

Body Language Interpreter

Being a successful gymnast, naturally feeling how to control and relax his body, 30 years ago, he started to study rehabilitation, an underappreciated medical specialty. Today, thanks to Prof. Pavel Kolář (54) the physiotherapy profession is a prestigious medical discipline in which he plays the role of guru both at home in the Czech Republic and internationally. When doctors do not know what to do, a charismatic short man with a shy look and magical hands is called. He says his hands are just mirrors of sensory training. He gets patients back into movements that could not help him and his disease; however, he did not fall ill by Bechterev disease. He respects but does not accept his disease. He considers pain to be a way to solve the problem but not a reason to become anxious.

**„Pain frequently has
a social context“**



■ **In an interview some time ago you confirmed being a hyperactive child. What did you mean?**

I was quite energetic but I was not a bad child. Unlike today, energetic was not a diagnosis. Today, just slightly hyperactive children are considered abnormal and in America are even given psychiatric medication. However, I believe that our society is healthy and strong enough to resist the pharmaceutical company's pressure and allow for natural child development.

■ **How did such a healthy, good boy behave?**

I ran and played outside at all times. We played soccer or ice hockey on the pond. The biggest stress was being forbidden by my parents to go out. Today it is opposite; we have to push children out of house or apartment.

■ **I know you are rather critical of indoor children life style. Is it because it may have fatal consequences on child development?**

If such life style is fatal, I cannot tell. The cell phones and computers also have something to do with it. It develops different abilities. And frankly, sometimes we criticize it because we do not understand it. The problem is the addiction causing lack of interpersonal communication and limiting physical activity. It results in increasing number

of young obese individuals with limited body awareness. They have a lack of physical experience, which diminishes specific functions important for prevention of physical problems. It decreases their ability to solve some physical problems without medical help. Not only muscle training but also "brain training" is important in prevention.

■ **I assume this is not only your professional experience, but also personal because as a youth gymnast champion – you experienced pain more than a few times. It was your mother, a goof soccer player, who chose gymnastic for you. What of the nine fractures you experienced through your sport carrier?**

You know, to be successful in sport, you need to be in proper shape; it requires coordination talent, it requires speed, strength, endurance but also a strong will, diligence, and psychological resilience. Then you add anatomical prerequisites such as suitable shape of joints. Based on anatomical parameters we can predict what type of sport is appropriate for a specific person. What made me good at gymnastics was my great coordination, but because of inconvenient shape of shoulder joints and forearms I was weaker in certain exercises compared to my

teammates. This resulted in mistakes and many health problems which were not coincidental.

■ **Was it frustrating for you?**

It was a little bit frustrating. At that time, of course, I did not understand the main reason so I tried to make up with more will and diligence. However, it did not really work. Therefore, today I know it was a good decision to terminate the competitive sport career at a young age. Considering possible health consequences later, it was the proper thing to do. Top strain does not hurt some athletes but others will pay for it earlier or later, when health issues will occur.

■ **"We spent lots of money treating basically healthy people on expense of those who are really sick."**

■ **Were you really so mature to finish successful sport career to avoid troubles far too in future?**

No, not at all. Nobody realizes the risks at that young age. The athlete does not care what will happen when he turns 50. He wants to be successful now. Even I have difficulty explaining to some younger individuals that it would be better to quit their sport career because of problems I can see she or he will develop much later in life. I just try to inform them about the penalty they will pay later. Even in my case it was not the confrontation with what would happen in distant future. I just realized the energy I had to put in training would not bring me into top world class. Therefore, it was better to transfer the energy into education and in practicing various sports but only on the recreation level.

■ **It seems you were just a perfect young man. No parties, pubs, and other revelries in a life of Physical Education and Sport Faculty student?**

I certainly was not the one always sitting in library and studying. We did a lot at school. At this time, we were full of energy. I was lucky with the class I had. Thanks to our great professors, me and my class-mates spent time, even at

parties, discussing our specialty topics. At this time in my studies, a great generation of rehabilitation professors were on top, forming a new specific type of rehabilitation. There was prof. Vojta, Lewit, Janda and Vele, and until today if you say Rehabilitation Prague School in America, all rehabilitation professionals know what you are talking about. They had a great influence on young students, and thanks to them we have become fascinated by this medical specialty that was very new, but also very marginal at this time.

■ **Wait a minute, it is said that physiotherapy was a clear choice and kind of a destiny for you. But how much could you know at your young age about this minor specialty field, that only thanks to you has become so popular.**

It was not a clear and simple choice at all. When I was a teenager my only focus was sports; therefore, I wanted to study something that would allow me the ability to combine sport and studies. Paradoxically, at the Faculty of Physical Education and Sport, a rehabilitation study program was not even available yet was the best school to choose. One had to travel a lot, taking various courses and perform lots of duties which was not in line with active sport training despite individual study plan. Therefore, first I applied for low studies along with my two friends because we believed there would be better chance to train and study.

■ **But that did not happen. You either did not pass the entrance examination, which I do not believe, or you applied, but then either joined the army or took the exam for law school.**

I did not go to take the entrance examination at law school. First of all, it bothered me how much the law was under the influence of communist ideology and secondly, I felt I had no talent for such profession. Therefore, I decided to continue in sports and joined the army, where I could train.

■ **Why did you finally end up in rehabilitation anyway?**

Thanks to gymnastics I understood movement a little bit and realized rather intuitively how



important of a role movement plays in origin and treatment of many health problems. Based on my own experience, I knew how much one can help himself. Intuitively, I felt what I needed to do when feeling a pain somewhere, how to compensate for it, to take rest or rather be active. And I also experienced on my own how medical care can vary. For example, I met Mrs. Mojziso in Prague, or Dr. Mracno in Bratislava and although their approaches were not too standard, after several months of problems, they helped me to recover and start training again quickly.

■ **People call you a magician whose hands heal. Although you do not like to admit it, have you really discovered a certain special talent in yourself?**

Each of us is talented in a certain way and each of us has different emotional empathy for certain things. Therefore, I do not think I have any miraculous abilities. I just chose a job for which I perhaps have some prerequisites. It is the same as for a good musician or surgeon, or an athlete. Not everyone chooses or even can make a choice of a discipline he or she has talent for. Such divide cannot always be made up for by studying. For example Mrs. Mojziso had just minimum medical education, but she was able to use her intuition and sensitivity.

■ **"Even false information can make you sick"**

■ **What do you use?**

I try to combine both. I trained my senses, which means I learned to sense through palpation pretty well but I also use observation. Each dysfunction or disease reflects in muscle tone distribution, reflex, and movement changes, but also in signs such as different skin color, perspiration, skin sensitivity and many other. Thus we examine kind of body language, patient's involuntary movement behavior, micro grimaces, unconscious feet movements, eye movements etc. "Reading" such signs properly is necessary for clinical diagnosis; however, it is not enough. You need broader knowledge from medical disciplines that concern movement.

■ **And you consider this to be absolutely connected vessels, kind of know-how?**

Of course! Often, there is a kind of simple thinking: the source of pain is where it hurts. You have a back pain, imaging studies show disk abnormality which is automatically assigned as a source of your pain. However, the disc problem was already there before you felt any pain, and it will stay there after your pain resolution. This is because the disc problem is just a fragile spot, however, it



In 2011 in Prague-Chodov, Pavel Kolar funded Pavel Kolar's Center of Movement Medicine where he combines clinical practice with scientific research.

is not a primary source of pain. Therefore, we have to clinically assess in neurological, metabolic, microbiologic, psychologic, immunologic and other contexts. Pain even frequently has a social context. Sometimes, in pain, we have to see the patient's life story, social background and all other aspects that may cause a disease or pain. Movement system and its disturbances certainly integrate many medical fields and therefore I strongly support the origin of special clinics or departments that are based on medical team of doctors of various disciplines, such as spinal cord units, cerebrovascular units or movement medicine centers. This also is a reason why I still work in the hospital. I need current medical knowledge, staying in contact with real live medicine.

■ **And this is a reason why you turned down even very lucrative job offers in America?**

I received quite a few job offers world-wide that would probably be quite lucrative, but would not meet my expectations and criteria as I said before. It does not matter how much they pay you, more important is to work the way you wish. My work is not just about myself but about cooperation. I cannot accomplish as much alone as I can with other colleagues working in one interdisciplinary team.



Physiotherapist Pavel Kolar looks after Czech soccer players. He also took care of Czech goalie Petr Čech before he finished his participation in national team. Team doctor Petr Krejci frequently discusses the goalie's health issues with Pavel Kolar.

■ **This is why you criticize the "box physiotherapy" when therapists work in an isolated offices?**

Yes, I think this is not good for our future. Rehabilitation medicine is not too financially demanding. Therefore, just after finishing school many physiotherapists open a private practice without any connection with a health care institutions. But I do not believe that rehabilitation therapy should be separated from the rest of medicine, e.g. in the way it happens with chiropractic care in the USA. Chiropractic physicians often run

their offices in shopping malls treating client's spines, manipulating the necks for 50 dollars without any cooperation with other specialists, such as orthopedist, internal medicine specialist or physiatrist. Their medical knowledge will soon become limited, all their care subordinated to number of treated patients and treatment procedures they can charge.

■ **Unlike good physiotherapists? Well, they may be limited in the care they provide as well. You know, modern medicine treats disease just from a somatic standpoint. The client is merely considered to be a passive object for treatment. Client's active role and subjective perception in treatment is not always appreciated. One has back pain and is given painkillers by a physician who has never asked and learn the client just lost his job or has been undergoing a divorce. High cholesterol? Medication is given. High glucose level resulting from overeating is treated by medication as well. Not too many specialists will analyze a patient's fitness, the amount of everyday movement and the types of movement activities.**

■ **How could movement help? Physical activity influence all the systems – metabolic, cardiovascular, respiratory, immune, central nervous system. In comprehensive medicine, the influence of**



Pavel Kolar's therapeutic abilities also benefitted hockey player Jaromir Jagr. Pavel Kolar says about Jagr: His ability to perceive weight, body and movement is exceptional. Give him five hockey sticks with a commercial sign and 5 without the sign and after shooting with each he will tell you exactly which one had a sign on the surface and which not without seeing them.

movement and exercise should be considered as important as medication. Physical activity plays an important protective role, it decreases morbidity and mortality by 40 % comparing to those with sedentary life style. The problem is that pharmaceutical therapy generates a profit; exercise does not. We waste lots of money to treat what could be prevented with movement and exercising. We spent lots of money treating basically healthy people on expense of those who are really sick.

■ **Are you sometimes sad that your pioneering still collides with so many obstacles, no matter if it is an old tradition that is unwilling to change or a business?**

Well, you have to respect such a situation. Sometimes I teach a seminar or a course leaving with a good feeling that attendees understood my message, but then they return to their office the next day and see them slipping back into the old stereotype again and the message passed at the seminar

He took care of Czech president Vaclav Havel for 20 years. "I am perhaps one of the few who even sported with him. At a vacation and Canary Islands I played tennis, basketball and soccer with him" mentions prof. Kolar.



Many other sports stars rely on the "gold hands" of the most well-known physiotherapist. In the picture is Pavel Kolar with phenomenal javelin thrower Jan Zelezny. Pavel Kolar advised him even with the tongue position during throwing. "Tongue or jaw position exactly fits within a global pattern of movement function" says Pavel Kolar.

disappears. But still, there is a seed planted and a chance it will someday blossom. One must be patient, must not think that he is the only right one.

■ **Maybe your patient attitude comes from your life-long battle with chronic spinal disease. Please, tell me how you diagnosed your ankylosing spondylitis yourself. Was it great self-reflection of your body, empathy, intuition, professional knowledge or a combination?**

I did not diagnose myself. I was just aware of some problems intuitively knowing how to deal with it to prevent progression. It

is like growing a plant, you do not know what exactly is wrong, but you sense that extra watering will cause it to fail while limited watering will buck it up as well as taking it from any draft or from a very sunny location. You simply work with your senses.

■ **What do your senses do for you in regards to your condition? I cannot treat my disease, it is impossible, and I do not even try. But I try to limit the symptoms. More than any specific exercise, what is also important is deep relaxation. This helps me. I can reduce the inner tension, can even influence autonomic and immunity func-**



Along with Ivana Trump and a signer Karel Gott in June 2018 Pavel Kolar received a prize "Czech Republic Ambassador" awarded to celebrities who promote Czech Republic in the world through their professional achievements.





tion more by relaxation than by any exercise. But relaxation is very personal experience that cannot really be passed to another person. Nobody has the key to it. Everybody must learn how to deal with it himself, the experts can only guide you.

■ **Does one always have a chance to find the right principle?**

It depends. Some have more and others have less empathy to understand the disease. Sometimes it is not so important to treat the patient, but rather to guide him through his inner senses, showing him how to deal with the disease. Even false information can make you sick. If a powerfully positioned clinician tells you that the

problem you have may put you in danger, you will often get sick from anxiety not just subjectively but also with objective symptoms.

■ **You did not learn of your diagnosis in youth. How did your disease get started?**

Back in those days, at university, I often had a back pain. I could hardly walk limping easily for three months. I also suffered from eye inflammation, and when I was in the army I had Achilles tendon pain and edema for half a year. The tendon inflammation did not diminish despite all the treatment. They did lots of injections because it seemed I overstretched it in gymnastics. Nobody saw it within a broader context. I did not either.

When assessing patients, Pavel Kolar relies on his senses. Inspection and palpation maybe in some cases more accurate than modern instrumental techniques. "It is not an energy perception or any kind of supernatural force. Perhaps, I have good kinesthesia, i.e. the ability to perceive my own body and to read the movement of myself and of others".

■ **"One must not live in fear because of a disease."**

■ **When were you diagnosed?**
When I was about 30 years old. Importantly, it has not made me sick. I was not anxious although I saw fatal results of the same disease in my uncle. He suffered from very serious form, dying early due to complications related to this disease. I just want to say that one must not live in fear because of a disease. It must not become the center of your life. Giving the disease too much space will end poorly; therefore, I never quit working and doing sports.

■ **Do you feel any limits as a result of your disease?**
I do not admit it. But of course, the flexibility I had in my gymnastic life period is gone.

■ **Does it mean you ignore your disease?**
No, I respect it but I do not overestimate it.

■ **I guess it means you do lots of things despite the pain.**

Sometimes I hardly make it to work. And then there are periods of time when I don't have much pain. I feel maximum pain in the morning, but I must not allow it to make me anxious. One must never consider chronic pain to be unbearable. Pain is not just a passive repercussion of the processes inside the body via complex well known neuro-chemic processes it is related to active problem solving. Depending how we evaluate the pain we may suppress it and improve but suppression can also make it worse. This must always be considered.

■ **You respect this principle in your specific approach you use in treatment of patients with movement problems. May I ask you what you plan in future considering your disease?**

I know my movement will deteriorate with a time but I do not really worry about it. I have a good friend, head physician at a spinal unit at my department, he is on wheel chair, he has compromised both upper and lower extremity movement as a result of trauma. He is doing much worse than me, still he has to deal with it and accept it. His physical disability has not made him sick, he has been actively dealing with it by having an active life and working. Even one who cannot walk, still can live a normal life.

■ **You are a father of three, adult daughter and two younger sons. Do you try to pass them your whole life knowledge or perhaps some kind of your personal philosophy?**

I wanted my children to do sports, because sport requires a self-denial, you must surpass yourself, you have to "touch the bottom of your abilities". This is necessary to learn for life, otherwise one collapses just from the idea of being absolutely exhausted while there still is enough capacity to work and improve. Actually, even studying the whole night until morning is painful. Since we mostly live in welfare we have a tendency to avoid anything painful or uncomfortable. But one cannot live completely comfortable life full of joy and satisfaction. This

would ruin the society. I think today's children but also adult people sometimes need a reminder that suffering is a part of human existence. It must hurt sometimes and we have to overcome it! This is a way towards self-knowledge and the art of sharing suffering with others. I try to cultivate my children in this way.

■ **How do you do it?**
One must personally demonstrate by not preventing all uncomfortable or a bit painful situations.

■ **It hurts sometimes but we have to overcome it!**

■ **Your middle son is about to start economy studies at a university, the younger one still is at a high school and I heard he had become interested in biology. Isn't it your desire that one child follows your footsteps?**

I do not have such expectations and I am maybe even glad they do not because if any of my children do the same profession, they will be in a tough position. I do not try to direct my children. I want them to choose their specialization on their own depending on their desire. They have to reach their goals by themselves as much as I did.

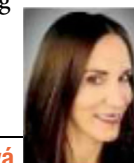
■ **At present, you have many university students following you. You founded a department of physiotherapy at a medical school, you teach world-wide, you**

■ **are the best in your field. However, instead of celebrating you keep moving forward. What is the motor inside you?**

It is a part of my personality. My desire is to make rehabilitation to be a full respected part of medicine. Educational improvement is critical. Our field must not be set aside from the rest of medicine. It is extremely important for me that our patients who cannot be fully cured, become maximally independent, self-supported, minimally relying on others and on the social system. We must help them to live with their families, to complete their education to get a job. Rehabilitation treatment does not stop behind the hospital door. This must be our goal.

■ **Doing your best, even in your Center of Movement Medicine it is difficult to achieve such aims completely.**

Yes, we cannot do everything there. This is a reason why I am active in certain organizations. I founded the foundation and together with my colleagues we look for other ways to specifically direct the rehabilitation in individual stages of the disease to make it useful even for incurable patients. Unless the follow-up care system works well, even spending enormous amounts of money and energy, the results will be poor.



Radka Červinková

He was a member of medical consultation team caring for president Vaclav Havel and Vaclav Klaus. He was awarded the prestigious „Presidential Award for Professional Excellence“ by Czech President Vaclav Klaus in 2007. Later he became a member of a medical team taking care of current president Milos Zeman.



Although Pavel Kolář keeps helping to others, at 28 years he was diagnosed with Bechterev disease (ankylosing spondylitis), a painful rheumatic disease causing lack of spine movement and spinal stiffening. From the same disease suffered e.g. Karel Čapek (Czech writer, the author of the world used word ROBOT).