

international perspective on stress

Robert S. Eliot

I'd like to take you on a quick trip around the world—to point out how the world has changed in the last 30 to 50 years, to point out how our world here in Nebraska has changed, and finally to talk about us as individuals. So, I'd like to take you from Cape Kennedy to Russia to Finland and back rather quickly.

Cape Kennedy

My interest in stress began about the middle of the 1960s when I was called to Cape Kennedy as a cardiovascular consultant. At that point in time, they had an epidemic of deaths in young aerospace engineers, 28-33 years of age. This epidemic was believed to be due to cardiovascular disease. To make a long story short, we looked for the standard risk factors of high cholesterol, cigarette smoking, hypertension, and the other factors critical to incidence of disease in this group.

But, we were drawn away from this dogmatic approach to the cause of coronary heart disease. Other things became obvious at the Cape. There was a high level of psychoneuroticism, of suicide, of alcoholism, of drug abuse in children, and of divorce. When we began looking more carefully at this, we decided we needed help from outside the area of cardiology.

Our multidisciplinary groups found that the people at the Cape had been put into a losing society, a society in which there was a negative incentive system. The result was that following every successful manned rocket shot, there was a reduction of 15% in the work force at the Cape. It wasn't a matter of whether you'd be fired, but when. We watched the employee population decrease in an 8-year period from 32,000 to 8,000, an epidemic of considerable proportion.

These people were so highly trained they were no longer useful to American industry. Therefore, we as a nation, created a race of human dinosaurs who were put on the face of the

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earth at a time when their environment was appropriate. They flourished and they actually did very well for a period of time, maybe seven years. Then they forgot where they laid their eggs, the environment changed, and they became an endangered species. Now, aerospace engineers are nearly extinct and certainly endangered. Circumstances then that played a vital role were personal loss, loss of occupation, loss of status, loss of family, and loss of time to do anything for oneself.

Russia

Two and half years ago, I visited Russia. When we arrived and went through customs as VIPs, they didn't open our bags. However, if you're a customs inspector in Russia, you work in hotels, you don't work in airports. You wait until everybody is out on tour and then you can check everything over in their closets. It's a lot easier and it saves a lot of confusion at the airport. It also makes it look like the country is free.

Sense of Immediacy

The Russians told us two things that relate to us in our society and stress. First, they said: "What's the difference, we had stress a hundred years ago." Well, there's a big difference. If you think about the way your great grandparents lived a 100 years ago and you think about yourself today, you realize that for every year you're alive today, you experience 1,000 times the events that you would have experienced if you had lived a 100 years ago.

What do I mean by this? Go down to your local telephone exchange and look at the way it is now and then get some pictures of the way it was 30 years ago. Our world has changed. There's a sense of immediacy. You're no longer alone. There's no place where you can totally get away from it all. Getting out of this world is, perhaps, the only way to get away from it all because boundary lines between countries have been blurred by communication and transportation.

No-Win Situation

The other thing the Russians told us, which related to us here in rural Nebraska, is that the incidence of coronary heart disease in peasant farmers 35 to 45 years of age has gone up 68% in the last 10 years. That's a dramatic increase. We're told by federal bureaucrats that coronary heart disease is decreasing in our country, at least the deaths from it. However, most of my colleagues in practice haven't noticed this difference. Perhaps we're saving more lives by earlier attention to illness, but we don't feel we're really preventing illness. Whatever the case may be, a dramatic increase of 68% any place in the world is worth looking at.

When I asked my colleagues in Russia what they felt the basis for this was, they indicated they felt that until 10 years ago, it made no difference, as a peasant farmer, whether you were under a czar or commissar. You could still trade with your colleagues in and around the farm areas and supervision was remote. You still lived with your family in a bucolic existence. There was togetherness in a community, there was anonymity, there was privacy. About 10 years ago, however, big brother got the computer and he put every Russian peasant farmer on a quota system and only one in every three farmers could achieve his quota. For the other two, the Russians had cooler climates available. So, what they did was to set up a losing society, a "no-win" situation.

U.S. Comparison

In our country, we have great differences. Of course, the American farmer can own his land, but he finds it increasingly difficult because of taxation, cash flow problems, and a whole host of things. In our government, a stroke of a pen can change the priorities from wheat to other grain crops to cattle so quickly that the farmer may not know how to adjust fast enough in his own management systems to handle the changes in his surrounding environment.

It's the impression of many of my colleagues that although we may be making a dent in coronary heart disease in the bigger cities, there may be an increase in coronary disease in the rural areas. It's difficult to get these figures, but it's a possibility. One factor that may be involved is that often farmers are put into a situation where they have to have two occupations to maintain their cash flow. A different situation from that of the Russians, but perhaps similar in some ways.

Finland

From Russia we went to Finland, which has the highest incidence of coronary heart disease and sudden death in the world. You would ask yourself, why, if you saw it. Finland is a country of very fine, articulate, industrious people who have a remarkable lifestyle. I was one of 12 people from around the world to visit Finland to try to determine why Finland was number one. If we could understand what caused coronary heart disease and sudden death in Finland, we should certainly understand what caused it in our own country and, indeed, in our own state and community.

Eastern Border

What we found was that the highest incidence of coronary heart disease and sudden death in the world was on the eastern border of Finland. This is a border of over 700 miles

right next to Russia and it's a hostile border. It's a place where you find people who may be lumberjacks, burning up 8,000 calories a day with normal body weights, who also have the highest incidence of coronary heart disease in the world.

You say, "Well I thought exercise was good for you." It's not exercise alone. These people have to live for months at locations remote from their families, in a barracks-like setting. They can never move up the social scale because you're born a lumberjack and you stay one. They're the lowest paid and they also have the opportunity of working along the Russian border where there are machine guns, search lights, German Shepherds, and other hostile devices that the Russians use periodically to make life quite miserable.

Finland has been to war 39 times in the last 200 years and has lost every war. That's a trend. You begin to get the feeling that there's no way to win. You begin to play the game that the other fellow wants you to play. That game with Russia is to buy petroleum from Russia and negotiate that contract every year. They also have to sell the Russians a certain amount of their commodities.

The most important thing we have to do is to learn to adjust, to cope, to learn to do things faster, and to adjust better than we ever have before. We need to hold our families together because no society can survive without the family. . . .

*Invisibly
Trapped*

Although they're a free country, they have to struggle every day for every ounce of freedom they have, realizing that Russia could wipe them out if it chose to do so. In other words, the Finns are invisibly trapped. They have few personally acceptable options. Their spirit is with the West, yet they must stay where they are. They can't fight and they can't flee. Therefore, they must learn to flow. They can't put Finland on pontoons and float it off the coast of Long Island. They have to leave it there and adjust to the changing situations. They've done a remarkable job of keeping themselves free, but it's their belief and the belief of others who are looking at the situation, that the price they have had to pay may be an acceleration of coronary disease and sudden death.

It's these factors that are important to us. You're often in a situation where you can't determine what the outcome will be. The outcome may be undesirable and there's nothing you can do about it. In this setting, you undergo stress.

United States

Meantime, arriving back in the United States, having looked at where we came from and where our great grandparents came from as they moved across these plains, we see that life for them was quite a bit different than it is today. Indeed, pollution used to be whether there was a moose upstream. Now it's an international problem. A traffic jam was how many wagons you could get on a ferry to cross the Missouri River from Council Bluffs to Omaha, a far cry from what we see in the morning in Omaha today.

Can you imagine the difference that television and these other things have had in our lives—the sense of immediacy, the sense that you're there, the desire to make you feel you're there? It's now possible to be involved with every moment of terror in the world. You can participate and be put into an alarm reaction as no other group of people in history could.

Game Rules

We came into this world with a better brain and a thumb so that we could make tools to till the land and weapons to protect ourselves. We were sheltered, oriented toward our families, and oriented toward protecting ourselves from the climate. To get this far in life, you had to have parents and grandparents who were able to put the alarm reaction together and do something with it; to use their musculoskeletal systems in the traditional way. With time, we were selected out, the weaker of us were gone, the stronger of us made it into the 20th century. Then, the rules changed.

Native Alarm Reaction

It's no longer possible to respond with the native alarm reaction that raises our blood pressure, heart rates, and respiratory rates and dumps all sorts of survival hormones into our body to get us ready for either fight or flight. Now we're often held in a state of invisible entrapment, unable to fight or flee. Indeed, today we uncouple this native reaction. Our heart and blood vessels are literally uncoupled from the musculoskeletal system that would have helped dispel this energy in a matter of moments.

This is the first time in the history of man and woman that we have been held in alarm reactions for days, weeks, months, and years. That's the difference between us and our forebears. This difference may be setting the stage for every industrialized country as it becomes more and more industrialized to have a higher and higher incidence of coronary heart disease.

Learn To Adjust

The most important thing we have to do is to learn to adjust, to cope, to learn to do things faster, and to adjust

better than we ever have before. We need to hold our families together because no society can survive without the family. We need to know that the woman is one of the most stressed people in our world today because she has two professions, both full-time. She is a wife, a mother, a nurturer, a supporter which is enough of a job for anyone. At the same time, she is being told she must be a person, she must have a business, she must have a profession, she must have other things. We have to learn to put these needs into balance in our society so that she can find a sense of self-worth. If she chooses to be at home, she should be rewarded for being at home, in dollars and respect. If she chooses to be a business or professional person, she should be given that opportunity. In my view, it's a great deal to ask women to do both. It's too much. It's the most stressful situation in the world today.

Summary

Although stress is with us constantly, we can learn to manage it to our advantage so that it doesn't lead to health problems. By responding to stressful situations in a healthful manner with greater flexibility and resiliency and new coping and adjustment skills, we'll have an enhanced quality of life and an increased sense of well-being.