

Pharmaceutical Ethics in the Frame of Bioethical Knowledge: Challenges for Development and the Potential of Foucault's Key Ideas

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Abstract.

Pharmacy-related ethical issues have become a vast controversial area. Nevertheless, to be successfully integrated into the philosophy of health sciences, pharmaceutical ethics lacks reliable theoretical and methodological grounds. The authors suggest that in order to conduct this integration, it would be fruitful to rethink bioethics in terms of Michel Foucault's biopolitics. The performed research is aimed to prove this hypothesis. To explore the situation of pharmaceutical ethics in the system of bioethical knowledge, a large body of scientific and educational publications was analyzed and various pools of respondents were inquired. Some comparative studies were carried out. Underestimation of pharmacy-related issues, still persisting in bioethical research and education, was confirmed. The obtained results demonstrate that Foucault's theory is useful for integration of pharmaceutical ethics into bioethics and beneficial for pharmacists' education improvement.

Keywords: pharmaceutical ethics, bioethics, biopolitics, medicalization, Michel Foucault.

INTRODUCTION

"Medical ethics has long been a major part of applied ethics. However, pharmaceutical ethics has, perhaps, been rather neglected" [1, p. ix] – we would like to proceed with this statement by Sam Salek and Andrew Edgar. Why neglected? Certain difficulties with the integration of this area into medical ethics ("applied ethics") are evident. Let us take a look over the range of pharmaceutical ethics.

Technically speaking, the pharmaceutical ethics' range of problems covers several groups of relations and ethical collisions in which a drug producer, drug consumer, physician, patient (not every drug consumer is a patient), and other parties participate. Many professionals in pharmacy education are tempted to reduce the subject of pharmaceutical ethics to comprising professional codes of ethics or ethics guidelines for pharmacists, manufacturers, importers, distributors, policymakers, etc. Indeed, in today's Russia, a case when a doctor imposes unnecessary prescriptions for drugs on a patient is a daily routine. However, the situation is much more complicated.

First of all, there is no simple universal solution for all the different kinds of problems related to the research using human cells, protection of personal data, the use of laboratory animals, drug treatment risks in pregnancy, dilemmas of clinical trials, drug approval based on insufficient data, dilemmas of using psychotropics... Pharmacy is connected with all bioethical problems, not just with bioethics in the narrow sense. For example, the death penalty is an area where law, ethics, medicine, and pharmacy meet (due to the appliance of lethal injection).

Secondly, and this is essential, pharmacy has a tremendous impact on health care as a whole, on morals, biomedical ethics, on our contemporaries. As Ben Goldacre argues in his prominent book, the whole edifice of medicine is broken because its basis is undermined by the pharmaceutical industry. Pharmacy and medicine are different domains and there may be a conflict of interest between them. Goldacre refers to numerous documents evidencing to dishonesty, statistics misuse, missing data, withholding negative data, unrepresentative groups for trials and the continuing dependence of medical education on the pharmacy industry finances [2, p. 175–193]. Nevertheless, the so-called Big Pharma conspiracy theories which accuse medical and pharmaceutical establishment in operating against the public good, though welcome in mass media [3], are deliberately rejected in professional communities [4]. There is a need for comprehensive and balanced approach that would take into

consideration both economic, political and bioethical aspects of the problem.

In this connection, we can quote the statement by Jeffrey Bishop and Fabrice Jotterand: "The current malaise concerning the nature and goals of the field of bioethics is characterized by a lack of substantive reflection, which is mirrored in the difficulty of establishing a normative ethics for science in general and the biomedical sciences, in particular". [5, p. 205–206] Bishop and Jotterand rightly advocate for turning to Michel Foucault's biopolitics, moreover, to his entire oeuvre, because bioethical issues are extremely politicized. Many experts came to the similar conclusions, stating that Foucault's ideas are helpful in understanding contemporary bioethics (<https://ssrn.com/abstract=3002513>) [6; 7]. In their previous research, the authors of the article tried to demonstrate the methodological potential of Foucauldian philosophy in tandem with Husserlian phenomenology for medical practice [8] and, at the same time, for resistance to medicalization [9]. The depiction of bioethics as biopolitics allows a better understanding of current changes in pharmacists' values [10]. It mitigates the opposition between metaphysics and instrumentalism in the highly professional philosophy of health sciences [11]. On the other hand, using the humanities based on so solid foundation adds to pharmacists' education improvement [12].

As compared with Illich's doctrine of medical Nemesis, i.e. social and cultural iatrogenesis [13], the approach shaped by Foucault is far more spacious and flexible. According to Foucault, power is not a mere oppressive force but it creates knowledge and conditions for freedom [14]. So, returning to the original question: why has pharmaceutical ethics been neglected? The authors tend to view this negligence as a biopower strategy. Critical reflection on the state of affairs is another biopower strategy. Both strategies are intrinsically coherent and provide just the same process of changing the human conditions, with moral concerns being a part of these conditions.

It means that pharmacy – not the handicraft of the past epochs, but modern institute and culture, science and economy – became an integral part of new human conditions. The development of pharmaceutical ethics is determined with the immanent logic of pharmaceutical knowledge and practice. Pharmacy practice, in its turn, isn't a mere application point for allegedly universal ethical principles, but it can be influenced by various ethical standards, norms and rules. It is unfruitful, for instance, to talk about justice or injustice in the distribution of

health resources without a clear picture of pharmacy, its own development patterns and its own perspective on a human being.

As a rule, the respect for a patient's dignity and autonomy, beneficence, non-maleficence, justice, informed consent, confidentiality, honesty and telling the truth are considered as the guides for health care and pharmacy [15]. It is difficult to consistently apply any of these principles in practice. For instance, the principle of autonomy is often in conflict with the principle of beneficence. Should one guard the rights and freedoms or protect health? That is why to say a pharmacist must not cause harm to the patient, or to say that people must not be transformed into just research objects means to say almost nothing today.

One of the most crucial Foucauldian ideas is that a person is an always open project. We make ourselves and there are no eternal patterns of what is humane, beneficial, and healthy (to use or no to use drugs). From pharmacist's point of view, it may mean that people often have no idea what the best treatment is. However, there could also be another plausible explanation: the permanent shift in social values and personal expectations that occurs in today's society. One should avoid entering the decision-making process with standards imposed from the outside because it is the very process of medical treatment, the very space of it that patient's values are shaped by. Hence, the empowerment of patients (an educational process by means of which responsibility for own health-related decisions is developed) can be experienced in a new light. Patient consultation appears to become the arena of the most important moral decision-making in the pharmacy practice, which is in accordance with Foucault's idea about the crucial role of biomedical discourse in construing modern man and truth [16]. Yet, a mistake is made when trying to borrow separate concepts from the works by Foucault. One shouldn't seek to follow the author's text to the letter (that would contradict the purposes of the great French thinker), to look for direct answers to questions or, conversely, dispute each statement. It would be better to tune in to the holistic perception of the approach.

To sum up, the authors try to reconstruct the configuration of important rudders provided by Foucault's outlook:

1. The depiction of bioethics including pharmaceutical ethics as biopolitics [14].
2. The interaction between medicine and politics; hospital and school as disciplinary institutions [17].
3. Biopower as a technology of managing population as a whole [14].
4. The productive nature of power, and, at the same time, the importance of resistance to power, in particular, to medicalization and drug dependency [16].
5. The role of pharmacy-related discursive practices in construing man, health, and truth [18].
6. The interaction between science and non-science (e.g. political discourse).
7. Pharmacy as a field for integration of humanities and natural sciences.
8. Overcoming the tendency to think using binary oppositions: subject – object, autonomy – paternalism, evolution (nature) – history, humanism – transhumanism, norms – deviation, health – disease, moral – immoral...
9. Developing methods of pharmacist's reflection. Reflection is not limited to introspective acts. It is mediated by discourse, dialogue, visualization.

MATERIALS AND METHODS

Two large pools of scientific and educational publications on bioethics were analyzed to explore the state of pharmaceutical ethics in the framework of bioethics. Special attention was paid to professionals' opinions concerning not so

much ethical problems, but the development and the very nature of pharmaceutical ethics as a system of knowledge and practice. Content analysis (various techniques), elements of statistical analysis, and comparative analysis were used.

Several groups of graduate and undergraduate students as well as professionals were observed and inquired to elicit information concerning their awareness of pharmaceutical ethics, bioethics, and Foucauldian concepts. An unstructured conversation, a highly structured interview, a survey, comparative study, longitudinal study, intent-analysis, case-study and focus-groups study were employed.

Thus, qualitative data collection methods rather than quantitative research were largely relied upon.

RESULTS AND DISCUSSION

The obtained results can be divided into two groups. The first group of the data aims to throw light on professionals' understanding of the position of pharmaceutical ethics in the framework of bioethics. The second group relates to the matter of actualizing Foucault's key ideas to meet new challenges in bioethics.

1.1. A pool of one hundred texts on bioethics, published in Russia within the period from 1990 to 2017 was analyzed. The pool comprised 50 research works (including both journal papers and books) and 50 educational publications (introductions, tutorials, guides etc.) that formed the two subsections. It is important to note that no text was limited to one single subject matter, but claimed to represent or at least touch upon the whole scope of bioethical issues. Regarding the authors, approaches, styles, years of publishing and publishing houses the pool was intended to be as diverse as possible.

Only ten texts of the pool (10%), viz. 2 research works (2% of the total i.e. 4% of the subsection) and 8 educational ones (8% and 16% respectively) referred to pharmaceutical ethics. In addition, all tutorials containing any references to pharmacy touched upon these issues exclusively in the context of some other topics. For instance, a well-known and highly recommended introduction to biomedical ethics includes special articles on war, prison, child's rights and many other matters but only briefly mentions pharmacy or pharmacists in connection with iatrogenesis, clinical trials, medical confidentiality, AIDs, etc. [19].

On the other hand, authors of a number of research works as well as of the educational ones (all outside the above-mentioned pool) dealing specifically with issues in pharmaceutical ethics often avoid treating these issues in the frame of bioethics and are inclined to reduce the subject of pharmaceutical ethics to generalities from the area of professional and corporate ethics and/or from medical ethics (see Introduction). Only 8 teaching texts from 40 items in this group (20%) consider pharmaceutical ethics as a part of bioethics. Some of them deserve more attention [20].

According to authors' rough estimates, the number of publications on the ethical issues in pharmacy is two times less than on euthanasia or abortion. However, the overwhelming gap may prove to be much smaller, if the indirect involvement of the subject is taken into account. Anyway, this staggering fact is a challenge of great importance and requires a thoughtful explanation because it is the concern with medicines, not euthanasia that most people are confronted with and that influences our lives significantly.

As for any changes in the attitude towards pharmaceutical ethics since 1990, no clear tendency in bioethical literature was revealed.

1.2. A list of one hundred most influential, world-famous bioethical texts (all in English) was arranged to carry out a comparative study. Books by V. R. Potter, T. Beauchamp,

J. F. Childress, J. McMahan, P. Singer, and other prominent authors were selected [21; 22]. Only eight of them (8%) touched upon pharmaceutical ethics in the scope of bioethics, which is comparable to the results obtained for Russia. E.g. the authors of the article *Bioethics in The International Encyclopedia of Philosophy* mention pharmaceutical ethics neither as a distinctive topic of bioethics nor among its sub-disciplines (<http://www.iep.utm.edu/bioethic/>) [23].

In the meantime, the worldwide pharmacy ethics papers written in English are in stark contrast with those published in Russia. However, just as well as in Russia, authors rarely clearly build pharmaceutical ethics into the frame of bioethics [24]. Many avoid the use of the word pharmaceutical bioethics. Instead, the following wording is favored: pharmaceutical ethics; pharmaceutical deontology; ethics in pharmacy; professional ethics of pharmacist; code of ethics for the pharmaceutical system; business ethics in the pharmaceutical industry; last but not least, bioethical standards for the pharmaceutical industry.

1.3. In 2015–2017, two groups of students (KSPU named after V. P. Astaf'ev, spec. *Social Work*), 12 and 16 persons (2015 and 2016 acad. years respectively), who started learning academic discipline *Bioethics*, were interviewed and observed in relation to their understanding of the subject and significance of bioethics, in particular, pharmaceutical ethics. Since no regular difference between the two groups was found, the calculation for a total of 28 respondents would be reasonable. At the beginning of training, none of the respondents were aware of the ethical issues in pharmacy, while everybody extensively talked about abortion, euthanasia, organ donation and so on. In the middle of the semester (after all the matters had been introduced) students were given a list of topics for “a minor” (a minor field of study) to make a free choice. The following preferences were revealed:

Euthanasia (including assisted suicide) – 7 students (25.0%);
 New reproductive technologies – 7 students (25.0%);
 Organ donation and transplantation – 3 students (≈ 10.7%);
 Ecological ethics and animal rights – 3 students (≈ 10.7%);
 Pharmaceutical ethics – 0 students (0%);
 Other matters: definition of death; prolongation of life; abortion; clinical trials; cryonics; telling truth; justice; capital punishment – 8 students (≈ 28.6%).

Thus, a similar careless attitude towards the urgent issue was demonstrated.

At the end of the course, all the students were asked questions concerning bioethics. Each of the 28 respondents demonstrated the ability to discuss any bioethical issue except for the problems in pharmacy. E.g. 7 respondents (25%) failed to clearly explain why drug pricing is not only an economic problem but also an ethical controversy.

1.4. In 2016–2018, the bioethical awareness of a large cluster of undergraduate and graduate students of primarily biological specialties (KSPU named after V. P. Astaf'ev, Department of Natural Sciences) was explored. The total amount of full-time and distance learning students was about 200 people. They studied academic disciplines *Philosophy*, *Sociology*, *Culturology* (bachelor students); *Methodology and Methods of Research*, as well as *Present-day Issues in Science and Education* (master students); *History and Philosophy of Science* (doctoral students). During the teaching courses, the students were occasionally involved in discussions on bioethical issues or were given some tasks on the matter (in compliance with the usual requirements [25]).

Many important results were obtained. As to the modest purposes of this article, the authors can afford three remarks. Firstly, future biologists, scientists and teachers, initially had no idea about the domain of pharmaceutical ethics in the framework of bioethics. Secondly, subsequently they didn't demonstrate an

interest in pharmaceutical ethics; they lacked a holistic vision of the subject of pharmaceutical ethics; they established connections between the latter and any other bioethics area with great difficulty. Thirdly, the pharmaceutical bioethics was the hardest matter to make at least a moderate progress in learning bioethics. The question arises: how so?

The authors offer the following explanation to these observations. A deficiency of a comprehensive and reliable philosophical basis for deep integration of different areas of bioethics becomes striking when it comes to the question of pharmacy. Generalities like “sanctity of life” may make a feeble semblance of a theoretical principle when, for example, abortion is discussed, however, it stops working if pharmacy or similar matters with obvious economic and political implications are on the agenda. That is why contemporary bioethics needs the same grounds with political and economic sciences. Biopolitics seems to be appropriate.

2.1. Analysis of the hundred texts pool introduced above (for details see para. 1.1) showed that only eight bioethical texts (8%) briefly mentioned the name of Michel Foucault and only five of them (5%) contained clear references to his key ideas and their relevance to bioethics. All ten pieces belonged to the research works subsection (see para. 1.1). Of course, the numerous works devoted specifically to Foucault or specifically to biopolitics weren't included in the pool. Our objective was to evaluate the occurrence of references to Foucault in bioethical literature, not to look for the links to bioethics in Foucault studies.

2.2. As for the list of the world-famous bioethical texts (for details see para. 1.2), similar proportions were found. Only seven pieces (7% of the collection) referred to the Foucauldian ideas. Nevertheless, outside the list, a vast realm of opuses arguing in favor of Foucault's philosophy usefulness to bioethics, as well as rare samples underlying relevance of “Foucault's work” exactly to pharmacy practice, was easy to distinguish [5].

2.3. In the group of 28 respondents learning academic discipline *Bioethics* (for details see para. 1.3), nobody initially had been informed about Foucault and his contribution to science. After acquaintance with the heritage of French philosopher, all students demonstrated the ability to apply his key ideas to bioethical issues with ease. Yet, levels in the acquisition of different Foucauldian concepts varied. According to the authors' estimates obtained during oral exams (including final examinations) in *Bioethics*, the achievements of respondents ranged as follows:

The power-knowledge complex; knowledge as a means of control – 28 (100%);
 Biopower as a technology of managing population – 28 (100%);
 Productive, not simply repressive nature of power – 28 (100%);
 Hospital and school as disciplinary institutions – 28 (100%);
 Sciences of sexuality and their link to power structures – 21 (75%);
 Importance and ways of resistance to power, in particular, to medicalization and pharmacy dependency – 21 (75%);
 “How do we talk about truth?” instead of “what is true?” – 17 (≈ 61%);
 Arguing against the belief that a person is always at the centre of knowledge and morality; the “death of man” – 14 (50%);
 The “practices of the self”, self-forming activities – 14 (50%);
 The notions of episteme, genealogy, archeology, discursive practices, and some other ideas – not more than two people for each of the notions (from 0% to 7% for each).

Thereby two conclusions, at least, could be made. Firstly, it is the bioethically charged part of Foucauldian philosophy that students acquire most readily and heartily. Secondly, this philosophy provides a strong background in science and education for pharmacy to be understood as a part of social control as well as for resistance to medicalization and

imposing pharmacy dependency hence for the true pharmaceutical ethics.

2.4. Inquiry of a large group of undergraduates and graduates into biological specialism (for details see para. 1.4) yielded comparable results. From year to year, during learning one course after another, students were occasionally involved in pondering over bioethical matters. Having been trained in the basics of the Foucauldian approach, students displayed a holistic view of bioethics, applied new concepts heartily and discussed ethical issues in healthcare and pharmacy more easily than before.

2.5. Besides, in 2016, an inquiry of master students studying courses *Methodology and Methods of Research*, as well as *Present-day Issues in Science and Education*, (KSPU named after V. P. Astaf'ev, Department of Philology) was carried out. Only 12 of 40 philologists (30%) had some knowledge concerning M. Foucault, which was provided by the sketchy information on a book *The Order of Things* and the formal attribution of the author to the group of famous postmodernists. Moreover, no respondents had any idea about biopolitics despite the fact that many courses on philosophy, social and political sciences had already been completed.

Even though since 1980 the flow of Russian-language publications on Foucault's theories has increased two or three times, the results of the inquiry are the evidence to an enormous gap between science and education still persisting; important knowledge remains untapped in the classroom. In the meantime, a classroom is known to be the space where both training professionals and the interaction between professionals and laypersons (mass mind) take place to transform the current drug consumption culture.

2.6. In February 2017 and March 2018, inter-university seminars *Bioethics: Theory and Practice of Teaching* were held (KSPU named after V. P. Astaf'ev in cooperation with Krasnoyarsk State Medical University and Krasnoyarsk State Agrarian University respectively). A multilateral dialogue which was continued in the duration of several meetings disclosed teachers' dissatisfaction with the state of affairs in teaching bioethics. This notwithstanding, only two of 20 professors (10%) teaching bioethical disciplines in these three universities appeal to Foucault's heritage in their practice.

CONCLUSIONS

The research showed that the importance of the pharmacy issues for completion of bioethics as a coherent knowledge system is clearly underestimated, not to say ignored, both by professional community and the social consciousness (mass mind). Of course, it is impossible to give here a comprehensive explanation of the poor representation of pharmaceutical ethics in bioethical research and education. However, the authors' claim is that an advanced methodology and strong theoretical grounds are needed to fuse pharmaceutical ethics with bioethics and, therefore, to strengthen both. Besides, the authors advocated for the integrity of the scientific process and its applications for education. The investigation confirmed, to a certain extent, the provisionally accepted hypothesis that Foucault's theory is useful for integration of pharmaceutical ethics into bioethics. Further on, it would be fruitful to explore various population groups' understandings of ethical issues in pharmacy.

REFERENCES

1. Salek, S., Edgar, A. (eds.), *Pharmaceutical Ethics*, John Wiley & Sons Inc., New York 2002.
2. Goldacre, B., *Bad Pharma: How Drug Companies Mislead Doctors and Harm Patients*, Fourth Estate, 2012.
3. Law, J., *Big Pharma: How the World's Biggest Drug Companies Control Illness*, Constable, 2006.
4. Jacobs, A., Good Pharma, *Medical Writing* 2013, 22(4), 239–316.
5. Bishop, J.P., Jotterand, F., Bioethics as Biopolitics, *Journal of Medicine and Philosophy* 2006, 31(3), 205–212.
6. Hull, G., The Subject and Power of Bioethics, *Journal of Ethics, Medicine and Public Health (Forthcoming)* 2017.
7. Frank, A.W., Jones, T., Bioethics and the Later Foucault, *Journal of Medical Humanities* 2003, 24(3/4), 179–186.
8. Viktoruk, E.N., Mineyev, V.V., Actualizing the Methodological Potential of Michel Foucault Philosophy in Praxis of a Physician, an Educator and a Psychologist, *Siberian Journal of Special Education* 2016, 1-2(16-17), 40–46.
9. Mineyev, V.V., Phenomenology as a Strategy of Resistance to the Medicalization Attitudes, *Research Workings. Social and Humanitarian Research and Technology* 2017, 3(20), 54–60. DOI: 10.12737.
10. Benson, A, Cribb, A, Barber, N., Understanding Pharmacists' Values: A Qualitative Study of Ideals and Dilemmas in UK Pharmacy Practice, *Soc. Sci. Med.* 2009, 68, 2223–2230.
11. Mineyev, V.V., The Meaning of Bioethics: Dilemmas of Instrumentalism and Metaphysics in Comprehending Life, *Bulletin of Krasnoyarsk State Pedagogical Univ. named after V. P. Astaf'ev* 2014, 3(29), 28–31.
12. Bumgarner, G.W., Spies, A.R., Asbill, C.S., Prince, V.T., Using the Humanities to Strengthen the Concept of Professionalism Among First-professional Year Pharmacy Students, *The American Journal of Pharmaceutical Education* 2007, 71, 28.
13. Illich, I., *Medical Nemesis: The Expropriation of Health*, Pantheon Books, New York 1976.
14. Foucault, M., *The history of sexuality, Volume 1: An introduction*, Random House, New York 1978.
15. Boylan, M., *Medical Ethics*, Wiley-Blackwell, Oxford 2013.
16. Foucault, M., *Ethics: Subjectivity and Truth. The Essential Works of Foucault, 1954–1984 (Vol. I)*, The New Press, New York 1994.
17. Foucault, M., *Discipline and Punish: The Birth of the Prison*, Vintage, New York 1979.
18. Van Campen, L.E., Allen, A.J., Watson, S.B., Therasse, D.G., A Pharmaceutical Bioethics Consultation Service: Six-Year Descriptive Characteristics and Results of a Feedback Survey, *AJOB Empirical Bioethics* 2015, 6(2), 53–62.
19. Shamov, I.A., *Biomedical Ethics: A Textbook*, Medicine, Moscow 2006.
20. Erokhina, L.D., Erokhin, A.K., Trifonova, G.A., Nekrasova, E.V., *Pharmaceutical Bioethics*, Medicine of the Far East, Vladivostok 2017.
21. Potter, V.R., *Bioethics: bridge to the future*, Prentice-Hall, 1971.
22. Beauchamp, T., Childress, J.F., *Principles of Biomedical Ethics*, Oxford Univ. Press., Oxford 1994.
23. Bioethics, Internet Encyclopedia of Philosophy.
24. Viktoruk, E.N., Mineyev, V.V., *Bioethics. Lectures and Materials for Practical Lessons. Tutorial for Students in Educational Program 39.03.02 – Social Work*, KSPU named after V. P. Astaf'ev, Krasnoyarsk 2017.
25. DeSpelder, L., Strickland, A., *Last Dance: Encountering Death & Dying*, McGraw-Hill Education, New York 2015.