

By: Philip Incao, M.D.

Acute inflammations like colds, the flu and fevers seem to be an inescapable part of life: everyone experiences them. Why do we get them? Many of us have noticed (if not, then our spouses have noticed!) that we often come down with a cold or flu when we are overly stressed or depleted. We explain this by assuming that stress lowers our resistance to the viruses and bacteria that, we believe, like to attack us and make us sick. Most of the time we peacefully coexist with these microbes which everywhere share our environment, and if we get sick it's often because we've allowed ourselves to get out of balance. This applies to children too, but only partially.

In children, studies have shown that respiratory infections increase in frequency from birth until a peak by age 6 followed by a sharp decline after age 7, irrespective of treatment. In other words, it seems to be a normal feature of childhood to experience a variety of acute inflammations, especially respiratory, in the first seven years of life.

Prior to the advent of 20th century improvements in sanitation and living standards, children had a high death rate in their first seven years from these acute inflammations: measles, scarlet fever, diphtheria, whooping cough and the common unnamed pneumonias and diarrheas. These have been the greatest threats to children throughout history, and still are in developing countries. In all modern nations, children's deaths from such acute inflammations have been steeply declining ever since 1900, and over 90% of the decline occurred before the advent of antibiotics and vaccinations. Polio is an important exception to this pattern. Just before 1900, when all the other familiar life-threatening children's illnesses were beginning to decline, the newcomer Polio made its first appearance in medical history and continued to grow in importance until its abrupt decline with the advent of the Salk and Sabin Polio vaccines in the 1950's.

In the US today what used to be the common dangerous infections of childhood only account for about one percent of children's deaths. In contrast, 7% of deaths in American children ages 1-19 are from cancer, 7% are from suicide and a shocking 14% are from homicide.

Since 1960 there has been a sharp increase in both the frequency and the severity of asthma in many developed nations. In the U.S., asthma accounts for one percent of children's deaths—equal to infections—and is a leading cause of childhood disability.

A growing body of medical research supports the common-sense idea that children who experience frequent infections and inflammations in early childhood will strengthen their immune systems and will be less prone to allergies and asthma than children who rarely experience such infections. This idea is called "the hygiene hypothesis." Research has revealed a list of factors which correlate with a decreased risk of asthma and allergies, including the avoidance of vaccinations and antibiotics and the blessings of growing up in a large family and having farm animals.

If the hygiene hypothesis proves to be correct, it will have a revolutionary impact on medical practice. We will realize that, when children experience their colds and fevers, they are challenging their immune systems and developing an inner strength which will be theirs to draw on throughout life.

Factors correlating with lower risk of allergies and asthma

- Having older siblings
- Entering daycare by 6 months old
- Reacting positive to a T. B. skin test
- Having had the measles
- Not having had the DPT or MMR vaccinations
- Having had little or no antibiotics, especially before the age of two
- Eating fermented foods containing live lactobacilli
- Growing up with frequent exposure to farm animals
- Not washing much

As with all challenges in childhood, our job as parents and health care workers will be to strengthen the child to meet its challenges by not removing the challenges altogether. In any case, it's not possible in the long run to eliminate challenges, but only to replace some kinds of challenges with other kinds.

The blessing of modern medicine is that it has the tools and techniques to ease suffering and save lives when we or our children are in danger of being overwhelmed by illness.

Nevertheless, thwarting or suppressing illness does not automatically create health, though it does grant us or our children the respite to return to health thanks to our body's natural tendency to heal and to restore balance. Health and healing are mostly about developing our inner capacities to adapt to change as we move through life's journey.

To truly foster the overall health and inner strength of our children, we need to go beyond the short-sighted view of illnesses as hostile aggressors and of children as helpless victims. Children are individuals. Each child gets ill in his or her own individual way, and each illness a child gets has a meaningful part to play among the challenges belonging to that child's life. Just like everything else in nature, individual illnesses exist within a larger context of a balanced system. There is an ecology of human illness. If we attempt to eliminate a single element of an ecological system, we disturb the balance of the whole in ways which can lead to unforeseen consequences.

To these unforeseen consequences belong the dramatic increases in asthma, allergies, diabetes, and autism occurring in children today. These result, in part, from modern medicine's failure to appreciate where the balance lies in health and illness, and from its failure to grasp that when you push down on one side of the balance, the other side goes up! Our present effort to eradicate acute infectious diseases in children through

increasing numbers of vaccines has already long overshoot the healthy balance point and is now helping to create in developed nations more chronic disease and disability in children than ever before.

To improve public health, policy needs to shift its focus from eradicating particular diseases to improving the social conditions which breed disease, and physicians need to learn how to help our individual patients to maintain balance in body, soul and spirit throughout their lives. If we physicians learn that, and if we apply it to ourselves as well, then the overall health of our society cannot help but improve.