



Tending the Flame: The Link Between Education and Medicine in Childhood

Philip Incao

People are social creatures; just try to remember we need human contact and warmth more than any thing.
– Colorado eighth-grader Kelly Ash, reflecting on the Columbine tragedy.

Education is to light a fire, not to fill a bucket.
– Heraclitus

A social issue is essentially an educational issue and this in turn is essentially a medical issue, but only if medicine is fertilized with spiritual knowledge.
– Rudolf Steiner

Fever is the purifying flame which renews the body.
– Hippocrates

The Tragedy of Hospitalism

I once had a medical consultation with an eight-year-old Waldorf student who had been adopted by her American mother from a Romanian orphanage. The mother recounted to me the intensely moving story of their first encounter. She entered a room full of children and her eyes rested on a tiny waif in a crib who looked to be about eight months old, with no teeth and as yet unable to stand or talk. Their eyes met, the child laughed, and in that moment the mother knew that “this was my child.” Then to her shock she learned that the child was over two years old! “I just took her home and loved her,” she told me, “and all her teeth started coming in and she began standing, walking, and talking!”

What an amazing demonstration of the power of human caring, of human warmth, and of the human spirit itself, I thought at the time. I’ve since learned more fully that this was by no means an isolated example.

In the early 1900s, children in American orphanages and hospitals died at a staggering rate of a mysterious condition that came to be called hospitalism: “a listless wasting away despite adequate food, a weakening of muscles,

loss of reflexes, and greatly increased risk of gastrointestinal and lung infections. For older children, it might take days or weeks for hospitalism to set in, but if they left the hospital they improved drastically within days.”¹

The experts of the day could not understand why these children were dying in great numbers, but exposure to hospital germs was the prime suspect. So children were further isolated from human contact and kept alone in disinfected hospital cubicles designed to be a barrier to germs—and their death rate grew still higher.

Hospitalism lay at the intersection of two ideas popular at the time: a worship of sterile, aseptic conditions at all costs and a belief among the pediatric establishment that touching, holding, and nurturing infants was sentimental maternal foolishness.²

The lethal agent in hospitalism was no germ, but simply the fact that, in addition to being isolated and treated coolly by the hospital staff, children were allowed parental visits for only

two or three hours per week. It wasn't until 1942 that emotional deprivation and loneliness were acknowledged to be the true causes of hospitalism.

Isn't it interesting (and tragic) how an idea that seems self-evident today—that infants and children need warm and loving human contact in order to survive, grow, and develop properly—took so long to be understood and accepted? But that is the usual way human knowledge advances. As Schopenhauer observed, "All truth goes through three stages. First it is ridiculed. Then it is violently opposed. Finally, it is accepted as self-evident."

A Search for Solid Ground

The forgotten shameful story of hospitalism still has important lessons to teach. In the early 1900s it was an article of faith among physicians that human consciousness and human emotions could have no influence whatsoever on the inner workings of the human physical body. How could they? They are only subjective and non-material. They exist only in the mind, quite apart from our physical body. Or so we imagined.

It is reassuring to find solid ground in our scientific seeking to understand the human being, and for the past 300 to 500 years that solid ground has been the human physical body. Medicine still operates on the assumption that the inner workings of the body are pretty much the same in everyone. When these workings run smoothly we have health, and when they malfunction we have illness. Medicine is based on this assumption and so is popular thinking about health. Illness is a problem of bodily malfunction on the physical level, end of story. In this respect, things haven't changed much since the days of hospitalism.

Perhaps we no longer consider children's need for human warmth and loving human contact to be sentimental foolishness, but we are still a long way from understanding the inner needs of children.

Mainstream medicine and education are still based on the unproven and unjustifiable assumption, really a bias, that human feelings have little or nothing to do with the health of the physical body.

The Canary in the Coal Mine

Like the canary in the coal mine, today's child is in distress. A look at the statistics confirms this. The crudest measure of children's health is their death rate from all causes. In the 1950s American children had one of the lowest death rates in the world. According to UNICEF statistics for 2006, there are now thirty-eight nations where children under five years old have a lower death rate than the rate recorded in the U.S.

This under-five death rate, which UNICEF names on their website "a critical indicator of the well-being of children," shows that, compared with children in other developed nations, the well-being of U.S. children has been declining since the 1960s.

Now children under five years old in all of Western Europe, as well as in Estonia, Hungary, Poland, Croatia, and Cuba, have lower death rates than do U.S. children.

What are American children dying from? In 1900 most of the deaths in our children were due to inflammatory conditions

such as pneumonia, diarrhea, TB, measles, diphtheria, whooping cough, and scarlet fever. Deaths from acute inflammatory contagious conditions declined in the 20th century with improvements in the standard of living, sanitation, and literacy in the U.S. and other developed nations.^{3,4,5}

By the early 1950s most of the acute inflammatory conditions listed above were less common and far less serious in American children. Sulfa drugs, as well as vaccines for diphtheria, tetanus, and whooping cough, had been developed before World War II and were now starting to be put into more widespread use along with the new

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wonder drug, penicillin. Polio, the dreaded scourge of the 1940s and 1950s, fairly soon fell into decline with the advent of the Salk and then later the Sabin polio vaccines. The 1950s, the Eisenhower years, were a time of post-war optimism and prosperity, and also for American children a time of relative good health. We had reached a balance point: The old acute scourges of pneumonia, typhoid, diphtheria, etc., had largely retreated and the new chronic scourges of allergies, asthma, diabetes, and cancer were still relatively rare in children.

Practically unknown in those early post-war years were the now common conditions of autism, learning disabilities, hyperactivity, and attention-deficit disorder. Also largely unknown was the modern tragedy of homicide, suicide, and drug use among children.

A Great Shift in Health

There has been a dramatic shift in all modern industrialized nations: Children no longer die from acute inflammations as much as they suffer from a variety of chronic conditions affecting their immune system (allergies, asthma, diabetes), their neurological system (autism, learning and developmental disabilities), and their behavioral and emotional stability (depression, suicide, violence, and drug use).

It is reasonable to assume there is a spectrum of causes that contributes to these conditions, in specific and non-specific ways, some acknowledged and many as yet unknown or unacknowledged. One of the acknowledged non-specific causes which contributes to stress and distress in today's children is the decline of stability in the American family. According to a 1994 Carnegie report on U.S. children, the percent of children under the age of three living with one parent increased almost fourfold from 1960 to 1990, from 7% to 27%. There are also a number of possible specific causes just now being debated across the country, including vaccine reactions as a cause of diabetes, autism, and asthma; excessive antibiotic use as a cause of allergies and asthma; excessive T.V. and computer use as a cause of behavioral dysfunction

in young children; and exposure to fluoride in water and to mercury and aluminum in vaccines as possible causes of neurological dysfunction.

My purpose in this article is not to debate specific causes, as valid as that debate may be, but to point to the overall trend and to characterize it in such a way as to shed light on the problems children are experiencing today. I've already sketched the overall trend in the U.S. and other developed nations since 1900, but a summary is needed:

1. Children are dying at a lower rate than ever before.
2. Illness and death from acute contagious inflammatory diseases occur at a lower rate in children than ever before. This fact alone is responsible for #1 above.
3. Children have more chronic conditions and more disabling conditions than ever before. *The Medical Tribune* of August 13, 1998, reported a study that estimated 18% of U.S. children suffered a chronic health or behavioral problem which qualified them for special services supported by public programs.⁶ That's almost one in five children. The July 5, 2002, edition of the *Washington Post* reported: "One of every dozen U.S. children and teenagers [ages 5-20]—5.2 million—has a physical or mental disability, according to new figures from the 2000 census that reflect sharp growth in the nation's young handicapped population over the past decade—[in which] special-education enrollment rose twice as fast as overall school enrollment."
4. While certain social conditions like poverty, hygiene, and sanitation have improved, others like family stability, child abuse, violence, and drug use have worsened.⁷

A survey by the Public Health Policy Advisory Board found that of all children between the ages of one and nineteen who died in 1995, 41% died from accidents or unintentional injuries, many of them

alcohol or drug related, a shocking 14% died from homicide, 7% from suicide, 7% from cancer, 5% from birth defects, and 1% from infections.⁸

Although the overall death rate of children has declined very dramatically in all developed nations since 1900, it bears repeating that U.S. children under five years old are still dying at a higher rate today than children in thirty-eight other countries, probably largely due to the worsening social conditions mentioned under #4 above.

In 1995, homicides in the U.S. were the fourth leading cause of death in children one to nine years old, the third leading cause in children ten to fourteen years old, and the second leading cause in adolescents fifteen to nineteen years old.⁹ In a report entitled “A Call to Action,” the blue ribbon Public Health Policy Advisory Board concluded: “The most important threats to American children today lurk in the changing psychosocial fabric of American society and in behavioral and cultural changes not readily amenable to definition by the biomedical models that empowered public health earlier in this century.”¹⁰

A New Paradigm Needed

The message is clear: A new way of thinking and new models are needed, not just for social problems but for education, health, and medicine as well. In a prophetic lecture entitled “Health Care as a Social Issue” given in 1920 and cited at the beginning of this article, Rudolf Steiner speaks to this need. Steiner’s mission was to bring much-needed healing into human culture and social life. Essential to his mission was the renewal of contemporary medical science and education through the application of a new model of human biology and human psychology. Steiner’s model—simple in outline

(though complex in the details)—represented a renewal of ancient Western and Eastern wisdom,

viz. the human being is composed of four concrete realities: spirit, consciousness (soul), life, and body. Only the last, the physical body, is concrete in the material sense, that is, perceptible to our senses and to our scientific instruments. The other three elements of the human being—spirit, soul, and life—are wholly invisible and non-material, but without them the wonderful human physical body would be nothing but a cold, lifeless corpse prone to deterioration and decay. Thus, spirit, soul,

and life are not abstract or vague, but are concrete realities graspable by the human mind and having definite functions and observable effects in the human physical body.

As soon as one begins to study the human being in light of this fourfold model of spirit, soul, life, and body, some helpful answers to very basic questions start to emerge. The question at the core of this article is, “What is health, and why has it changed so dramatically in our children in the last hundred years?”

Based on Steiner’s fourfold model, we could answer this question as follows: Health is the harmonious balance in the rhythmical workings of spirit, soul, life, and body in us, a household in which our spirit should rule, and not another member of our being. Again, this is a simple answer in outline, but very complex in the concrete details.

As to the important question, what is healthy development through childhood, we would answer: It is the free and full unfolding of a child’s individual spirit in the course of time so that this active spirit is unhindered in growing to its full expression and full potential within the child’s soul, life, and body. When a child’s spirit waxes strong and becomes

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the master in its own house, then balance, harmony, and health are the results, both in soul and in body. But our spirit is accompanied by a co-worker—the human soul—as unpredictable as the wind! Spirit and soul are linked in their activity like fire and air. When spirit rules, our inner flame burns steadily and quietly, suffusing our mind and our actions with its warmth and light. When soul rules, we are prone to mood swings: from a mighty wind which fans an inferno to a stifling calm which causes the inner flame of our spirit to choke and sputter.

Fire and Ice, Blood and Nerve

These polar opposite forces in the human being were called Yin and Yang in Ancient Chinese wisdom, and Love and Hate in the Ancient Greek philosophy of Empedocles. Steiner called them Sympathy and Antipathy, perceiving them, as the ancients did, as the bipolar primal energy working in the universe and expressing itself in forces of nature like heat and cold, or positive and negative electricity, but also expressing itself in the human being as the primal warm, effusive, expansive energy of our blood and the primal cool, focusing and condensing energy of our nerves, brain, and sense organs. Robert Frost's little gem of a poem "Fire and Ice" offers a succinct poetic picture of these twin primal forces.

Some say the world will end in fire,
Some say in ice.
From what I've tasted of desire
I hold with those who favor fire.
But if it had to perish twice,
I think I know enough of hate
To say that for destruction ice
Is also great
And would suffice.

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It is the mastery and discernment of our spirit, working in every system and function of our physical body, which keeps harmony in its household between these mighty opposing powers, our inner Fire and our inner Ice, and our spirit transforms and heals their tendency to destructive excess. The unique composition of Yin/Yang (or Ice/Fire) imbalances that a child has in body and soul by inheritance or destiny will determine the particular illnesses to which that

child will be susceptible. Illness too has a bipolar nature: On the hot side are the acute contagious inflammatory illnesses and on the cold side the chronic degenerative or sclerotic illnesses. These are the twin dangers we must navigate on our life's journey, as between Scylla and Charybdis, between Fire and Ice.

A Great Reversal

Throughout recorded history the fiery acute inflammatory illnesses have always predominated as the chief causes of death because the human constitution always tended to the warm side, thus making us susceptible to inflammations. But in the brief course of the past 100 years, the illness pattern of all previous recorded history has suddenly reversed itself, as we've seen. Now, in all developed nations, the cold illnesses prevail: cancer, heart disease, and stroke in adults; asthma, allergies, cancer, neurological and emotional dysfunction in our children.

What is the deeper meaning of this sudden and profound reversal? From 1900 to the 1950s the health and survival of children improved because the cooling and focusing effect of modern industrial and intellectual civilization made them less susceptible to the acute contagious hot inflammations which up until that time had claimed children's lives. After a brief period of healthy

balance during the 1950s, children's health has worsened since 1960, due to the further intensification of the same cooling and condensing forces which improved their health from 1900 to 1950. We were on the right track, but we overreached the healthy balance point, and the pendulum has rapidly swung to the opposite side. Through the effects on our children of our modern

materialistic and technological culture, especially modern education and medicine, we have brought about a constitutional change in children that has made them more resistant to the life-threatening acute inflammations of the past, but also more vulnerable to the modern life-burdening chronic conditions at the opposite end of the illness spectrum.

Children are indeed the canaries in the coal mine. In their distress they are crying out to us to wake up to the health-weakening and spirit-dampening aspects of modern life so that we will understand how to protect and nurture the delicate growth and unfolding of their individual spirits. This spiritual unfolding is nothing less than a child's entire developmental process. What we call brain development, neurological maturation, and the like are the all-important physical effects resulting from a healthy and balanced spiritual development.

Human Warmth

In the forgotten story of hospitalism, we have seen the devastating effects on children's development that emotional deprivation, a lack of human warmth, can have. But what is human warmth? Is it the 104° Fahrenheit body temperature in our child which frightens us, or is it the caring interest shown to us by a friend which consoles us, or is it the steady burn of enthusiasm which energizes us to carry through an important project? It doesn't

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take a lot of imagination to see that all three are human warmth. Warmth is the bridge between mind and body, the unique element interconnecting body, soul, and spirit in us.

Like water for fishes, warmth for humans is the indispensable all-pervading medium both within us and among us that supports and nourishes our humanity at every level of its existence.

Through warmth we connect.

We connect to our family, our friends, our teachers, our co-workers, to all humanity, to animals, to plants—in short to the entire universe and all that inhabits it.

A growing child must find its inner ground, its center of warmth, and from this solid ground seek to connect to other sources of warmth, in an ever-widening circle around itself, from immediate family all the way to God. But today's child understandably has great difficulty finding its connection to the world when that world is portrayed by modern science and education as ultimately an arrangement of atoms and molecules devoid of any higher meaning or purpose, and hence devoid of any human or spiritual warmth.

Standing on Solid Ground

This failure to connect, which causes so much dysfunction and quiet despair in our children and all too often horrible violence, stems ultimately from the fact that our culture and our society are missing the boat. The solid ground referred to earlier, which we all need and seek, is not the cells and molecules of our physical body; it is our human warmth. Technology has enhanced many aspects of our lives, but no technology, whether in the form of video screen or loudspeaker, drug or vaccination, can be a source of human warmth. That is why our children are growing inwardly colder.

Physicians can learn marvelous truths from patients, if we have the ears to hear them. Just recently a mother reported to me that her weary, uncomfortable eight-year-old child said to her around 2 a.m. during his third night of fever, “Mom, you know what I need? I need some new ground to stand on.”

If modern education and medicine are to strengthen our essential humanity, they must learn that this solid ground derives from the human spirit, not from the human body. As the ancients knew, the human spirit manifests in warmth, in fire: the fire of love, the fire of enthusiasm, and, in the physical body, that most misunderstood and most feared of all fires—the fire of fever.

The Renewing Flame

Fever remodels and renews the physical body, making it a truer and more responsive instrument of the spirit. How often have mothers told me of the developmental leap in emotional and neurological maturity their child has

taken after working through a fever that was not suppressed with antibiotics and anti-inflammatory drugs. And conversely, how often have I seen children, whose inflammations were repeatedly suppressed with these drugs, lose their spark and stagnate in their development.

One of the most effective ways to reverse the increasing cooling and densification of our children’s souls and bodies, and of our own, is to recognize the healing, enlightening, spirit-permeating power of feverish inflammatory illness. Seen truly, inflammation is never the real illness; it is the attempt of our immune system

to permeate our inner density, opacity, and coldness with the spirit’s healing warmth and light. When this attempt is overzealous and threatens our life or functional capacity, we can be very grateful that modern medicine has empowered us with the tools and techniques to suppress and control inflammation.

But we must use that power with discretion. To suppress all inflammation indiscriminately, out of fear and misunderstanding, with antibiotics, vaccinations, and anti-inflammatory drugs contributes enormously to just this condition of spirit-rejecting density of body and soul described in this article. Health, after all, is a state of balance, and we must learn to avoid overreaching that balance with our fear-based and overzealous efforts to conquer illness.

To Heal, Not Suppress

The surging consumer interest in Waldorf education and in complementary-alternative medicine in our country is a sign that our paradigm in education and

in medicine is shifting. Still, what is urgently needed is a widespread awareness of the critical difference between healing an illness and suppressing it. Healing empowers our spirit; suppression cools the spirit’s activity in the body. Repeated suppression may hinder the capacity of our human spirit to express itself in us and may transform our acute illnesses into chronic ones. The spirit renews as well as destroys, and now that we have the power in our technology to block even the spirit’s power, we must acquire the discernment to use that power wisely, or else cause our children and ourselves great suffering.

Healing ourselves, our children, and the Earth is one and the same task. To accomplish this will require a revolution in all aspects of modern science, especially so in agriculture, medicine, psychology, education, and parenting. It will require great discernment, courage, and good will. It will require of us nothing less than a practical, down-to-earth embodying of the spirit’s

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Resources

1. Sapolsky, R., "How the Other Half Heals." *Discover*, April 1998, pp. 46–52.
2. Ibid.
3. Sagan, L.A. *The Health of Nations*. New York: Basic Books, 1987.
4. McKinlay, J. and S. McKinlay. "The Questionable Contribution of Medical Measures to the Decline of Mortality in the United States in the Twentieth Century." *Milbank Memorial Fund Quarterly* 55 (1977): pp. 405–428.
5. McKeown, T. *The Role of Medicine*. Princeton, New Jersey: Princeton University Press, 1979.
6. Mann, D. "Study: 18% of U.S. Children Suffer Chronic Conditions." *Medical Tribune*, August 13, 1998.
7. "Study Confirms Worst Fears on U.S. Children." *New York Times*, April 12, 1994.
8. "Health and the American Child Part 1: A Focus on Mortality among Children." Public Health Policy Advisory Board, Washington D.C., May 1999.
9. See endnote 8.
10. Ibid.