Children and Infectious Diseases

It is a common and almost regular concern of all parents that their child gets sick after being put in baby sitting/play nursery or school. We must know that we are surrounded by bacteria/viruses and other germs not in billions but in trillions. Our innate body immunity system can cope up with most of these infections. Furthermore, there are vaccines for diseases caused by viruses and bacteria which lead to death, serious illness or disability. For mild to moderate illness caused by bacteria/viruses, there is no vaccine. It is only when we come in contact with those bugs we get the disease in different severity and recover. This gives protection from same illness in future.

Nutrition deficiency

Due to extreme weather in summer people seldom go out during the daytime to get fresh air and direct sunlight. To get adequate vitamin D, our skin must be exposed to direct sunlight between 10 am - 4 pm. However during summer season, this is the time when people do not go out causing vitamin D deficiency in the region.

Poor feeding practices (giving too much milk and juices than semisolids) lead to nutritional deficiency, iron deficiency in particular, which makes them susceptible to infection.

In UAE and Dubai in particular where population movement is from around the globe, this brings visitors who bring diseases prevalent in their region.

Infectious diseases at school

Infectious diseases account for millions of school days lost each year for kindergarten through 12th grade public school students all over the world. In US for example, in spite of best preventive measures:

- 40% of children aged 5–17 years missed 3 or more school days in the past year because of illness or injury.
- Nearly 22 million school days are lost each year due to colds alone.
- 38 million school days are lost each year due to the influenza virus.

Schools inherently foster the transmission of infections from person to person because they are a group setting in which people are in close contact and share supplies and equipment. But schools also can be instrumental in keeping their communities healthy by:

- Encouraging sick students and staff to stay home and seek medical attention for severe illness.
- Facilitating hand hygiene by supplying soap and paper towels and teaching good hand hygiene practices.
- Being vigilant about cleaning and disinfecting classroom materials and surfaces.
- Providing messages in daily announcements about preventing infectious disease.
- Adopting healthy practices such as safe handling of food and use of standard precautions when handling body fluids and excretions.
- Encouraging students and staff to get annual influenza vaccinations in addition to other recommended vaccines.

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CEDARS - Jebel Ali International Hospital is a full-fledged multi-specialty hospital offering services ranging from Pediatrics to Occupational Health, Laparoscopic Surgery to Internal Medicine. The Hospital is equipped with ICU for medical and surgical emergencies, with two major and one minor operation theatres and runs fully equipped Laboratory and Radiology departments. CEDARS – Jebel Ali International Hospital is accredited by TUV and JCI and located next to JAFZA Gate 2.
Foodborne illnesses is caused by consuming contaminated foods or beverages. Many different disease-causing microbes, or pathogens, can contaminate foods, leading to many different foodborne illnesses. Educating students, families, and school staff on simple but effective food safety measures can help prevent cases of foodborne illnesses that lead to hospitalization and even death.

Food safety remains a concern in schools, as children can come into contact with contaminated foods on school property.

**Influenza**

On average, each year 5%–20% of the U.S. population acquires seasonal influenza (flu), more than 200,000 people are hospitalized as a result of flu complications, and about 36,000 people die from flu. Young children (6 months - 5 years) are among the populations at greatest risk for serious flu complications.

Flu viruses are spread mainly from person to person through coughing or sneezing by people with influenza (air borne or droplet infection). Sometimes a person can become infected by touching something — such as a surface or object — with flu viruses on it and then touching their mouth or nose. The best ways to prevent seasonal flu is to get a seasonal flu vaccination each year and follow proper respiratory and hand hygiene etiquette.

**Preventing transmission of infectious diseases**

**Hand Hygiene**

Keeping hands clean is one of the best ways to keep from getting sick and spreading illnesses. Practicing good hand hygiene gets rid of bacteria and viruses from contact with other people or surfaces.

Schools play a key role in supporting hand hygiene. This involves teaching good hand and nail-hygiene practices, providing hand-hygiene information to students and families, and providing the hand soap and paper towels necessary to reduce the spread of infectious diseases in the school environment.

**Respiratory Etiquette**

Respiratory infections can spread from person to person in respiratory droplets of coughs and sneezes. Droplets from a cough or sneeze of an infected person can be propelled through the air and land on the mouth or nose of people nearby.

To prevent the spread of respiratory illnesses, the nose and mouth should be covered with a tissue when coughing or sneezing and the tissue should be thrown in the trash immediately after use. Schools can teach respiratory etiquette to students and staff — including coughing or sneezing into the arm if no tissue is available — and can ensure that tissues are available.

**How to protect your child**

- In addition to regular check up, inform your paediatrician that you are going to put your baby for day care/baby sitting/Nursery your child will then be screened for any nutritional deficiency (Iron, Vitamin D etc). Probiotics (bacteria in our digestive system - provide immunity) and some oral vaccines will be prescribed which can be given at home.
- Make sure your child vaccination status is up to date. Child must receive Influenza viral vaccine before winter every year.
- Take care of hand and nail hygiene. Supervise hand wash and use of sanitiser at home and school.
- Teach how to cover cough/sneeze (tissue/arm)
- Hand wash after using the toilet, before food and upon entering the home.
- If you have a baby less than 6 mo of age, all family members must take Flu vaccine. This is in order to protect the small infant from getting Influenza.
## Advised vaccinations

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### Other vaccines:
1) Rotavirus - from 6 weeks of life
2) Hepatitis A - From 1 year of age
3) Meningitis (ACWY) - From 9 months of age
4) Typhoid - From 2 years of age
5) Influenza - Yearly from 6 months
6) Yellow fever - from 6 months of age (only for those travelling to African countries)
7) HPV Vaccine - From 9 years of age; only for girls

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**Medical Consultant for June 2013**

Dr. Ziaul Akhter has more than 25 years of hospital and teaching experience as a consultant in Pediatrics and new born (Neonatology) care. Currently, he is the head of Paediatrics Department at CEDARS – Jebel Ali International Hospital.

After obtaining his MD (Pediatrics) in India, Dr. Zia had the privilege to work in prestigious medical institution in India like Holy Family and Christian Medical College. He also has 14 years of extensive experience in Saudi Arabia in the Ministry of Health as Specialist Paediatrician in the field of General Paediatrics and Neonatology.

His special interests are respiratory/allergic problem in children, infant feeding practices, new born care and children vaccinations.

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