

# Health in writings of Polish Renaissance: One more look

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Original article

## Abstract

The short analysis of scientific and medical, medicine and didactic treaties of the age of Renaissance allows us to present numerous motifs linked to health and physical fitness, which were in the realm of interest of Polish authors. Not all their statements were original, many notions were taken from ancient scholars. Nevertheless, Polish Renaissance writers undertook the challenge of independent deliberations over the matter of health, formulating – also in a naive way – many faulty theories. These achievements are worth acknowledging. The scholars mentioned in the above article were in many cases forerunners and originators of certain proceedings which undoubtedly in their times were innovative and ground-breaking.

## Keywords

- Renaissance
- literature of Polish Renaissance
- health
- upbringing
- physical activity

## Contribution

A – the preparation of the research project  
B – the assembly of data for the research undertaken  
C – the conducting of statistical analysis  
D – interpretation of results  
E – manuscript preparation  
F – literature review

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Literary historians as well as historians – concerned strictly with the past – in various research undertook the issue of health, which was discussed in numerous literary texts by the authors in the age of Polish Renaissance.

Although Renaissance has already been sufficiently defined – both time frame and the catalogue of the creators and the abundance of their masterpieces – the question of health (and all derivatives of this precious condition of body and soul) arose and – fortunately – is still becoming the subject of constant analytic and synthetic deliberations of generations of consecutive researchers.

This provides not only already compiled multi-faceted set of scientific literature devoted to achievements of Polish literature in the Age of Renaissance, but also inspires to further exploration and attempts to construct in exhaustive way the inputs, articles, monographs and syntheses which analysed, commented and described the perception of the concept of health (in the full meaning of the term) by writers living in the age of Renaissance whose beliefs, first and foremost, were adequate to the system of values and models of thinking characteristic of that times.

Despite the fact that nowadays we appreciate the importance of the renaissance breakthrough realising the level of intellectual changes occurring in the field of perception of mankind, we still oversimplify our idea of the Middle Ages, imagining that contemporary philosophers and artists ignored the knowledge of the human being. The alleged medieval contraposition of such suggestive concepts as God and world or spirit and matter is only a common misconception. Medieval science maintained gradualist manner of thinking, professing the existence of certain order (grades), ascending from the matter, through physical-spiritual beings to purely spiritual ones. That is why, though medieval asceticism appeared in scientific ideas and artistic creation, the themes applied and used in the Middle Ages were not restricted only to it.<sup>1</sup>

It is true that medieval reality dominated by christian morality questioned the value of health and joys of earthly life. The contempt for flesh and necessity of mortification for the good of the soul belonged to the preached elements of attitudes and role models of behaviour. From the viewpoint of medieval morality, salvation of soul and entering the Paradise were obviously more significant than attentiveness to the body. Physicality was looked down on – it was body and its parts which were the reason for sins and which pushed the human from the road to salvation.<sup>2-3</sup> The words of Tertulian: *Palaestrica diaboli negotium* (physical exercise is the creation of devil), for a long time determined the

negative attitude of Catholic Church towards physical exercise, and taking care of the body was considered unnecessary.<sup>4</sup> The Middle Ages, therefore, broke with the ideal of beauty common in the culture of Antiquity, in which this concept included not only well-maintained body but also intellectual efficiency. After all, it was the ancient people who united the essence of beauty and goodness into one concept, called 'kalokagathia'. The Middle Ages split this unity of aesthetics and ethics, emphasising the value of goodness, which in Christianity has indeed huge potency, but rejecting the ideals of ancient aesthetics which paid attention to the beauty of human body and its full functionality.<sup>5</sup> Consequently, goodness as the attitude was justified and expected while taking care of fitness and human health was visibly diminished. Nevertheless, it does not mean the termination of this care. The medieval society – especially bellatores (knights) and laboratores (laborers) – had to maintain physical prowess. Thus, the ethos of the knight, constructed throughout the entire Middle Ages, by no means rejected the efforts to develop horsemanship or sword fighting. The body of a knight, hidden in armour, was equally alien and indifferent to human as the one covered by monk's frock. In monasteries human body was considered to have been a major source of sin, for this reason it became the subject of mortification.<sup>6</sup> Difficult living conditions as well as hard work of inhabitants of villages and cities, primitive level of agricultural technology and communication, demanded not only strength but also agility and stamina. Extremely high death rate contributed to natural selection and – however cruel it may sound – allowed the strongest individuals to survive. What is more, pervasive lack of hygiene added up to epidemic diseases recurring with considerable regularity. The most widely known epidemic disease in XIV century was 'black death'.

Diseases were, yet, treated as the sign of supernatural forces. Deficiency of knowledge and lack of medical skills increased such a perception of sickness and disability. Cruel attitude towards lameness led to treating people with physical deformities as stigmatised and retarded.

On the other hand, it was Christian theologian and philosopher, Thomas Aquinas (1225–1274) who proclaimed that the body arose from human nature and it should be nurtured and exercised, so as thanks to the achieved fullness of being, it could demonstrate the greatness of divine creation. He objected to explicit 'contempt for the flesh': "As far as the perfect happiness is concerned, some believe, that training of the body is not essential to it. [...] However, this view is not rightful. Since the unity of soul and body results from the nature of human, so it can be concluded that the perfection of

soul cannot exclude the natural perfection of body. It is proper to assume that the ideal training of the body is necessary to happiness, ideal in its all aspects. [...] The body indeed contributes nothing to this activity of the soul on which seeing Deity relies on- but it could be the obstacle in relation to this activity. Therefore, the perfection of the body is vital so that the body does not disturb the grandeur of the thought.”<sup>7</sup> It can be stated that saint Thomas Aquinas was ahead of his times and he outran the renaissance perception of the man and health as an important element of human body (and soul).

Renaissance brought with itself a critical view of the existing order. Not only did the changes in ideas concern almost every aspect of feudal society but also there arose the objection against current traditions and ways of thinking about the role of the man and his place in the universe. The changes affected as well the philosophy of upbringing, school education, health and physical education.<sup>8-10</sup> According to one of the most eminent Italian humanists, Vittorino da Feltre, full upbringing included three areas- intellectual, artistic and physical upbringing.<sup>11</sup> He believed that physical exercises possessed medicinal properties. He acknowledged that thanks to regular and persistent exercises you can achieve physical resilience.<sup>12</sup> Moreover, scientific treatises of other Italian thinkers were reflected in scientific and philosophical ideas of Polish Renaissance. The treatise of Paolo Pietro Vergerio (*De ingenius moribus ac liberalibus studiis*) was popular with Polish Renaissance writers. It paid attention to the versatile development of the youth- both intellectual and physical. The most frequently read treatise in Poland was the one by Aeneas Silvius Piccolomini, later the pope Pius II, *De liberorum educatione*. The first one was translated into Polish (*The books delightful about kind upbringing of children*) by Marcin Kwiatkowski (d. 1585)<sup>13</sup> who made references to the ancient ideal of kalokagathia. On the other hand, a didactic treatise, which was a free translation of the work of Piccolomini *About the Prince's Upbringing*, created in 1467, was by an unknown author. It appears to have been created on the royal court of the Jagiellonian Dynasty, perhaps in the inner circle of the teachers of the royal sons.<sup>14</sup> *Oration about necessity of education of young noblemen*, published in print in 1558, may also carry some reference to scientific treatises originating from Italy. The author of the mentioned work – Andrzej Gostyński (1540–1571), the doctor of medicine, the professor of Cracow Academy, pointed out, that a young nobleman should be educated not only in arts of knighthood, but also in fields which surpassed knightly skills, just as “prudence surpassed the bravery and peace exceeded the war”.<sup>15</sup>

The question of physical health, as the element of the broad process of education of young man, came into prominent being in belles-lettres. At the beginning, it is yet worth mentioning that in the creations of Renaissance poets and writers these thoughts were of the vague nature and referred to life and customs through critical remarks. Mikołaj Rej from Nagłowice (1505–1569) is the most closely associated with commenting the everyday life, its charms and problems. He might have remembered distinctly his failed attempts to study in Cracow as he explicitly criticised academic attitude towards upbringing and educating and – possibly inadvertently – he referred back to the medieval models of education of a knight, emphasising the importance of physical fitness and military activities (target shooting, wielding a spear, horsemanship).<sup>11</sup> Rej accentuated that parents, taking responsibility for their children (sons) upbringing, should also tend to their mental health. “Hence kind parents are to carefully consider what exercise and what matters they introduced their children to, as they are born as clean slates and what they write on it will always remain there. [...] Afterwards, when [...] they start entering adolescence it is not a bother to learn what is needed like mastering the horsemanship as needed in these times. [...] It is not a burden for the youth to learn fencing and dancing and also playing the lute- they are all blissful plays. Better if they do not lie like a hog in a lair, wasting time which is a precious gem and which [when] passes will never return again? And nothing can be more harmful for the youth than abject idleness. [...] Thus when he stands like an ox, he becomes like an ox [...] Since what the youth needs to adorn himself? Only with comely things around him, which will not come from anywhere but from solid exercise.”<sup>16</sup>

In 1555, Marcin Kromer (1512–1589), a bishop, humanist, historian, diplomat and music theorist, published in Basel his treaty *De origine at gestis Polonorum libri XXX* (*About the origins and deeds of the Polish thirty volumes*). This work – about the matters, history and all other Polish crown issues – appeared in Polish in 1611. The author pointed out to the popularity of bathhouses in which in the XVIth century Poland “The Polish, in summer and winter, for ablution and improvement of body, like bathhouses and hot springs, which are used separately by men and by females.” It does not require any persuasion nowadays that taking care of the hygiene of the body is an unailing method seving health maintenance, not only in the context of potential epidemics.

Łukasz Górnicki (1527–1603), a humanist, political writer, royal secretary and librarian, elaborated on the topic of hygiene, cleanliness of the body and bathing.

In his best known work – *The Polish Courtier* – he pointed out the discomfort connected with using the public bathhouses by many people: he who enters the public bathhouse, he must suffer plenty of inconveniences; some smear themselves in booze with soap, others anoint themselves, there are those who blow bubbles and those who flog with twigs; one calls: pour! And another wishes to keep the door ajar.<sup>17</sup>

It is worth mentioning that this author emphasised the value of physical prowess as well as certain ‘opportunity’ for action. “As it comes to height of a person, as I see in myself, the courtier should be neither too tall nor too small, both of the situations are frowned upon, so if by birth oddity appears in front of human eyes, it is abhorred immediately. Indeed, if one does not fit the acceptable measures, it is better to be a bit smallish than to exceed the rest of people with his size. Since these giants, despite being almost always slow-witted, are also clumsy and unable to perform any work, whereas the courtier at all times needs to be willing, robust and capable. That is why, I wish the courtier had shapely limbs, strong will and stamina so that his strength was felt and his heftiness and rapidity were known. Only then I wish he was well-trained in everything that a warrior needs to learn, first and foremost, I wish for him to be able to wield weapons, both afoot and while horse riding, to know all ploys especially used at the court. [...] After mastering the weapons, I wish he was adroit in archery, presenting himself finely and having entertainment. There used to be the priority in our land to this exercise: walking on foot and wrestling, not for nothing, as it may help greatly while dealing with infantry. Hence, may my courtier have such skills as well.”<sup>17</sup> Indeed such a physically fit member of the royal court had to be maintained in good health.

The statements of Górnicki and Rej have didactic and educational character while in the works of Jan Kochanowski (1530–1584) we can clearly see pure delight over well-being, which derives from good health. His famous epigram *To health* is a short affirmation of the state of well-being, which – among many positive phenomena – is simply the best human value. After all, Kochanowski appealed as well to intellectual challenges such as ability of playing chess.

Nevertheless, Polish physicians in the age of Renaissance were the ones who left vast scientific contribution as their inheritance. They researched the reasons for diseases, they demonstrated means of therapy, they gave preventive prompts. Let this short review (however incomplete) of Polish medical literature of the age of Renaissance be the evidence of the state of Polish science, which was not limited only to the genius of Nicolaus Copernicus (Pol. Mikołaj Kopernik).

One of the most eminent scholars at the turn of Middle Ages and Renaissance was undoubtedly Maciej from Miechów (1457–1523). He received doctorate in medicine at the University of Padova in 1483. He became famous as a lecturer at medical faculty of the Academy of Cracow, where he was the dean for eight times. Thanks to his initiative and his money second branch of the faculty of medicine was brought to life.<sup>18-21</sup> During his lifetime he already gained reputation of ‘Polish Hippocrates’. Although in his times it was hard to talk about visible progress of medical knowledge and distrustful attitude towards health issues was everpresent, according to the words: “physician, heal thyself”, Maciej from Miechów audibly condemned unscientific methods, including quackery and charlatanism. It cannot be strange in his case that – despite scientific foundations of his academic degrees – he pointed out to astrology as the field prompting the methods of treatment. He published the conclusions from his medical experiments in print.

Several other works dealing with medical issues of this scientist is also well-known. The work *Contra saevam pestem regimen accuratissimum*, published in Cracow in 1508 was an interesting manual for the times of plague (plague was rampant in Poland between 1505 and 1516). This publication was created due to peculiar social procurement even before plague occurred in the capital of the Kingdom. Nowadays the principle DDM (distance, disinfection and masks) is basic behaviour in times of coronavirus but in XVI century our compatriot advocated the principle of 5 times F – *peste fatiga, fames, fructos, femina, Flatu* – the answer to the aforementioned were – *flebothomia, fuga, focus, fricatio, fluxus* [in times of plague tiredness, hunger, fruit, female, wind – the answer to them were bloodletting, escape, fire, stimulation of body, ebb tide]. The first five were factors harmful for health during plague, the latter five were considered to have been activities aiding the maintenance of health and good body condition. The author emphasised that in times of plague it was essential to avoid tiredness (it did not matter whether it resulted from hard physical work, intensive reading, thinking or only running), but also women (which should be understood as sexual intercourse, in terms of Maciej from Miechów, especially extramarital intercourses). Hunger weakened the body and made falling ill easier, unwashed fruit could cause transferring germs, and the air itself in times of plague is the synonym of poisonous vapours. In contrast, he recommended i.a. Bloodletting (in order to “ventilate the heart and breath, so that blood burdened by the excess would not get damaged”), escape (to places untouched by plague) or burning fires fueled by resin, fragrant ointments and sweet-smelling flowers.



In the second part of the manual, Maciej from Miechów included the description of strengthening agents, the use of which were supposed to prevent from coming down with plague. The author reintroduced recipes for self-made tablets (made from fraxinella, ginger, candy sugar, comfrey, deer heart bones, aloe wood, lemon zest). He also recommended popular at the time and sold in pharmacies Rufus pills (from aloe, saffron and myrrh, which had laxative effect) or scabiosa, the mixture of several dozen ingredients in the form of pastry, which was used to treat different diseases.

In the third part of the manual Maciej from Miechów explained how to treat plague. He recommended bloodletting and induction of laxation, application of strengthening medicine, also healthy nutrition and cutting abscesses and covering them with adhesive bandages containing ointments.<sup>22</sup> In 1508 the work entitled *Fructuosa doctrina de sanguinis missione deque nonnullis aliis probatissimis atque salutribus remediis adversus horrendam pestilentie luem singulis hominibus eidem obnoxio non solum utilis futura, verum etiam summe necessaria* was published in Cracow. Its authorship was assigned to Maciej from Miechów although it is not signed with the author's name.<sup>23</sup> It is noticeable that Maciej from Miechów – probably using Hippocrates as a model – used the foundation of so called humoral theory, based on the assumption that there were four liquids present in human body: bile, black bile, blood and mucus.<sup>24</sup> In the course of time, from this basis four types of human temperament originated: choleric, melancholic, sanguine and phlegmatic.

After fourteen years, second medical treatise written by Maciej from Miechów, *Conservatio sanitas*, was published. It contained general advice concerning the preservation of good health. He believed that everyone should look for methods to reach good life and well-being, these could be achieved thanks to right air, food and drink. In many chapters, the author discussed the ways of taking care of good air, pointed out which food and drink helped preserve good health and which were harmful. He devoted the last chapter to medicinal (thermal) water. In the chapter regarding drinks, reflections of Maciej from Miechów seem peculiar. He presented his own opinions on the subject of medicinal properties of consumed liquids. He analysed the properties of sour wine and its usage in health care. He paid attention to wines containing addition of plants. He supported the idea that wine was capable of wiping away sadness restoring the proper balance of individual bodily fluids. Moreover, he mentioned the kind of wine which had antitussive properties. What is fascinating, he objected to rooted in science views of Galen, who warned against the consumption of beer. Maciej from

Miechów believed that if beer was made from barley or wheat it could be beneficial for health. He claimed that hops used in the process of brewing beer had special importance for health.

Maciej from Miechów included short pieces of information from the field of medicine in his greatest work, *Chronica Polonorum*. In this work he explicitly correlated the onset of plague with earlier noted solar eclipse (years 1180 and 1491). Longer excerpt dealing with epidemics can be found in chapter LXXIII of book IV. He described the epidemics which appeared in Cracow in 1482, having probably been the witness to spread of the disease.<sup>25</sup>

Another scholar, Jan Benedykt Solfa (1483–1564)<sup>26-27</sup>, coming from Lusatia (Łużyce), a court physician of the kings Sigismund I the Old and Sigismund II Augustus, wrote several medical works, i.a. *De morbo Galico libellus* (1556), or *Libellus novus de causis, signis et curatione pestilantiae...* (1521, 1552). The first title is a treatise about syphilis, the latter treatise concerned plague. This work was based on Solfa's research carried out in caverns in the vicinity of Rome. Solfa accentuated the impact of vapours coming from putrefaction.

Andrzej Glaber (Andrzej from Kobylin, circa 1500 – up to 1572) cannot be omitted in this deliberation.<sup>28</sup> In 1535 he published the work *Talks about symmetry of human limbs chosen from Aristotle and other scholars, chosen diligently from inbred and medical sciences*.<sup>29</sup> This work was published in Polish, which made it accessible to much broader audience. He compiled the knowledge about medicine, anatomy, physiology and hygiene in the form of 408 questions and answers. He clearly took much out of medieval experience. He was an opponent of weight training and hard physical exercises; he recommended physical effort which did not require endurance, mainly strolling. The authorship of Glaber can be proved also in case of other Works – *The science of saving women in labour, Science of bloodletting, Governing against poisonous air*. In case of the work *Science of usage of urine [...] both for the healthy and for the sick man*, his authorship cannot be confirmed.

One of the most titled physician in the age of Renaissance was Joseph Struthius (Józef Strutius), commonly called the Ostrich (1510–1568). Just as many his contemporaries, he performed diplomatic duties on several foreign courts.<sup>30</sup> He gained recognition above all for his research concerning human cardiovascular system.<sup>31-36</sup> Still a student at Padova University, he undertook the task of translating from Greek into Latin works of famous ancient physicians, Galen and Hippocrates. On the orders of university authorities, one of those translations, the work of Galen *Astrologia ad Aphrodisium* was published in print. An expert of contemporary Polish

writings, Simon (Szymon) Starowolski, suggests that the first edition of Struthius's most outstanding work, *Sphygmicae artis iam mille ducentos annos perdiatae et desideratae Libri V*, was printed in Basel as early as in 1540.<sup>37</sup> At the time Struthius was active medical practitioner and lecturer in Padova. The best known version of this work was published based on Struthius's almost twenty-year-old experience in 1555. Polish translation of the work was prepared by his contemporary scholars in Poznań, the author's hometown.<sup>38</sup>

Struthius was the first Polish physician who highlighted the benefits arising from testing heart rate variability of patients. And yet, nowadays in medicine, monitoring heart rate (more precisely its frequency and compliance with the action of the heart) constitutes the core of the conditions of acquiring information about the hemodynamic condition of circulatory system. Struthius was the first person in the history of European medicine to present the heart rate in a graphic form. He distinguished five fundamental heart rate features. To make it simpler for medical students to remember them, he applied an interesting mnemonic rule, using the drawing of human hand. He attributed a specific feature of heart rate, called by him: simple heart rate, to each of the five fingers of the hand. In turn, he distinguished three levels of intensity in each one of these features. These features were symbolised by three phalanges of each finger.<sup>30</sup> He also introduced the separate concepts of heart rate and arterial wall tension. In XVIII century it became the theoretical basis of the development of modern cardiological diagnostics and invasive cardiology. Struthius recognized close relationship among heart rate, heart beat and body metabolism. It must be added that Struthius assumed the existence of nerves changing the tension in arterial walls, in the present day called vasomotor nerves.

Struthius had also many other achievements which cannot be forgotten about. One of them is the research concerning contagiousness of syphilis, at that time called Galician disease, the sickness of Naples or Spanish scabies. However, he was wrong as far as pointing out the route of infection: "The seeds through which this disease becomes infectious are tiny particles, sort of atoms (however not like epicurean atoms) inhaled, which float in vapour and which easily infect mucinous fluid and they replicate in this similar fluid." His work devoted to this disease, *De morbo Gallico*, did not survive till present day.<sup>39</sup> In his other findings, Struthius demonstrated the differences between pleurisy and pneumonia. He also accomplished successful observations concerning heart rate variability present among people suffering from jaundice and among pregnant women. Finally, Struthius is considered to

be forerunner of the usage of heart rate tests for lie detection.<sup>40</sup>

In the age of late Renaissance, in 1589, Hieronymus Powodowski (1543/1547–1613), mostly theologian and religious writer, published the treatise *The soul and body prescription against poisonous air*. In his work he perceived every epidemics as the consequence of human sin and scourge.<sup>41-42</sup>

Wojciech Oczko (1537–1599) was another famous physician during Polish Renaissance. He was meritorious in the field of vernacular medical terminology and what is more in matters of research into syphilis and balneology. In 1569 he achieved the titles of Doctor of Philosophy and Doctor of Medicine. He practised medicine as a court physician of king Stephen Bathory (Stefan Batory) and Sigismundus III Vasa. He recognised the value of outdoor physical activity. He expressed the sentence, known until today although in simplified form – "physical activity can replace any medicine, but no medicine can replace the physical activity."<sup>7</sup> He was a great supporter of a warm-up before every physical activity. He strongly persuaded his contemporaries to this notion: The exercise of the body should be started with a light warm-up, followed by more strenuous exercise to put it into motion, just as wrestlers or those throwing stones used to do. First put your hands into motion, arms and back and finally the whole body. Not just as all those daredevils who improperly act while drunk. They get injured and hurt by mindless wrestling or stone throwing. In body not warmed-up the back can break, the arm get sprained and dislocated, nosebleed can occur or even bleeding from the mouth.<sup>43</sup>

Wojciech Oczko is considered nowadays to be the father of Polish therapeutic gymnastics. Having had the knowledge of his contemporary writers of textbooks of gymnastics (eg G. Mercuriale), Oczko in his works paid attention to physical exercise and its role in the process of therapy and physical medicine and rehabilitation. Furthermore, he described the methodology of therapeutic exercise, pointing out the necessity of gradation of difficulty. He observed the benefits resulting from gymnastics and connected with improvement of blood circulation, strengthening of joints and muscle ligaments. Oczko enumerated, in his opinion, the best forms of physical activity – wrestling, fencing, horse riding, running, jumping, weightlifting, dance and ball games.

Oczko addressed his greatest creation *Syphilis, that is the court disease* to all physicians. He explained to them the medical arcana concerning the treatment of syphilis, rampant in those times. On the one hand, he based his ideas on the views of Galen, on the other hand, he presented his own knowledge about the roots,

diagnosis and treatment of this disease. He emphasised the level of infectiousness of syphilis. He linked spreading of the disease with improper everyday hygiene and overeating. He distinguished the case of innate syphilis (mother could pass the disease on the child in prenatal phase). The best example of this case of syphilis were the children of Polish queen Mary (Marysienka) and her first husband, John „Sobiepan” Zamoyski. Oczko is attributed to have performed the first confirmed case of grafting skin taken from the arm to reconstruct the nose, misshapen by syphilis. Oczko was also an advocate of natural medicine and he indicated the disastrous consequences of the therapy with mercury. That therapy, in extreme cases, led to the death of patient. In lieu, he suggested the brew made from the root of sarsaparilla and rasin from guaiacum tree.

In 1578, Oczko published the treaty written in Polish entitled *Hot Springs*. The work concerned the hot springs coming out from the centre of the earth. In the dedication letter included in the introduction of his work, Oczko stated: “[...] it is huge negligence of our people, as if they scorned the gift from God, that so far it [hot springs] was not written about nor cared for, as if these springs so needed were not in high regard.” It is speculated that Oczko was encouraged to have written *Hot Springs* by the king Stephen Bathory who sought effective treatment of ulcers on his shanks in thermal waters in the place called Szkoło near Jaworowo. In the treatise Oczko included his original principles of hydrotherapy. He emphasised that for human well-being not only physical activity is necessary but also spiritual development. That is why, he encouraged to listen to music while taking thermal baths (!). Furthermore, he pointed out the significance of drinking mineral water and following an appropriate balanced diet.

Unfortunately, other medical treaties written by Oczko did not survive till modern times- neither published in 1578 *Opera medica nor Descriptio herbarum and De varia affectionibus corporis humani earumque curatio*, both from 1581. From the references to the works of Oczko and his quotations which can be found in works of different other authors it is known that he raised a question of a mutual relationship between a physician and a patient. He highlighted that patient's trust in his physician and positive attitude towards treatment are crucial factors of undertaken therapy. He emphasised the fact that a patient should be aware of his health condition, according to the words: “you know yourself how your disease decreases.”

Another well-known Polish physician from the XVI century, Sebastian Petrycy from Pilsen (Pilzno) (1554–1626), spoke out about matters of health, also in the context of physical fitness.<sup>44</sup> He is considered

to be the creator of pedagogical system which he described in his treatise *The Politics of Aristotle, that is the government of Republic of Poland, more than Eight Books* (Cracow, 1605).<sup>45</sup> He believed that taking care of health is an important didactical factor. He particularly drew attention to physical education of children. He advised physical activity for children since the early age recommending games and sports – running, jumping, ball games, swimming, strength tests and playing with the sling. For teenagers and older youth he advocated horse riding, hunting and fencing. He divided physical activity into four categories: for health, for fitness, for military reasons and for human well-being. He strongly believed that physical exercises were crucial provided that they were undertaken in moderation and with pleasure. Another valuable work – concentrating on purely medical issues – is the treatise devoted to syphilis. The work was published in Cracow in 1591.<sup>46</sup>

Herbaria are a specific kind of scientific medical literature. The oldest known Polish herbarium, the treatise *Hortus sanitais, About Herbs and Their Power*, published in the printing house of Florian Ungler in Cracow in 1534, is definitely of interest in the context of the topic discussed here. *Hortus sanitais...* was written by Stefan Falimirz (I half of XVI century), a botanist, physician, translator and editor, originally coming from Rus.<sup>29</sup> Hieronymus Spiczyński (before 1500–1550), a botanist, translator and royal physician, published another herbarium in 1542 in Cracow – *About local and overseas herbs and about their strength, and also medical books*<sup>45</sup> Marcin Siennik (d. 1588) is the author of the next work of similar character. His work was entitled *Herbarium that is description of local, foreign and overseas herb, their power, their usage for protection of health as well as healing the diversity of illnesses, newly improved by renown medics and according to the herbaria in the present century. Added to that was the work of Aleksy Pedemontana “Eight books of secret and mysterious medicine, at the same time subtle and pertinent to the experience you will possess”*. The work was published in Cracow in 1568.<sup>45</sup> The author introduced into everyday Polish 800 names of plants present in Poland and the neighbouring countries. In Lazarus Printing House in Cracow, in 1564, Siennik also published *Medicine used in practice and also useful horse medicine*.

*Herbarium*, as called in Latin, compiled by Simon Syreński (circa 1540–1611), a botanist, physician and professor of medicine at Cracow University, was another meaningful and extremely popular work about herbs and plants. This work was much in demand also in the ages following Renaissance. This work was published after the death of its author in 1613. Syreński travelled widely in order to collect plants and discover

their medicinal properties. He conducted floristic research on premises of Podolia and Pokucie, in the vicinity of Kamieniec Podolski, Lvov and Cracow and in the region of the Bieszczady Mountains and the mount Babia Góra.<sup>47-50</sup> *Herbarium...* contains the descriptions of 765 species of plants and information about their properties, habitation, harvest time, therapeutic effects and instructions for their use.<sup>47-48,51</sup> The information about plants are given according to constant patterns, which was the symbol of the modernity of the work. The contents included the following elements: name of a plant (in Latin, Polish and German); morphological description, information about habitat, harvesting time, location et cetera (in subsection *Location or Location, Choice and Harvesting Time*); general characteristics of medicinal properties (subsection *Attributes*); information about the usage of plants mainly in medical treatment (subsection *Strength and Effects*); discussion and criticism of other authors and methods of the use of species (subsection *Common Sense*).

Syrynski borrowed Latin and German names of plants from ancient, medieval and his contemporary scholars. Polish names of plants and botanical terminology was borrowed from everyday language, from previous authors of herbaria and partially created by Syreniusz himself. His terminology began to be used by latter botanists. Such names as heracelum, carline thistle, gentian, birthwort, thistle and restharrow survived till modern times. The herbarium contained not only the prescriptions for herbal medicine, but also recipes explaining how to prepare food, eradicate pests and treat domestic cattle. What is more, Syrynski described plenty of bygone folk traditions and rites linked to the usage of plants.

The above short analysis of scientific and medical medicine and didactic treaties of the age of Renaissance allows us to present numerous motifs linked to health and physical fitness, which were in the realm of interest of Polish authors. Not all their statements were original, many notions were taken from ancient scholars. Nevertheless, Polish Renaissance writers undertook the challenge of independent deliberations over the matter of health, formulating- also in a naive way – many faulty theories. These achievements are worth acknowledging. The scholars mentioned in the above article were in many cases forerunners and originators of certain proceedings which undoubtedly in their times were innovative and ground-breaking.

(Translation from Polish: Agnieszka Kołodziej)

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