

# Preventing pneumonia in seniors

DR ZUBAIR KHALED HUQ

Pneumonia is an infection that affects one or both lungs. The disease can range from mild to severe and can be fatal. It is typically caused when bacteria, fungi or viruses enter the lungs and cause inflammation within air sacs in the lungs called alveoli. This inflammation may cause the alveoli to fill with fluid, resulting in difficult breathing and fever. Common causes of pneumonia include the bacteria *Streptococcus pneumoniae*, and viruses such as influenza. During the winter season it increases in Bangladesh. Once an older person gets it other associated disease flares up.

It makes them more vulnerable to other problems. Because of its rapid onset and ability to spread to other parts of the body, pneumonia can be deadly. Even a milder case deals a severe blow to your immune system, which can turn an underlying condition like heart disease into a life-threatening malady. Since older people often have these additional problems, any sort of pneumonia can have dangerous complications.

The most common symptoms of pneumonia are cough, fever (which may be mild or high),



shaking chills and shortness of breath. Other symptoms may include confusion (especially in older people), excess sweating and clammy skin, headache, loss of appetite, low energy, fatigue and sharp or stabbing chest pain that gets worse when you breathe deeply or cough.

There are several primary reasons why seniors are more susceptible to contracting pneumonia — they are frailer than younger people, seniors cannot clear secretions as well from their lungs. Those secretions can go

down into bronchial tubes, causing the infection. Having weaker immune systems, seniors often cannot fight off an infection. A suppressed immune system may also be due to an organ or bone marrow transplant, chemotherapy, or long-term steroid use. Senior health conditions like diabetes, Parkinson's disease, chemotherapy, and HIV put seniors at a higher risk for pneumonia as well as, asthma, Chronic Obstructive Pulmonary Disease (COPD) and bronchiectasis.

Chest X-rays and a blood test are how doctors can determine pneumonia. If it is bacterial pneumonia, it is usually treated with antibiotics. If the infection is viral, an anti-viral medicine may be prescribed. Patients may begin to feel better before finishing their medicine but should continue taking it as prescribed. If they stop too soon, pneumonia may return.

Doctors may give the patient fluids if he or she is dehydrated, oxygen if there is a breathing problem, along with pain relief

and medical support. Milder cases of pneumonia can be cared for at home, but with severe cases, other underlying health conditions hospitalisation maybe required.

Flu predisposes older people to pneumonia, so the number of cases tends to spike during flu season, but the illness can occur at any time of the year. To help reduce the risk of pneumonia, get vaccinated — all people over age 65 should get an annual flu shot, as well as a pneumococcal vaccine, a one-time shot that protects against the pneumococcus, or pneumonia bacteria. Consult this with a physician first.

Practice good hygiene. Wash hands regularly or use an alcohol-based hand sanitiser. Stop smoking. It damages the lungs' natural defenses against respiratory infections. Get enough sleep, exercise regularly, and eat a healthy diet. Children in the senior's family should get vaccinated.

Caregivers should also be vaccinated to avoid getting themselves sick and passing the illness to older members of their own families.

The writer is a gerontologist and a public health specialist. E-mail: zubairkhaledjoy@gmail.com

HAVE A NICE DAY

## Let's Talk 'RLC' & 'Health Begins at Home'



If you visit local hospitals or doctors' clinics, you will see that there is a record rise of some illnesses like diabetes, heart diseases and kidney problems in families especially living in urban and semi-urban areas. And more alarmingly, along with physical illnesses — different

types of mental illnesses are also on the rise. It is true that our life is much easier today with a lot of gadgets, yet each and every day a lot of unexplainable sicknesses are also approaching slowly behind our familiarity. It has been seen that most of us in the first category consume small amount of vegetables and fruits and maintain a sedentary lifestyle. A huge group has also developed a 'fast-food culture' - which is more harmful than we assume. Even at home, we are ignorant about consuming the right amount of oil, sugar, salt, red meat and carbohydrate. We also cannot sidestep the concern of 'eating alone' and 'ill-timed sleeping'!

Regarding the other issues of illnesses, researchers found more people than ever before suffer from anxiety, depression and distress. It starts from the family by choosing an outgoing life and becoming less and less of a family person. Some people feel proud to be not at home with the excuse of saying heavy load of work. They do not feel the shame of ignoring their close ones at home. In both the cases, home can play a big role. As it starts from the family by choosing healthy eating habits, adopting physical activities and quitting harmful habits which include



spending less time on your smart phone. Let us talk about another powerful treatment available at home, clinics and hospitals. That is treating sufferers with Respect, Love and Care (RLC). As psychological sicknesses are increasing, home can play a special role. 'RLC' is the silent revolution that has swept across all homes and treatment places; offering patients with a never ending wave of empathy, care, and support during the patient's journey to recovery from all illnesses including cancer; patients receive utmost care to ensure they receive maximum comfort both physically and mentally.

Then again, unfortunately our sweet homes alone would not be able to improve health outcomes. They need to be designed with health in mind. Besides designing features we need great solutions to pressing global health concerns. In that context, clean water, adequate air and sunlight are essential.

Nevertheless, taking on the role of caring for someone with an illness is a big commitment. Although sometimes it can be demanding, but remember, it can also be a rewarding experience. As long as you read this article you may have a sick or injured person close to you. It is a great idea to go and sit next to her/him — say a few good words with care. You will definitely make your beloved person happy and put a huge smile on their face. And also do not forget to look after yourself.

Happy New Year!

E-mail: rubaiulmurshed@gmail.com

## HEALTH bulletin



### Weight maintenance after intentional weight loss

Many people who lose weight intentionally struggle to maintain their lower weight. In the carbohydrate-insulin model of obesity, a high glycaemic load increases the blood insulin-to-glucagon ratio, which results in increased hunger, lower energy expenditure, and weight gain. To test this model, researchers examined the effects on total-energy (Kcal/day) expenditure of three diets with different carbohydrate-to-fat ratios.

Researchers randomised 164 adults (body-mass index,  $\geq 25$  kg/m<sup>2</sup>) to high-, moderate-, or low-carbohydrate diets (60%, 40%, and 20% carbohydrates, respectively) with inverse proportions of fat (20%, 40%, and 60% fats, respectively). Diets had a fixed amount of protein (20%), and total energy intakes to maintain weight loss.

After 20 weeks, the intent-to-treat analysis showed higher total energy expenditure in the moderate- and low-carbohydrate groups (mean, 91 Kcal/day and 209 Kcal/day, respectively).

The effect of the low-carb diet on improving total energy expenditure was even greater in the subgroup of people whose pre-weight loss insulin levels were in the highest tertile.

## Thalassaemia: the silent genetic disorder

SADIA TASNIM TUBA and MD TARIKUL ISLAM

It was Shifa's (not an actual name) 18<sup>th</sup> birthday. She was trying to put on a bit darker makeup just to hide her pale and ailing skin. What an irony! The meaning of her name is 'the healing' — nevertheless, it has no effect on her at all! Shifa has a disease named thalassaemia.

Recently, we took part in a field work and went to different educational institutions of Dhaka. Our ultimate motto was to spread awareness among young people. We also offered them free blood test so that they could know their carrier status of the disease. We found many young boys and girls even do not know about the disease, let alone their knowledge on how it spreads and the consequences.

Some terms should be understood in order to know the type of the disease. They are alpha thalassaemia, beta thalassaemia, thalassaemia major and thalassaemia minor (also called thalassaemia trait). The main component of the red blood cells (RBC) called 'Haemoglobin' has two parts, namely globin chains and heme.

There are two types of globin chain — alpha globin and beta globin. A mutation or deletion of the genes that control globin chain production is the main reason of having thalassaemia. Thalassaemia is called 'alpha' when this part of the haemoglobin is not being made.

Same thing is also applicable for beta thalassaemia.

On the other hand, to mark the severity of the disease, the word major or minor is used. The same way we inherit our parents' skin or hair colour, this abnormal globin gene is also inherited. A person, may not have any symptoms at all or may have only mild anaemia, if s/he inherits the abnormal gene from his/her parents; No blood transfusion will be needed and the person will have normal blood iron level, meaning he has only the trait.



This is called thalassaemia minor. Then again, a person with thalassaemia major may have severe symptoms and may need regular blood transfusions.

It is really important to know whether a person has received abnormal trait from his parents. When two persons (both have abnormal trait) marry, there is a 25% chance of having a baby who is definitely going to be a thalassaemia patient. If an abnormal trait marries a normal trait, the parents will not have the diseased child but

may transfer the abnormal trait to their children and increase their risk of having thalassaemia.

There is no actual prevention for thalassaemia apart from highly expensive bone marrow transplantation. Yet, there are some precautions, for example, the unmarried people should do the blood test so that they can know about their carrier status and avoid marrying the carrier of the disease and also consanguineous marriage should be ignored.

This is truly unfortunate that there are many children like Shifa who is becoming the victim of our igno-

rance. The disease not only affects children, it also creates unbearable problems to the family. To get rid of this intolerable situation, all marriageable people must perform a genetic test before planning for marriage so that in future, their child does not have to be silhouetted against the shiny horizon.

Sadia Tasnim Tuba is a Research Fellow at the Institute for developing Science and Health initiatives (ideSHI) and Md Tarikul Islam is a PhD student at Kanazawa University, Japan.

f /StarHealthBD



## Orion Pharma Scholarship for Medical Student

### ডাক্তারবিহীন একটি সুস্থ, সুন্দর এবং সাবলীল সমাজ কি চিন্তা করা যায় ?

ডাক্তার হওয়ার স্বপ্ন অনেকেরই, কিন্তু অনেক সময় শুধু আর্থিক সংকটের কারণে আজন্ম লালিত স্বপ্ন ম্লান হয়ে যায়। সেই সব স্বপ্নবান, সম্ভাবনাময় মেধাবী শিক্ষার্থীদের লক্ষ্য অর্জনের সহযোগিতার জন্য ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাস্টের সমন্বয়যোগী উদ্দোগ "ওরিয়ন ফার্মা মেডিকেল স্কলারশীপ"।

#### যারা আবেদন করতে পারবেন

সকল সরকারী মেডিকেল কলেজে সদ্য ভর্তিকৃত ১ম বর্ষের অসচ্ছল ও মেধাবী শিক্ষার্থী।

#### ৩১ জানুয়ারি ২০১৯-এর মধ্যে

আবেদনপত্রটি ওরিয়ন ফার্মার ওয়েব সাইট থেকে সংগ্রহ করে যথাযথভাবে পূরণ করে প্রয়োজনীয় তথ্যাবলীসহ নিচের ঠিকানায় পাঠিয়ে দিন:

মেডিকেল সার্ভিসেস ডিপার্টমেন্ট

ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাস্ট

ওরিয়ন হাউজ, ১৫৩-১৫৪, তেজগাঁও শিল্প এলাকা, ঢাকা-১২০৮।

মেইল: abdullah.arafat@orion-group.net, saifuz.zahan@orion-group.net

মোবাইল: +৮৮০১৭০৯৬৫২৩১৫, +৮৮০১৭০৯৬৫২৩১৬



www.orionpharmabd.com



**প্রয়োজনীয় তথ্যাবলী**

- ১) নিজ মেডিকেল কলেজের অধ্যক্ষের প্রত্যয়নপত্র, পূরণকৃত আবেদনপত্র, জাতীয় পরিচয় পত্র/ স্মার্ট কার্ড এর ফটোকপি
- ২) অভিভাবকের বাৎসরিক আয়ের সনদপত্র (ওয়ার্ড কমিশনার/ ইউপি চেয়ারম্যান/ নিয়োগদাতা প্রতিষ্ঠান কর্তৃক সত্যায়িত), ২ কপি পাসপোর্ট সাইজের সত্যায়িত ছবি
- ৩) সকল শিক্ষাগত যোগ্যতার সনদপত্র এবং নম্বরপত্রের সত্যায়িত ফটোকপি
- ৪) নিজ মেডিকেল কলেজ থেকে রেজিস্ট্রেশনের সত্যায়িত ফটোকপি