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Role of History and Philosophy of Medicine in the Professional Formation of a Physician: Writings of Polish School of Philosophy of Medicine

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Polish physicians-philosophers tried to find a compromise between medicine as a science and medicine as a healing art. They stated that clinical practice should be transformed into science, bearing in mind that there would be no medicine without the existence of the sick. A perfect physician is a good and wise person and not exclusively a proficient expert. Polish physicians exercised a science that they called philosophy of medicine. It included logic, psychology, and medical ethics. The Polish school claimed that the history of medicine and philosophy of medicine are necessary for future doctors. The historical and philosophical approach makes it possible to recognize the subject of medicine (health, disease, and the sick) and its aim (treatment, restoration of health or just alleviation of suffering). The ethics teaches what values are pursued by medicine, what moral duties a doctor has, and what role model to follow to become a good physician. Placing the sick in the focus of medical interest, the Polish school taught future physicians to see in them suffering fellow men who should be embraced with care, compassion, and Christian charity. Such an approach to the ethical aspect of medical philosophy became incorporated into an education towards humane values, responsibility for ones' life and health in the spirit of the ethics of care.

Key words: education, medical; ethics, medical; health education; history of medicine; medical education; modern medicine; schools, medical; Poland

Medicine has to be your religion and politics, your happiness and misery“ (1).

Polish school of the philosophy of medicine (2) was shaped against the background of Polish culture of the 19th and the beginning of the 20th century, in the political reality of occupation and post-occupation times, and an intensive contact with the medical thought of leading scientific centers of Europe, especially France, Germany, and Austria (3). In medical journals published in Poland reviews of the latest foreign works in the fields of natural sciences, especially medicine were published (4). The birth of the School is marked by the publication of T. Chalubinski's "The Methods of Finding Medical Indications. A Plan and its Realization" in 1874. Its decline falls in the 1930-1935 period and is marked by the publication of a synthetic work by W. Suzmowski "The History of Medicine from a Philosophical Point of View". The other representatives of the School were Edmund Biernacki, Zygmunt Kramsztyk, Henryk Fryderyk Hoyer, Wladyslaw Bieganski, Henryk Nusbaum, Adam Wrzosek, Stanislaw Trzebinski, Tadeusz Bilikiewicz, Wladyslaw Szumowski, and Ludwik Fleck, considered epigonous of the School (2). The range of their interests was shaped by both the scientific achievements of the 19th and the beginning of the 20th, century and the clinical practice of its founders.

Scientific Medicine of the 19th Century: Ethical Implications

The 19th century was the time of laying the foundations for medicine as a modern science, science supported by discoveries in basic sciences, theoretical and organic chemistry, physics, and biology. It was the time of birth and acceptance of Darwin's theory of origin and evolution of species, Pasteur's evidence of the existence of pathogenic microbes, and the implementation of anesthetics. In the medicine itself there was an enormous development of pathology, physiology, and pharmacology, and various specialties were distinguished from the so-called pre-clinical sciences. Thus the 19th century is aptly called "the century of surgeons" by J. Thorwald and "the century of pathologists" by a Polish historian of medicine A. Sródka (5).

In clinical practice, two famous schools prevailed, Parisian and Viennese. The first aimed at the observation and classification of diseases based on pathological changes, the second was focused on studies of pathological mutations in tissues and single cells (5,6). The consequence of the scientific revolution was almost thorough bankruptcy of all the methods and cures that had been common so far. This state of affairs brought about two reactions: "therapeutic skepticism" – limited use of medications (French school) and "therapeutic nihilism" – complete cessation of using medications (Austrian school). J. Dietl explained the above phenomena in the following way: "practical

medicine can evolve only from the knowledge of humans. Since this knowledge is still in its cradle, we cannot have a scientifically justified therapy“ (cf. 7). A simple aftermath of such a conviction was that the therapeutic aspect of medicine was disregarded, if not contradicted, and only its scientific aspect was emphasized. The social role of the physician became blurred and the emphasis shifted away from the process of evaluation of how this role was realized. Dietl wrote that the physician was an explorer of nature that should be appreciated as a doctor and not as an individual devoted to the art of healing (cf. 2).

Greater appreciation of scientific research caused a withdrawal from Hippocratic ethics, from its rule *Salus aegroti suprema lex medico* and *primum non nocere*. It also resulted in patients being treated as “research material“, subjecting them to experiments without prior diagnostic and therapeutic objectives. Wrzosek described experiments on diabetics, carried out in the Jena Clinic (8), and Bieganski (9) and Kramsztyk (10) described inoculation of syphilis, scab germs, or cancer cells to patients. “A scientific zeal“, as H. Nusbaum remarked, “has overcome the most talented doctors to such an extent that the notion of truth, we could say, has suppressed in them the notion of goodness, and medical ethics, especially towards the sick, has been utterly ignored“ (11). Bieganski harshly criticized the consequences of scientific fanaticism that subjected human life to scientific objectives. He remarked with sarcasm: “The fate of an individual is nothing to scientific objectives [...] what harm does it cause when infecting people with syphilis we infect healthy people with a serious disease if thus we can cast more light upon the question of infectiousness of syphilis [...]. Such fanaticism was officially taught from the most renowned university rostra and laboratories. And the crowd of listeners absorbed, if not the scientific fanaticism, then trifling with the feelings and one's existence“ (12). It is in medicine more than in any other realm of human thought that a discrepancy between theory and practice, tendency to make a science an ethical command and to place medical command over an ethical command was revealed. E. Biernacki stated: “Medicine as a profession has as a whole become a subject of pure science“, and “in contemporary schools of professional knowledge the absorption of the rules of the pure science was emphasized“ (13). Chalubinski remarked with regret that “nowadays, the rules of practical education of physicians are commonly neglected“ (14).

An Ideal Physician – Wise and Good Person

A way leading to the restoration of medical skills (medical performance, as Polish physicians called it) to the prominent place and the reconstruction of the ethos of a physician, was, according to them, a proper professional formation. This formation was to be based on several factors: (a) philosophical (including ethical) and historical perspective of medicine as a whole, as a science, and an art of healing; (b) distinguishing factual and ethical aspect in the art of healing; (c) awareness that the factual aspect depends on the present advancement in science and is founded on reason, and that the ethical aspect depends on the standard of social ideals prevailing in the culture and is founded upon emotions firstly and then upon reason (12); (d) a conviction that an ethical command determines the aim of a medical command, preceding it in the moral order; and (e) belief that a chief value constitutive for the whole medicine is well-being of the ill. It determines the aim of the medical profession – treatment “in the sense of a help given to the sick in their illness“ (15), because it is the sick who are the most important subject of medicine and not isolated notions of health or disease. Professional duties of a physician are thus: (a) giving help “at a high standard for all the sick people without any exceptions“ (15); (b) restoration and preservation of health; (c) saving from death and prolonging life; (d) elimination of suffering especially physical suffering; (e) preventing complications and after-effects of diseases; (f) offering psychological support, comfort, assuagement of fears; (g) permanent education; (h) feeling of comradeship (but not falsely understood professional solidarity) towards other physicians; (i) development of one's personality by the formation of an ethical ideal, especially emotions and drives, as direct causes of human acts; and (j) basing the judgment of a physician's conduct on a rule “treat your patients in a way in which you yourself would like to be treated“ (15).

A physician who realizes or strives to realize such an ideal could be considered a wise and good physician.

History of Medicine as a Critical Knowledge of the Past

According to the Polish school, there is an unquestionable contribution of two sciences in the process of formation of a wise and good physician: history of medicine and philosophy of medicine, including ethics. History of medicine in the 19th century was a mature branch of science. It was viewed by Polish physicians as a science not only involved in collecting historical facts concerning medicine and putting them in the chronological, bibliographical, and biographical order but also analyzing them, seeking their meaning, trying to synthesize, i.e., “binding the facts in a genetic chain, depicting of the whole image against the background of the history of culture and human thought and associating historical lecture with contemporary science“ (16). The tasks of the history of medicine were cognition

of historically and culturally changing knowledge of health, illness, methods of treatment, and the history of evolution of medical professions; study of the history of triumphs and failures of human thought in the struggle for a life and health; and viewing the contemporary medicine in a historical perspective. Chalubinski claimed that without a critical knowledge of the past "it is impossible to know the present attitude of a science" (14). Knowledge teaches a distance towards new theories and discoveries. According to Z. Kramsztyk "neglecting of the history of science leads to overestimation of the current and one's own convictions, to self-conceit; history teaches to be humble, as it illustrates that all is changeable and transitory, that each idea, however funny it may seem to us, once had its wise and uncritical advocates" (17).

An awareness of the fact that many medical theories, methods of treatment, and medications, which were considered never-failing, proved to be useless or even harmful, helps in developing critical thinking. It provides a clue that "each so-called scientific fact should be subjected to extensive criticism before it earns permanent citizenship in science" (18). W. Szumowski attempted to present to all students of medicine methods and errors of medical thinking using the examples of the known material analysis in comparison to history (16). He regreted that, without history of medicine in a medical curriculum, "a contemporary physician, on receiving a medical diploma [...] has no idea of what is rationalism, and what is empiricism in medicine, [...] and in his medical practice he is not at all aware that sometimes he acts rationally, and empirically at other times" (16). Lack of that knowledge causes his thoughts to be unclear, superficial, and chaotic. Study of the history of science and profession teaches humility. It makes us "realize that achievements of our generation of scientists in comparison to the achievements of former generations are not [...] so advanced that the disrespect with which we look upon the work of our predecessors would be justified" (19). All representatives of the Polish school emphasized that the study of medicine broadened the physicians' minds, elevated the intellectual standards, and was one of the elements of humanization of medicine. It included medicine in the history of science and culture proving that, as T. Bilikiewicz formulated, "the bases and elements of medicine" were often "a reflection of the spirit of an epoch or a whim of fashion" (20). Philosophy of Medicine as a General Theory of Medical Knowledge

Philosophy of medicine – another science important in the professional formation of a doctor – was in the 19th century a science, as W. Szumowski put it, *in statu nascendi*. It enabled one to view medicine as a whole, its development, value, borders, methods, and errors; "leading research from the position of logic, theory of cognition, psychology – methods of, thinking, and, from the position of ethics – manners in which a doctor acts" (16). Physicians in their practice need, according to the Polish school, general knowledge of the subject of medicine and the aim of its actions, evaluating it from the moral perspective and providing a method of research that includes the specificity of medical thinking. The essence of medical thinking was described by L. Fleck: "A cognitive task of medicine is how to find a rule for irregular phenomena" since "there is no clear-cut border between what is healthy and what is ill, and it is impossible to encounter for the second time an alike disease pattern" (21). Thus, Polish physicians created the basis for a new science, which Chalubinski defined as a method of finding medical indications. His follower, E. Biernacki, called it "rules of medical cognition", W. Bieganski "logic of medicine and critique of medical cognition", and H. Nusbaum and W. Szumowski "philosophy of medicine."

The science, which was a "child of a clinic" as Szumowski (22) put it, was at the beginning a logical analysis of empirically found clinical facts, a knowledge of what and how a physician can and should do by a sick person's bed. The science started from general philosophical notions, included analysis of the phenomenon of life, health and illness, to further proceed to the physician's approach to a disease, finding indications regarding the treatment, making a plan of the treatment, and executing the plan. Logic of medicine, i.e., Bieganski's science of the medical cognition, was at that point a "philosophical theory of medicine in the full meaning of the word, comprising both medical science, and performance, i.e., medical practice" that included "not only the means, but notional assumptions of medical cognition" (23). It was the part of the philosophical theory of science, analyzing and criticizing medical dogmas. H. Nusbaum's philosophy of medicine added to those subjects a chapter on ethics (24), which was entitled "A General View on Tasks and Social Position of Medical Profession" and A. Wrzosek's "Medical Propaedeutics" contained a lecture "On a Good Physician" (19). The issues of professional ethics were also the subject of separate studies by Bieganski (12) and Nusbaum (11). Additionally extensive considerations on the subjects of a role model of a physician, his relation with a patient and the society as a "collective patient" mutual relations in a professional group of physicians, were connected to the general philosophic-medical considerations of authors such as E. Biernacki (1,13) and Z. Kramsztyk (25).

The value of this science for the medicine was, according to the Polish school, well justified. Bieganski remarked that without an apt method of scientific research it is not possible to erect a

lasting edifice of any knowledge. He pointed out that it was the philosophy that formulated a research method – J.S. Mill's inductive logic that has been accepted as a general method of research for all natural knowledge. A study of logic and the theory of cognition were subjects suggested for the education of physicians. Chalubinski wrote: "A profound knowledge of the mind's phenomenology, laws of reasoning or applied linguistics facilitates to a great degree both the studies and further work of a physician" (14). This knowledge has a practical aim: precise cognition of logical errors in the process of inference in medicine. Because, as Bieganski argues, "errors made in the process of inferring do not depend exclusively on the degree of knowledge of the subject, but also on the awareness of logical laws" (9). "Abstractive studies, being a kind of mental gymnastics, increase the confidence of a doctor's reasoning, and critical thinking" (24). They are the basis for building one's own theories in science, they prevent from thoughtless absorption of untested hypotheses as certainties, and guard against dogmatism. Kramsztyk said: "The most important, ennobling influence of a science is founded on independent thinking" (25). Chalubinski postulated that "every generation has not only the right, but the duty to criticize scientific achievements of former generations. Every school should instill in their students a critical tendency, but no school is privileged to dogmatize the science in any direction" (26).

Medical Ethics as Ethics of Care Science and the Art of Healing

Ethics played the main role in the development of the model of a wise and good physician. Although physicians of the Polish school thought it obvious that the utilitarian aspect of medicine can develop only on condition that the pure science in medicine develops, they believed that it should not negatively influence the clinical practice. Besides, science must not abandon ethical rules describing the physician-patient and physician-society relations as defined by Hippocrates, strengthened by Christianity, and accepted by the humanistic European culture. Medicine, as they believed, has an ineffaceable ethical aspect and tasks, mainly practical – treatment of the sick. Chalubinski, the founder of the School, wrote: "We put emphasis on our research from a strictly clinical point of view. Every simple new fact, new discovery, every single theory a practical physician accepts, examines, and verifies – he does that only for the sake of treatment of an illness" (26). Chalubinski's disciple, Z. Kramsztyk, confirmed: "Treatment is a base, essence of our actions, the most important of our tasks" (27). Medicine, placed between theory and practice, as Biernacki aptly remarked, tried to solve an equation with two unknowns: "one – cognition of a disease, the other – finding the influence of various medications used in the process of treatment" (28). Its limitations resulted from the fact that a disease cannot be studied in the way a botanist studies a sick plant or a veterinarian examines a sick animal. A sick person has always simultaneously been a subject of treatment (1) and the function of a physician's profession was a therapy, understood according to its Greek etymology where *therapeuo* meant: I serve, I give help, I embrace with care. The spectrum of therapy is much wider than just elimination of a disease.

Goodness and Truth in Medicine

Fulfillment of those tasks involved the realization of the notion of truth by medicine, which, according to the Polish school, preceded the notion of truth. A clinical experiment must not become an aim in itself since it leads to fanaticism in science (8-11). Thus the medical confidence was a relative and not indisputable task of medicine. It stayed in relation to the well-being of a man, understood paternalistically, in accordance with the doctor's conscience and knowledge (12). Nusbaum (29) and Bieganski (12) emphasized that in medicine "there must prevail the notion of good, realizing the great Christian commandment of love to a fellow man". Supremacy of the notion of truth over the notion of good in medicine led to the deformation of the ideal of a physician. It led to the deformation of mutual relations between a patient and a physician depriving it of personal bond between a suffering man and the one helping them. In order to ethically raise a man, one should perfect and develop his ideal of goodness (12). Wrzosek wrote: "The ideal of a physician as a good, educated and wise person had begun to deteriorate and instead an ideal of a professional who has perfectly mastered the skill" took its place (19).

Reductionist and Holistic Approaches

Polish school states that accepting health or disease as the subjects of medicine gives direction to the practical actions of a physician. Thus an exposition of health aspect directs the actions towards prophylaxis, hygiene, and rehabilitation (1, 11, 13, 26, 29-31). An emphasis on struggling with diseases attracts physician's attention to their cognition, leads to the development of medical specialties and diagnosis, and is based on reductionist perception of a human being as a mechanism divisible into parts. It leads to a state of affairs described by Bieganski: "Public complaints are often heard that [...] today one doctor cannot even treat typhus himself because he is uncertain and constantly needs an advice of that specialist or other" (9). The personality of the patient as a psycho-physical whole is

gradually vanishing, being replaced by pathologically mutated organs and tissues. Ontological theories of disease that state "the primary task of a doctor by a sick person's bed is the location of a disease i.e., tracking down the place, or anatomically or functionally mutated organ [...]" and "working on that organ" (13), date back to the mid 19th century expansion of surgical methods of treatment, which culminated in the 20th century in the so-called hospital ideology (32,33). The representatives of the Polish school perceived disease functionally, as a distortion of normal functions of an organism by external and internal factors. This distortion causes "decrease of health" and involved the whole man in his relation to the environment. A physician's activity was supposed to restore harmony of all life functions, both at physical and mental levels. Such a holistic approach caused the doctors to treat the sick and not the sickness. Biernacki expressed this belief clearly: "It is not diseases that exist primarily in the world but sick people" (34).

Individualism, Personalism and Care in the Physician-Patient Relation

A sick person was perceived as a miserable fellow man, suffering, awaiting help, recovery, relief, or just consolation. "Comfort is one thing that a physician has no right to refuse to the sick, as a man to a man" (28). A sick person was viewed not as a subject of clinical treatment, carrier of health or disease, but as an autonomous person, capable of thinking and feeling, almost the physician's alter ego. A very significant part of the therapy was a medical interview, that not only gave information about the state in which the sick person was and the way the sick person experienced it, but also a "healing" factor, psychotherapy, because "pain and suffering are soothed by crying and talking about them" (12).

Exposition of the sick's benefit as the aim and the greatest value of medicine and the treatment as the moral duty required a shift of stress in the physician's ethos. Bieganski postulated: "Reforming the system of teaching of medicine, you should not be concerned with the knowledge only, but also with the heart" (12). In relation to the sick, ethical factors were decisive: "Let us remember that medicine was born from misfortune, and their godparents were charity and sympathy" – Bieganski reminded (12). Altruism and empathy are to be expected of a doctor, putting oneself in a sick person's place, learning his or her feelings and thoughts, awakening of the feeling of compassion towards the sick (15). Bieganski emphasized that the results of a therapy were to a great extent based on suggestion and trust. Snapping off the thread of trust and compassion binding the sick and the physician, we devoid ourselves of the most important healing factor, while "moral help is primum movens in the doctor-patient relation" as Biernacki states (28). A relation of the sick towards a physician was perceived as a "relation of the suffering to their savior who brings relief and health – a relation similar to that of a mother to her child" (35). At least for the duration of the moment spent by the sick person, a physician should abandon his individual desires and ambitions, and should devote all mental capabilities towards the good of the suffering fellow man (1).

The well-being of the sick was widely understood as an all-embracing care that a physician "owes" to the sick and is synonymous with the respect for every human existence. Chalubinski, for example, suggested that his clinical assistants should visit the sick in their homes, to better learn the circumstances which cause pathogenic mutations and eliminate them more efficiently (36). Kramsztyk advised physician to make sure whether the sick can afford expenses of a medication he was about to prescribe (37). He demanded that the so-called "hospital sick" (mostly poor people) were treated in the same way as the rich (30,38). He strove for the organization of the hospital (reception, examinations, number of patients in wards, wards equipment, and standards of nursing) to serve only the sick and not the convenience of an administration board (31,39,40). All the representatives of the School emphasized that the treatment of the disease should by no means be harmful to the sick person. Prophylaxis, rehabilitation, nursing of the sick, and palliative care were equally, if not more, important as medications or extensive treatment methods. Polish physicians based their actions on the belief that a patient must be surrounded with tender care and be given all the attention, because "a suffering of a single sick person is a thorough suffering" (31). Thus understood, care became a purely ethical notion, and the pursuit after it is decisive in assessment of deeds as morally good or bad. In the views and their realization in medical practice, the Polish physicians philosophers were close to the P. Ramsey's ethics of care (41).

Professional Formation as an Education Towards Values

Both factual and ethical knowledge can be gained by teaching, self-instruction, and upbringing of medical students. In the writings of Polish physicians-philosophers there is the Socratic-Aristotelian belief that good should be elicited from a man and that virtue can be taught. Teaching is not only the process of passing medical knowledge onto the students but also a formulation of a complete personality of a physician, his mind, will, and emotions. It is an education towards the universal values founded upon Ancient and Christian tradition of European culture, that is, as the history of medicine reveals, common in the medical ethos of many cultures all over the world. Such far-reaching task, that

is understood as a moral duty, should involve: (a) universities with their medical divisions; (b) department and clinical personnel, most of all professors, who should be moral and scientific authorities whose lives should serve as an example (*verba docent exempla trahunt*) that a doctor can be both wise and good; and (c) medical press, publishing houses, and scientific societies, that shape the scientific reality of medicine.

Universities in their pursuit of truth must become guardians of all values that come from the goodness or are connected with it (42).

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