

# Medicine is a philosophy

Speech by Prof. Leonid Roshal – Russian Academy of Sciences

Leonid Roshal: “Blaming a doctor for a mistake in a decision taken at a huge cost means completely killing the profession.

Medicine is a philosophy.

That's what a medical scientist is called: Doctor of Philosophy. Medicine is a system of views on diseases.

There are hundreds of thousands of diseases, and the number of their combinations is infinite.

The laws of disease are different from the laws of physics. They do not fit into graphs and formulas. They cannot be described by a mathematical model and calculated even on the most powerful processor. There are just as many rules in the laws of disease as there are exceptions, and the exceptions are so significant that they have their own rules.

Any third-year student of medical school knows that a heart attack can proceed like pneumonia, appendicitis - like flu, flu - like appendicitis, and gastritis - like a heart attack, and that all these sores can have an erased or completely “silent” clinical picture.

The laws of disease are not easy to fit into computer programs and clinical protocols. Medicine is a field of knowledge in which the patterns of diagnoses are brazenly violated by atypical symptoms, and the outcomes of diseases are often unpredictable.

Everything is possible here. In medical science, it is customary to consider a fact to be statistically reliable and proven with a five percent error rate. What does it mean? This means that even the strongest scientific evidence provides only a 95% probability of a correct diagnosis and treatment outcome.

So:

**Conclusion one.** A medical diagnosis and prognosis cannot be one hundred percent accurate. Never.

**Next is attention.** In our advanced world, neither the super-duper Internet, nor the Japanese-pre-Japanese android robot, nor the mega-nuclear-prenuclear tomograph will diagnose you if you have a stomach ache. Or a head.

Even if you can automate and subordinate your whole life to technologies and algorithms, you will be diagnosed by a living person in a slightly wrinkled dressing gown.

And this diagnosis will have - at best - ninety-five percent accuracy.

So, the doctor makes the diagnosis. Just like a couple of hundred years ago, in fact.

And this is conclusion number two.

**Third.** No doctor in the world is interested in the complications or death of his patient. Dot. We accept the third conclusion as an axiom and move on.

So, 95% of diseases have a typical course: symptoms are known, tactics are worked out and prescribed by protocols: tonsillitis - antibiotic, peritonitis - laparotomy and antibiotic, bleeding - caesarean section. Or trepanation. See what hurts you.

The result of treatment is predictable ... again, 95 percent.

**So, the fourth conclusion.** In most cases, doctors treat you with confidence in the result.

**Fifth** - the same five percent, be it wrong.

Atypical, their mother, symptoms or "erased clinic".

Unexpected course of illness or surgery. Or childbirth. Rare response to treatment.

An unexpected combination of several diseases. It is in such situations that standard protocols do not work, and the doctor almost alone makes the decision.

Switches the arrow - at the invisible fork in the road of your fate.

Decides whether to operate or lead conservatively.

Take the crumbs on the operating table - or not to take.

Caesarea or wait. Remove the organ affected by the tumor, or save, remove the hypotonic uterus, or risk not removing.

Hospitalize the child - or leave at home.

Whether to go for a second operation, whether to prescribe thrombolysis and whether to bypass the brain.

In many such cases, the risk of intervention is almost equal to the risk of non-intervention.

Sometimes there are a couple of days to make a decision, sometimes one night, sometimes a few seconds.

And so, he decides.

- there are risks of anesthesia, intraoperative risks...

- intrauterine fetal death - or cesarean scar ...

- organ defect - or distant late metastases ...

- complications of irrational antibiotic therapy or a progressive septic process ...

- risk of contamination by nosocomial infection...

- the risk of a fulminant course of the disease ...

And yes. Any treatment is costly.

You may be surprised, but all this calculation, all weighing, comparisons and miscalculations of forecasts, all binary choices in such cases are based on a completely ephemeral substance: the intuition and experience of the doctor. On some mystical gizmos from a fakir chest, in short.

Believe me, this is how decisions are made in the most difficult cases: in-tu-i-tiv-but.

By eye. Heads or tails. Hit or miss.

And if, for example, you happen to be in these five percent, consider that both of you are unlucky here: both you and your doctor.

Here, unfortunately, the math is different: fifty-fifty.

If the doctor draws the wrong card, this is called medical error. It is at this point, at the crossroads, that the physician takes responsibility for the decision.

Well, if the risks were initially equal, it turns out that the doctor will often be wrong. And he will fall under a flurry of accusations, under the execution of criticism. Should have done it wrong! - they will shout to him on the Internet, on television or at a medical planning meeting.

Can you imagine what it's like to make a decision at such a moment. Try it, accept it. Make a choice. With adrenaline, with a wet forehead. Near asystole, with clinical death. With a fist on the aorta. With mats in three floors echo in the operating room. With insomnia, with tachycardia at the door of intensive care. With sunken eyes. Loaded for the rest of your life.

The main conclusion. To blame a doctor for a mistake in a decision made at such a cost is to completely kill the profession. Make the whole experience meaningless.

Take care of the doctors.

Youth will not be driven into medicine so soon.

Looking at the current witch hunt, soon no one will want to stand there with you - at the key crossroads of your life lines.

Everyone will go to IT specialists and web designers. Well, or in cosmetologists. With smooth skin, you will sit at the computer and be treated on the Internet on beautiful sites.

Unfortunately, I understand what kind of typhoon we are in... long ago I wanted to somehow generalize all the hopelessness of medical practice in our country, but there was not enough time and experience for such a deep analysis ... try to make a mistake - they will peck both from the side of the patient and colleagues ...

And how many cases of gross error up to lethality after surgery in Germany, Israel, the UAE, South Korea ... I have several such cases in vaunted England and the USA ... and what is the most humiliating - silence in their direction ... well, like they did everything ... they are Divine ...

And it's also a shame when they spend big money on check-up abroad and, when they come here, they ask to see the studies carried out ... it's clear without payment ... moreover, our consultations cost very little compared to the opinion of a Foreign Doctor ... who has not even touched...

Previously, artists were in the role of jesters at palaces. Doctors were treated as a very privileged class! And now the Jesters - We ... - those who work and live for the sake of our people!

Be sure to send this article to people who appreciate the white coat, your colleagues and grateful patients ... let them know about the deteriorating attitude towards us and our life-saving profession."