

**FAMILY AND KINDERGARTENS -
*INFLUENCE OF THE ENVIRONMENT ON
THE SPREAD OF INFECTIOUS DISEASES***

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Habakuk, October 2nd 2009

- Keeping children healthy is goal of parents, caregivers and health professionals. If we take into consideration how often our children fall ill, we are far away to realize this wish.
- In early, most vulnerable period of life, the environment in which the child grows has a great influence on her/his health.

- In Slovenia, daycare attendance is increasing in the last years despite the rise in unemployment
- In 2008/2009 kindergarten was attended by 70% (66%) of all preschool children:
 - 49% (44%) in the first age period (1st to 3rd year of age)
 - 84% (82%) in the second age period (3rd year of age to school entrance)

- Daycare attendance brings many advantages as well as a higher risk of developing certain illnesses.
- Group daycare increases the possibility of transfer and development of infectious diseases, which impacts not only the individual, but also public health, with economic and social consequences.

- Children in group daycare more often suffer from respiratory, gastrointestinal and skin infections than children cared for at home.
- After attending daycare for six months and after three years of age differences in the morbidity of children in daycare and those cared for at home decrease and after two years of daycare the morbidity equalizes.
- Children who attend kindergarten often transfer infection to their family, which is particularly dangerous for babies.

How infection spreads

- **Directly:** - by saliva droplets (coughing, sneezing)
 - by touching contagious body fluids or secretions (mucus, saliva, blood, vomitus, stool, urine)
- **Indirectly** - by contaminated hands after contact with contagious body fluids and secretions of sick people (after cleaning the nose, inflamed eyes or infected skin, changing nappies...)
 - by touching contaminated objects that have been in contact with the contagious person's body fluids or secretions

Causes of increased morbidity in kindergarten children

- **immature immune system**
- **contagiousness in the period of incubation, asymptomatic carriers**
- **close physical contact between children**
- **close physical contact with caregivers**

Prevention of infections

- virulence of the germ cannot be influenced
- it is possible to influence children's resistance and
- the number of contagious agents they are exposed to

What can the family do

- only a healthy child may attend kindergarten
- basic hygiene rules should be considered at home (hand washing after using the toilet, nappy changing, nose cleaning, after playing in the yard or in the sand, contact with animals, before and after meals)
- support natural immunity (healthy nutrition, adequate clothing, physical activity in the fresh air, an adequate daily rhythm. Avoiding large temperature changes, contacts with sick people [shopping centres!], and smoking areas).

What can the family do

- Parents with a baby should keep their older child at home during respiratory infections to decrease the possibility of the baby becoming infected.
- Children should be vaccinated against all vaccine preventable diseases, at least in accordance with the national immunisation programme.
- When a child becomes ill, his parents should inform the kindergarten of the child's disease and follow the paediatrician's instructions.

What can kindergarten do

- Care for adequate hygiene and prevention of infections:
 - regular airing of the premises, enforcing food division sanitary standards, cleansing and disinfection of surfaces, sanitary objects and toys...
 - good routines for washing hands and for changing nappies, use of disposable paper handkerchiefs and towels, garbage bins with foot pedal
 - permanent education of kindergarten staff
- Exclusion of ill children from the group

What can kindergarten do

- **Vaccination of the caregivers**

Adults are often the source of infection for small children.

- **Assurance of quality nutrition**

At almost all kindergarten, children are served proper food.

- **Stimulation of physical activities**

Despite often limited kindergarten premises, most kindergartens ensure children have adequate physical activities.

Problems, we are dealing

- Change in family lifestyle:
 - inadequate physical activity
 - unproper nutrition
 - smoking
 - ignoring of basic hygiene principles, such as hand washing and avoiding contacts with ill persons

Problems, we are dealing

- Parents bring ill children to kindergarten
 - hope their child feels only a little worse
 - fear to loose their job
 - it is cheaper (families with low salaries and unemployment benefits)
 - consider children a burden

Problems, we are dealing

- All parents are informed about the spread of infectious diseases in kindergarten before their children starts kindergarten, but because of their disrespect for basic instructions, kindergarten children become ill more often than we would expect.
- Parents who stick to instructions and keep the ill child at home are more often on sick leave to care for their sick child only because of some individual's irresponsible behaviour.

How to solve the problem?

- permanent education of parents and kindergarten staff
- clear rules (law, regulations), enabling kindergarten staff to decline entrance to an acutely ill child or a child who endangers peers (e.g.: lice) should be established/formulated
- sanctions should be imposed on those who jeopardise the health of not only their own children but also other children and cause unnecessary difficulties to numerous other parents with their irresponsible behaviour