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RE-EMERGING THREAT

The rising number of "forgotten diseases" has put a spotlight on the importance of vaccination, writes **Kasmiah Mustapha**

Adults who are at risk of infectious diseases should get vaccinated.
Picture source: MedPro

Measles is making a comeback trail due to unvaccinated children. **Picture: Huffington Post**

THE return of infectious diseases is a real threat.

Worldwide, there have been increasing reports on cases of measles, whooping cough (pertussis), polio, tuberculosis (TB) and chicken pox.

Of these, measles and whooping cough have affected thousands of people.

With the advancement of medicine and vaccination, some of these aforementioned diseases were thought to have been eradicated, but doctors are seeing their return, leading to fatalities in some instances.

Despite the availability of vaccines, the World Health Organisation (WHO) reported that there were 114, 900 measles deaths globally in 2014, mostly in children under 5.

Each year, TB kills over one million, according to WHO.

Here, the Health Ministry has reported that measles cases are on the rise — two children died last year due to the disease.

Last year, there were 602 cases of measles compared to 235 in 2014 and 195 in 2013.

Locally, TB is still the leading cause of infectious disease mortality, with 1,603 cases reported in 2014 compared to 1,597 in 2013.

The WHO acknowledges that immunisation is one of the most successful and cost-effective health interventions and prevents between two and three million deaths every year.

From infants to senior citizens, immunisation prevents debilitating illness, disability and death from vaccine-preventable diseases such as diphtheria, hepatitis A and B, measles, mumps, pneumococcal disease, polio, rotavirus diarrhoea, tetanus and yellow fever.

While health experts have been pushing for children to be vaccinated, adults should take the same precaution.

Universiti Putra Malaysia deputy dean (Research and Internationalisation) Professor Dr Zamberi Sekawi says vaccines are an importance means of prevention both for adults and children.

When vaccines were created, the aim was to prevent people from dying from dangerous infectious diseases.

In those days before vaccine for measles was available, the disease killed millions. When people had measles in those days, chances of death were high, especially in children, he says.

"That is why vaccines are created. If these diseases are not dangerous and can kill people, why would scientists come up with vaccines? So to say that we don't need vaccines is wrong. Immunisation is protection of life.

"Children must take the vaccines that are listed on the National Immunisation Programme and adults should know of their own infection risks and get vaccinated."

RE-EMERGED DISEASES

Dr Zamberi says in Malaysia, measles, whooping cough (pertussis) and turbeculosis (TB) have re-emerged.

While cases of TB are possibly due to the influx of foreign workers, measles and whopping cough are spreading from people who are not vaccinated.

"Based on our observation, those who were infected with measles or whooping cough are children who were not vaccinated.

"Adults who were vaccinated as children have some risk of acquiring these diseases as their immunity will wane with age. They may suffer a mild disease but they can still spread the virus to others, especially children.

"Measles is very infectious and can spread very fast. There is no treatment for measles as it is a viral infection. Doctors can only treat the symptoms. There are serious complications from measles such as pneumonia and swelling of the brain,"

Whooping cough usually spreads between family members. The elderly who are infected can spread it to children in the family and the risks are higher for those who are not vaccinated.

"Adults, who think they are at risk, should get whooping cough vaccine. Pregnant women should also get it towards the later part of their pregnan-

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INFECTIOUS DISEASES: OUTBREAKS IN 2015

"Immunisation is protection of life."

Dr Zamberi Sekawi

cy because maternal antibodies will be transferred to the baby near term and will protect him during the early months of life."

He says pulmonary TB cases in Malaysia is mainly due to foreign workers. The majority of them are infected with the bacteria but were probably undetected during medical check-up.

"It is hard to detect the disease early as we rely on sputum and x-rays. Usually, the bacteria take between a few weeks and a few months before it can be detected. The worry is there are confirmed cases of multi-resistance TB here which means the disease is resistant to first-line antibiotics."

Dr Zamberi says the vaccine during childhood prevents invasive TB spreading to other organs.

It is less effective in preventing respiratory disease, which is the more common form of TB in adults.

"TB vaccination is not given to adults. But the disease is easily treated if the patient follows the medication regimen. They have to be on antibiotics for at least six months. This is also one of the reasons why the disease is spreading. The foreigners do not come to hospital early when they experience non-stop coughing. They present late with the disease and then do not follow the treatment.

"They could still spread the bacteria to others when they stop treatment. If they complete the medication, the cure rate is virtually 100 per cent."

According to Mayo Clinic, without treatment, TB bacteria can spread to other parts of the body through the bloodstream.

Complications include spinal pain, joint damage, swelling of the membranes that cover the brain (méningitis), liver or kidney problems and heart disorders.

Dr Zamberi, who is also the president of the Malaysian Society of Infectious Diseases and Chemotherapy, says the society is working together with the Malaysian Paediatric Association (MPA) to advocate the need for immunisation for Malaysians at all ages.

"The MPA is working on children's vaccination while the society is focusing on immunisation for adults. We make sure our work does not overlap. But the message is clear, it comes back to vaccination."

In recent years, vaccines have been developed for infectious diseases including H1N1 influenza, dengue and Ebola.

Researchers are also working on vaccines for malaria, Methicillin-resistant Staphylococcus aureus (MRSA) and HIV/Aids.

According to Pharmaceutical Research and Manufacturers of America, the country's biopharmaceutical research companies are developing nearly 170 vaccines for infectious diseases. The vaccines are either undergoing clinical trials or under review by the US Food and Drug Administration.

kasmiah@nst.com.my

WHEN PROTECTION WEARS OFF

IMMUNITY from childhood vaccinations can wear off and adults may be at risk for new and different diseases.

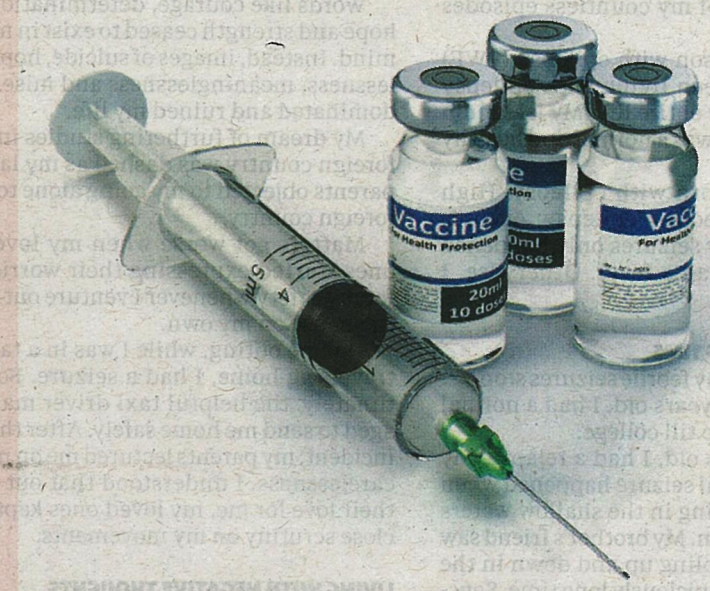
Also, vaccines and their recommendations may change over the years and certain vaccines may not have been available when they were a child.

The specific immunisations needed as an adult are determined by factors such as age, lifestyle, health conditions, travel, and previous immunisations.

Throughout their lives, adults need immunisations for protection against:

- Seasonal influenza (flu)
- Tetanus, diphtheria, and pertussis (whooping cough) for all adults who have not previously received a Tdap vaccine
- Shingles for adults 60 years and older
- Pneumococcal for adults 65 years and older and those with risk conditions
- Hepatitis B for adults who have diabetes or are at risk
- Other vaccinations include those that protect against HPV (human papillomavirus, which can cause certain cancers), hepatitis A, meningococcal disease, chickenpox (varicella), and measles, mumps and rubella

Source: US National Foundation for Infectious Diseases



For now, vaccines are the only way to stop the spread of infectious disease.
Picture source: healthimpactnews