

Public danger of unauthorized use of human genetic data

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Summary. Scientific and technological progress, the development of technologies, the consistent accumulation of empirical material on human genetic data and their potential value will objectively expand the conditions for their both legitimate and unlawful use. Therefore, the question of legal protection of human genetic data may arise in the very near future.

What legal means can protect human genetic data from misuse?

The protection of the object of encroachment depends on the dynamics of public danger from acts and can be carried out by various legal means (civil, administrative, criminal law). But, in any case, the protection of new social relations begins with the definition of social value, the significance for society of what needs to be protected. Can society do without what the act encroaches on?

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The issue of the legal nature of human genetic data has already become controversial (Selita,² Rothstein,³ Karelin⁴). It should be agreed that human genetic data are included in the content of human rights and can be attributed to fourth-generation human rights. One of the types of such rights is somatic rights, which (translated from the Greek “soma - body”) have a complex legal nature (personally materialistic and personalizing).

In the current system of legal regulation in Russia, genetic data, as relating to an individual person, relating only to this person and being biometric personal data, legally fit into the design of the “right to privacy”. Therefore, genetic information about a person can and should be kept secret, and their confidentiality should be considered in the context of the right to respect for human dignity.

The issue of the limits of “secrecy” (confidentiality) of a person’s personal data in modern society should be decided considering the balance of interests of the individual, society and the state. This complex issue requires further study.

The legal regulation of relations in the field of the handling of human genetic data should not create obstacles to their legitimate use; and should not create “niches” and conditions for possible abuse by both competent state bodies and other participants in dealing with such data (commercial organizations, medical institutions, private individuals).

Minimizing the above risks is possible. Their identification can be facilitated by the criminological examination of both existing and draft (developed) regulatory legal acts in the field of handling

² Andrews, L.B., Mehlman, M.J., Rothstein, M.A., 2015. Genetics: Ethics, Law and Policy, 4th Edition. ed. West Academic.

³ Karelin, D. V., Matsepuro, D. M., Selita, F., 2018. Criminal Legal Protection of Genetic Data of The Person: to Statement of a Problem. *Putnik Journal*. <https://doi.org/10.17223/22253513/29/7>

⁴ Selita, F. 2019. Genetic Data Misuse: Risk to Fundamental Human Rights in Developed Economies. *Legal Issues Journal*, 7(1). DOI: doi.org/10.6084/m9.figshare.11423724

human genetic data. Criminological expertise will identify bottlenecks, predict and evaluate both the favorable and negative consequences of legal regulation.

After determining the social value and significance of what should be protected by legal measures, it is important to determine: in what way can the “damage” of protected good (legal good, legal interest) be expressed? In other words, it is necessary to determine how the object of protection can be destroyed or damaged (physically); and whether the established order/schedule of possession and use of this object can be violated. Applied to human genetic data, it is possible to destroy the biological material itself, from which the genetic information has been extracted; and to destroy, damage and modify this information (or the material information carrier); the established procedure for using (trafficking) this data may be violated; and unauthorized access and unlawful use of human genetic data may occur (for example, hacking a database, copying and subsequent storage, alienation, dissemination of information).

Obviously, human genetic data (both information on a material or other medium) and biological material can be “damaged” through negligence as a result of failure to take measures to preserve them, violation of the rules handling them, etc. This is relevant, for instance, in the process of exchanging databases (biobank) both nationally and internationally. Therefore, of great importance are the development of legal mechanisms for the protection of genetic data and the selection of the type of legal measures are legal consolidation of the respective duties of the person, and the real possibility of their fulfillment. The above circumstances will affect the form and method of committing the offense, as well as the consolidation of a specific form of guilt (intent or negligence) in relation to the act committed by a person.

Understanding the nature and degree of public danger of the unlawful use of human genetic data does not at all mean the unconditional and immediate criminalization of these acts, that is, their

recognition in criminal law as criminal and criminally punishable. Legislative consolidation should be preceded by a process assessing the need and expediency of such criminalization, the possibilities of the criminal justice system, the protective potential of other branches of law (civil, administrative), the possibility of using administrative prejudice, and other conditions for criminalizing acts. One of the important conditions for criminalization is to consider the requirements of international legal acts, which in the current legal regulation system have priority over domestic law (part 4 of article 15 of the Constitution of the Russian Federation).

The choice of remedies and the possible criminalization of the misuse of human genetic data will also depend on the prevalence of such acts - an optional sign of public danger.

The effectiveness of protecting human genetic data from socially dangerous encroachments will largely depend on the development and implementation of uniform legal mechanisms, standards for their legitimate use, on the unification and universalization of the conceptual apparatus in this area. Cross-disciplinary and comparative studies will contribute to this.