What Kills the Most Young Children Around the World?

By Julianna LeMieux — November 13, 2017

The answer to the question is not an obvious one. You might think malaria or malnutrition? But, no - the answer is pneumonia. Pneumonia kills ~ 1 million children under the age of five around the world - more than HIV/AIDS, diarrhea and malaria combined. However, it does not get the same attention as other infections that are a challenge for global health. As November 12 was World Pneumonia Day, some attention on this relatively unrecognized killer is in order.

To start, it is important to mention that virtually all (99%) of pneumonia deaths in children under five occur in low and middle-income countries.

Pneumonia is an umbrella term, describing an infection in the lungs. It can be caused by infections with bacteria, viruses or fungi and may result after an initial infection such as the flu. The symptoms of pneumonia are, in general, cough, fever, chills, and trouble breathing.

Infections result in an inflammatory response, where white blood cells attempt to contain and engulf the infection. This defense response, in a lung infection, can lead to fluid in the lungs - filling up the all-important air sacs called alveoli. This can happen in just one small part of the lung, referred to as lobar pneumonia. Or, when patches of inflammation occur all over the lungs, it's called bronchial pneumonia.

Because the primary job of alveoli is to transfer oxygen from the air we breathe to our blood, when they are damaged, oxygen levels in the blood decrease, leading to diminishing cell function and potentially death.

Pneumonia caused by a bacterial infection can be treated with antibiotics, and in this country, are
readily given. In addition, two very effective vaccines are available for pneumonia - one for children and a separate one for adults over 65 years old. For more information regarding the pneumonia vaccines, please read my colleague’s story, "Hillary Clinton Says She Has Pneumonia, And That Means ... ? [2]"

However, in other areas of the world where neither vaccines nor antibiotics are available, something that is very treatable here causes 19% of childhood deaths.

Of course, malnutrition, HIV infection and other environmental factors that weaken immune systems bring greater risks of harm. Clean water, hand washing, and improved nutrition would help tremendously in the battle to stop pneumonia deaths.

UNICEF and global partners launched a campaign almost two years ago called Every Breath Counts [3] that puts a focus on increasing funding and supporting policy changes to help curb pneumonia deaths.

“Although sub-Saharan Africa accounts for half of pneumonia deaths among children under five worldwide, funding for pneumonia prevention, management and treatment in the region remains low,” said Dr. Mark Young, UNICEF Senior Health Specialist. “More resources and more commitment at the highest level will bring us closer to stopping this disease from being a major child killer.”

Let’s hope that this and similar initiatives start to chip away at the global crisis of pneumonia in children under five.

References:
