases of birth defects have increased. It is connected with the environment contamination and genetic factors.

Birth defects are defined as abnormalities of structure, function, or body metabolism that are present at birth. These abnormalities lead to mental or physical disabilities or are fatal. There are more than 4,000 different known birth defects ranging from minor to serious, and although many of them can be treated or cured, they are the leading cause of death in the first year of life. Birth defects can be caused by genetic, environmental, or unknown factors.

Structural or metabolic defects are those that result when a specific body part is missing or formed incorrectly or when there is an inborn problem in body chemistry. The most common type of major structural defects are heart defects, which affect one in 100 babies. Some other common structural defects include spina bifida and hypospadias. Metabolic defects affect one in 3,500 babies and usually involve a missing or incorrectly formed enzyme.

Defects caused by congenital infections result when a mother gets an infection before or during the pregnancy. Examples of infections that can cause birth defects are rubella, syphilis, toxoplasmosis, cytomegalovirus, encephalitis, parvovirus and rarely chicken pox.

Other causes of birth defects include alcohol abuse by the mother and Rh disease, which can occur when the mother's and baby's Rh factors are different. Although a few medications can cause problems, of the 200 most commonly prescribed drugs, none is associated with a significant risk of birth defects.

Genetics play a role in some birth defects – an error in the number of structure of chromosomes can cause a baby to be born with too few or too many chromosomes, or with a damaged chromosome. Birth defects caused by chromosome problems include

Down syndrome. The risk of this type of birth defect increases with the age of the mother.

PRINCIPLES OF HYGIENE AND INFECTION CONTROL IN CHILDREN

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From birth to adolescence, children live in a world in which viruses, bacteria and other microorganisms greatly outnumber human beings. Most of these germs live in harmony with humans, but others (pathogens) can cause disease. In the 17th century scientists discovered microbes and began investigating the role they play in causing human disease. The search for microbes continues today. Several factors help determine whether an encounter between host and microbe will result in disease. One is the intrinsic capacity of an organism to cause disease. A second important determinant is the number or "doze" of microorganisms. A third factor is the status of the individual child.

As for the stages of immune system development one can say that the child's immune system undergoes roughly three stages of development: the newborn period, the infant-toddler period, and the school-age period. Childhood diseases can be caused by viruses, bacteria, and other microorganisms. Distinguishing between viral and bacterial organisms is often the key issue in diagnosing and treating disease, largely because bacteria respond to antibiotic treatment and viruses do not. With the discovery of viruses, bacteria and other microorganisms the scientific community shifted its attention to germs and their strategies for survival. It became evident that different infectious diseases had different degrees of communicability and different modes of transmission. The concept of contagion – the spread of disease causing microorganisms – led to the development of antibiotics and vaccines, both of which play a critical role in controlling disease. Certain other historical developments also help control infection, although their contributions often go unappreciated. Perhaps the most important