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NEW TECHNOLOGIES IN THE FIELD OF MEDICAL SCIENCES

Scientific research in the field of medical sciences is an important aspect in the functioning of this industry. Medicine has the opportunity to become more qualitative and effective one not only in the theory but also in practical application due to the implementation of effective developments in its research.

To provide effective medical services, this branch should be developed in accordance with the needs of its users. The healthy person can perform manipulations, invent and improve something new and this is a person who has reached the absence of health complaints [1, c. 338-341]. For this purpose, the necessary innovations in medicine will allow us to reach a new level of diagnosis, treatment, operational interventions using absolutely new and integrated equipment. It will require a doctor only to control the procedure of work. It should be noted that these technologies have already been introduced in medicine, for example, the use of nanobots that perform surgical intervention independently. The surgeon doctor only manages it using a special control panel by controlling the process itself on a special monitor [2, c. 192-194].

Gerontology is considered to be a branch that uses nanoparts. The scholars are engaged in the direction of development of nanobots. It will not only suspend aging of cells but also stimulate their regeneration, thereby to "extend youth" and improve the physical state of the body of patients.

It should be mentioned that nanotechnology of using syringes without a needle is being developed. The scientists of the American Technological Institute of Massachusetts presented the development of an innovative syringe which has the ability to enter medication without a needle. The device operates with the help of Lorentz force. It is a small magnet but a powerful one which leads to a piston and then emits a medicinal product practically with a sound velocity (314 m / s) [3, c. 150-152]. Flying out of the top of the syringe, the thickness of which is very small, the drug pierces a very small hole and penetrates directly under the skin of the patient. The patient feels nothing. This device can be used to introduce any medications for injection in any place on a human body, even through the eardrum or the eye shell.

It is also necessary to focus on the fact that there is such an innovation in medicine as an artificial creation of stem cells. Scientists will be able to grow stem cells combining the DNA of the adult human cells and the genetic material of the egg. They (scientists) have already grown the urethra and kidneys by using this technology. In the long run, the patients will independently be able to grow material for transplantation. It brings forward the development of this branch of medicine to higher and integrated level.

Thus, the scientists all around the world are working on innovative developments in the field of medicine to provide modern, high-quality and effective medical services that help to prolong and improve the quality of life.

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