Health implications of doping

It is quite difficult to identify side effects from athlete’s use of doping — respective substances, methods or their combination. Partly, it is attributed to the following factors:

- for conducting respective studies on people, duly therapeutic reasoning must be in place;
- substances and methods used by athletes who consume doping, are usually developed for patients who have clearly diagnosed diseases, and are not intended for consumption by healthy people;
- volunteers, who take part in therapeutic studies, are not under the conditions where the athlete applied a certain method of application and dosage of the substance and (or) method for the athlete who uses doping;
- athletes who use prohibited substances, often use them in much higher doses and more frequently than it would have been prescribed for therapeutic purposes, and also often use them in combination with other substances;
- substances sold to athletes for enhancing their performance, are often produced illegally and, because of this, can contain impurities or additives, which may cause severe health problems and even cause lethal outcome.

Taking into account that many combinations and doses of substances, which enhance sport performance, used by athletes, have never had official clinical trials, such athletes, in fact, agree to act as guinea pigs, accepting risk of possible adverse effects of unknown nature and with unknown consequences. This document specifies only some adverse effects which can be considered as “minimum” compared to what can be expected. In practice, adverse and side effects from use of big doses and combinations of prohibited substances may be much more severe. Use of a combination of several substances means not just increase of risk, but a combination of several types of risks.

As hormones perform a variety of regulatory functions in a human body, use of any hormones not for therapeutic purposes poses a risk of destroying the balance, which affects several functions at once, and not only the function related to the consumed hormone. Additional health risks emerge the use of substances and methods assumes application of injections. Non-sterile injection method, including sharing the same needles and syringes, which may be contaminated, may increase the risk of transmitting infectious diseases, such as hepatitis and HIV/AIDS.

And, finally, use of substances may cause psychological of physiological addiction.

Below, possible health implications related to use of prohibited substances, are listed:

- depression, aggressiveness, addiction to the medication and others.
- neuroendocrine diseases
- myocardial infarction, heart failure, hypertension
- diabetes
- hepatic lesion
- excessive sweating, skin coarseness, osteoarthritis and increased risk of cancer.
- increased risk of thrombosis
- sexual disorders
- stroke
And many other negative implications

Source: 2015 Anti-Doping Manual of FISU.