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MILITARY MEDICINE IN THE MEDIEVAL EASTERN EUROPE

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*The article considers some evidences about military medicine in the Eastern Europe, especially on the modern Ukrainian territory, in 11th–13th centuries. Analogies from the West-European history are represented. The information from contemporary chronicles illuminates medieval medical thoughts in the practice of Rus' physicians. Some facts are leaded out the logical way. Connections between contemporary conditions and the next development of medicine in late-medieval Ukraine are followed. **Research Methodology.** As the main method, a logical analysis is used that allows supplementing missing information by comparison with analogous situations in other regions, investigating the text in order to find additional data, in some cases, to suggest the most likely option. A chronological method for supplying the material was also used. **Results.** It is concluded that military medicine in Kievan Rus' of the 11th–13th centuries was not inferior to Western European analogues. Some differences are associated with the earlier and strong influence of Byzantine and local traditions. Military medicine at that time was not so clearly separated from the civilian. Some lagging behind Western Europe is noticeable in the theoretical part - in Russia medical schools have not been formed, unlike the universities of Italy, France, England and Spain. Some monks and priests collected Byzantine medical treatises, sometimes supplementing them with descriptions of local traditions, but no more. Secular doctors had good practice, as evidenced by the description of the anamnesis of illnesses and wounds in the annals, but their knowledge was passed only to their own children. This is one of the reasons that in the subsequent there was a backlog from Western Europe. **Novelty.** Separate articles of the Old Russian chronicles are presented as a source of not only political and cultural, but also medical information. For the first time, a fairly profound knowledge of the ancient Russian chroniclers in this field has been demonstrated. A similar theme is quite common in foreign historiography, but still remains little studied in the domestic. **The practical significance.** The material of the article can be used to prepare general works from the history of medicine or for further scientific work in this direction.*

Key words: the Middle Ages; military medicine; (battle) wounds; anamnesis; physicians; prince'; the Eastern Europe; Rus'; Ukraine.

When we talk about Medieval Europe today the scene of savage wars without any modern humanistic principles is circumstanced. Every arrow, every sword-cut without sanitary work brought the death. Is it a truly picture? Of course, our answer can't be absolutely verified. We have too less sources about medicine in the Early Medieval Europe, some more from middle and late medieval period, but mostly these are theoretical works of intellectuals from universities, not practicing physicians. Military medicine is almost absent here, but it must be something in many armor conflicts between people in these times.

There are some tendencies in research literature of this question. There are some encyclopedic researches about military medicine as Jack Edward McCallum's [4] and medieval medicine generally [5]. Structured knowledge about military medicine in the Middle Ages is presented in the Internet work-in-progress by Lady Sofya la Rus, Mka Lisa Kies, MD based on classes taught starting in 2006. Levels of military medicine, predicted needs in medical support ratios for Medieval Armies, period military healthcare providers, texts with medical information, disease prevention,

battle wounds and general wound protocol (treatment) are presented in light popular form. As a conclusion: “There was military medicine in the Middle Ages!” [6].

From special researches among most represented is history of medicine in the Crusades (11th–13th centuries). There are the article of Eran Dolev and Nashon Knoller in “The Israeli Medical Association Journal” (2001) [3] and the monograph of Piers D. Mitchell (2005) [7]. Such interesting in these events is connected with the point there Latin (West-European), Muslim and Byzantine traditions became closest in medicine (and military too).

The main development of European medicine during the Middle Ages began in the 11th century at the Salerno Medical School in southern Italy. Later Arnold of Villanova (Arnaldus de Villa Nova, 1235–1311) gave new incitement to the medieval medicine thought in West Europe. Practical steps in military medicine were made by Magnus the Good (1024–1047) in Norway, Lois IX of France (1214–1270), James II of Aragon (1267–1327). In the English army new surgical teams appeared in French campaign of Henry V (1387–1422) and were connected with the names of Nicholas Colnet, Thomas Morstede, William Bradwardine [6].

As an examples of battle wounds Britain and American writers mostly present *Visby* or *Wisby* (1361)* and *Towton* (1461)**; there mass graves was founded. But such examples are good for medieval West-European military tradition, but what about East Europe? Very interesting is Croatian research by Tatjana Buklijaš named as “Medicine and Society in Medieval Hospital” but circumscribed to the 14th–16th century hospitals of Dalmatia (modern Croatia) [2]. So, we have tendencies of the national examples research for the medieval military medicine history illumination. Is it possible to make such research on the Ukrainian ground?

At first, we have based on known facts and make some analogy by the way of logic. From Viking’s *saga**** about Magnus the Good is known, that he assigned 12 men to care for the wounded in the battles. The number can be relative (12 is popular in many mythical traditions), but we have a serious evidence about the first-aid level care in Viking army. Successor and relative of Magnus was Harald Hardrade (1015–1066), which many years lived in Kyiv on the court of prince Yaroslav the Wise (978/983–1054) and was married with Rus’ princess Elizabeth, daughter of Yaroslav. His biography was typical for many Viking’s *konungs*****, but also we must remember what the Rurik dynasty had the Scandinavian origin too and the guardians of their army were Vikings. It’s possible to presume, that Military Medicine organization in this army was equal to Magnus the Good’s form with some local Slav traditions. But to be sure it’s necessary to look on local chronicles.

Among fundamental sources of this Ukrainian historical period is a chronicle (*litopys*) “The Tale of Past Years” (Primary Chronicle). In 1076 the death of Svyatoslav Yaroslavovych (1027–1076) is described here: “In this year Svyatoslav, son of Yaroslav, was dead in 27th December because of a bump-slit (on neck)” [1, P. 121]. So, we have early description of an oncological operation, not successful yet. Such operation hadn’t military character, but we must remember, that every ruler in this time was a commander, and his physicians were especially specialized in arms wounds (like ancient Claudius Galenus). And Svyatoslav is known like the best warrior from sons of Yaroslav the Wise and logically his court’s physicians came from the army.

* The Battle of Visby (Wisby) was fought in 27 July 1361 near the town of Visby on the island of Gotland, between the forces of the Danish king Valdemar IV (1320–1375) and the Gutnish country yeomen. The Danish force was victorious.

** The Battle of Towton was fought during the English Wars of the Roses (1455–1485) on 29 March 1461 between Yorkist and Lancastrian forces. It was decisive Yorkist victory, but also “probably the largest and bloodiest battle ever fought on English soil” (c. 30,000 killed from both sides).

*** Sagas are stories mostly about ancient Nordic history and Viking voyages written in the Old Norse language, mainly in Iceland.

****Konung is a kind of king in Germanic-Scandinavian tribes in Early Middle Ages (c. 700–1000 AD).

Year 1097 is known because of the Council of Liubech, also known as Congress of Rus' Princes, and the tragedy of Terebovlian prince Vasyl'ko Rostyslavovych (1067–1124), which was blinded by the Great Prince of Kiev Sviatopolk and Volhynian prince David. It was happened in the night on 7th November 1097: "... And then others came in and overturned him, and tied him, and put on his chest the board from the stove Then two more arrived and took of second board from the stove, and sat both dawn, and pressed him so hard, that his chest cracked. And *torchyn** named as Berendij, Sviatopolk's shepherd, approached with the knife. He tried to turn the knife in the eye, but missed and cut his face – that was [later] the wound on his face known. Soon he turned the knife in his eye and draw out apple (of the eye), then in second eye and draw out another. And was (Vasyl'ko) like dead" [1, P. 148–149]. Making political and military enemies blind was a common thing in these times, but is interesting detailed description of process. Maybe, this is connected with the method. In Byzantine Empire very often individuals and ever thousands of people were made blind. But it was without drawing out apples of the eye, but by red-hot irons on the distance. So, execution on Vasyl'ko was too cruel even for these times. But he didn't became dead and lived more almost 27 years (died 1124) – it's mean, that some care and medicine of the time were able to safe life even for such wounded persons. The chronicle hasn't any evidence about the special medical care for the prince, only one woman that gave Vasyl'ko a clean shirt is recalled. This fact is similar to the thesis of Piers D. Mitchell about medieval hospitals that "the requirements of many of the patients... were simply rest and care, rather than the more specialized medical treatment" [7, P. 213].

As the repetition before war Rus' (and West-European too) princes usually used hunting. Here traumas were also often. So, prince Volodymyr Monomakh (1053–1125) wrote in his Precept: "Two *ures*** threw up me with a horse by horns, a deer beat me [by horns] and two elks – one trampled, second beat by horns. The wild boar tore off the sword from my thigh, the bear bite my knee, a savage animal jumped on my thighs and my horse with me overthrew [on the earth], but God saved me. And I often threw down from a horse, twice beat my head, my arms and legs were crippled in youth, I didn't safe my life and head" [1, P. 461].

The hunting and battles were very dangerous for the life of Rus' rulers, but Volodymyr Monomakh had good physicians. Among them is best known Agapetus of Pechersk (?–1095), a monk in Kyiv Pechersk Lavra. He mostly healed by herbs and diet – it was a local pre-Christian tradition. As his opponent another anonym physician in Kyiv by Armenian origin is recalled. He only made diagnosis of an illness: mortal or not. Such profession based on well-known Byzantine treatises and had more theoretical, then practical character. Byzantine medicine thought was based on Nestorian medicine (4th century AD) with some influence of Muslim medicine theory. But Rus' climatic persuasions and local traditions were different. So, mortality in Rus' with mostly Byzantine theoretic physicians was high.

The closest Rus' region to the West European medieval culture was the Galician-Volhynian principality (1199–1340). Mostly about its society, history and culture we have information from "The Galician-Volhynian Chronicle" (1201–1292, truly 1205–1289). From Chronicle's episodes is one interesting description of prince Volodymyr Vasyl'kovych (1247/9–1288) illness before the death:

"Great Prince Volodymyr Vasyl'kovych lied in illness by four years. Let's talk about his ailment.

His lower lip became to putrefy. Few on the first year, on second and third – more became to putrefy. But he was not very sick yet, walked and rode on horseback when he wanted.

* A member of Turkic tribe living in South Ukrainian steppe in 11th century. Part of them served to the Great Princes of Kyiv like a light cavalry.

** The aurochs or rarely urus, ure – an extinct species of large wild cattle.

When fourth year was ended and winter came he grow very weak – and all meat from the chin fall off, and all lower teeth and jaw putrefied. It was second Iob.

... When he came from the Church, lied down, nowhere withdrawn, became more ill. And all meat from the chin fall off, and chin-bone putrefied, and ever his larynx one can see. He didn't eat by the week, only drunk less water.

And in Thursday night he became exhausted... And he ended the prayer, leaded his hands to the sky and gave the soul in God's hands" [1, P. 442–444].

Such detailed anamnesis of illness is rare in medieval non-medical sources. The illness is not named, but it's possible to suspect a kind of leprosy. This illness was very frequent in Ancient and Middle Ages even among aristocracy. We can suspect some leprosy, at first, because of the Old Testament prophet Iob's recalling – his illness is known as leprosy in medieval tradition, at second, from the description of the illness and even the exterior of Volodymyr Vasyl'kovych: "He had low voice and sturdy lower lip" [1, P. 445] (the same lip became to putrefy).

All these evidences make it possible to have some conclusions. East-European military medicine on Ukrainian ground in 11th–13th centuries was equal to West-European analog in own development. Some differences are connected with Byzantine influence (more early in Kyiv than on the West) and local traditions. The military medicine was not so strong demarcated here with the civil one. Some lagging behind the theoretical base is noticeable. Kyiv as Rus' capital and the Galician-Volhynian principality didn't formed special medicine schools. It was no universities like in Italy, France, England and Spain. Some monks and priests collected Byzantine treatises, preserved knowledge about local medical traditions, but no more. Secular physicians had a great practical experience, as we saw in chronicle's detailed anamnesis of illness, but it's any evidence about an attempt to pass it next generations (maybe, only in close family sense such existed). This is why theoretically the regional medicine lagged from the West-European one in next centuries.

References

1. *Літопис руський* / Пер. з давньорус. Л. Є. Махновця; Відп. ред. О. В. Мишанич. – К.: Дніпро, 1989. – XVI + 591 с.
1. *Litopis rus'kij* / Per. z davn'orus. L. Є. Mahnovcya; Vidp. red. O. V. Mishanich. – K.: Dnipro, 1989. – XVI + 591 p.
2. *Buklijaš T. Medicine and Society in the Medieval Hospital* / By Tatjana Buklijaš // Article from Croatian Med. J. (Med. Naklada). – URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2359880/>.
3. *Dolev E., Knoller N. Military Medicine in the Crusader's Kingdom of Jerusalem* / By Eran Dolev and Nachshon Knoller // The Israeli Med. Assoc. J. – 2001. – Vol. 3. – P. 194–214.
4. *McCallum J. E. Military medicine: from ancient times to the 21st century* / By Jack Edward McCallum. – Santa Barbara – Denver – Oxford: ABC-CLIO, 2008. – 384 p.
5. *Medieval medicine: a reader* / Ed. by Faith Wallis. – Toronto: University of Toronto Press, 2010. – XXVII + 563 p.
6. *Military Medicine in the Middle Ages. A Work In Progress* by Lady Sofya la Rus, Mka Lisa Kies, MD. – URL: <http://www.sofyalarus.info/Medicine/military.html>.
7. *Mitchell P. D. Medicine in the Crusades: Warfare, Wounds and the Medieval Surgeon* / By Piers D. Mitchell. – New York: Cambridge University Press, 2005. – VII + 293 p.

ВІЙСЬКОВА МЕДИЦИНА У СЕРЕДНЬОВІЧНІЙ СХІДНІЙ ЄВРОПІ

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Стаття містить свідчення про військову медицину у Східній Європі, особливо на сучасній українській території, в XI–XIII ст. Представлені аналогії із західноєвропейської історії. На основі інформації з тогочасних літописів висвітлено середньовічну медичну думку в практиці руських лікарів. Деякі факти виведені логічним шляхом. Простежується зв'язок між тогочасним станом і подальшим розвитком медицини у пізньосередньовічній

Україні. **Методологія дослідження.** В якості основного методу використаний логічний аналіз, який дозволяє доповнити бракуючу інформацію шляхом порівняння з аналогічними ситуаціями в інших регіонах, досліджувати текст з метою пошуку додаткових даних, в окремих випадках припустити найбільш вірогідний варіант. Також використаний хронологічний метод для подання матеріалу. **Результат.** Зроблено висновки, що військова медицина в Київській Русі XI–XIII віків не поступалася західноєвропейським аналогам. Деякі відмінності пов'язані з більше раннім і сильним впливом візантійської і місцевих традицій. Військова медицина у той час не була так чітко відокремлена від громадянської. Деяке відставання від Західної Європи помітно в теоретичній частині – на Русі так і не сформувалися медичні школи, на відміну від університетів Італії, Франції, Англії і Іспанії. Деякі ченці і священники збирали візантійські медичні трактати, іноді доповнювали їх описанням місцевих традицій, але не більше того. Світські лікарі мали хорошу практику, про що свідчать опис анамнезу хвороб і поранень в літописах, але свої знання передавали хіба що власним дітям. Це одна з причин того, що в подальшому спостерігалось відставання від Західної Європи. **Новизна.** Окремі статті староруських літописів представлені як джерело не лише політичної і культурної, але і медичної інформації. Уперше продемонстровані досить глибокі знання староруських літописців в цій сфері. Схожа тематика досить поширена в зарубіжній історіографії, але все ще залишається мало дослідженою у вітчизняній. **Практичне значення.** Матеріал статті може бути використаний при підготовці загальних праць з історії медицини або для подальшої наукової роботи в цьому напрямі.

Ключові слова: середні віки; військова медицина; (бойові) рани; анамнез; лікарі; князь; Східна Європа; Русь; Україна.

ВОЕННАЯ МЕДИЦИНА В СРЕДНЕВЕКОВОЙ ВОСТОЧНОЙ ЕВРОПЕ

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Статья содержит свидетельства о военной медицине в Восточной Европе, особенно на современной украинской территории, в XI–XIII ст. Представлены аналогии с западноевропейской историей. Информацией с летописей того времени освещается средневековая медицинская мысль в практике врачей Руси. Некоторые факты выведены логическим путём. Прослеживается связь между состоянием в то время и дальнейшим развитием медицины в позднесредневековой Украине. **Методология исследования.** В качестве основного метода использован логический анализ, который позволяет дополнить недостающую информацию путём сравнения с аналогичными ситуациями в других регионах, исследовать текст с целью поиска дополнительных данных, в отдельных случаях предположить наиболее вероятный вариант. Также использован хронологический метод для подачи материала. **Результат.** Сделано заключение, что военная медицина в Киевской Руси XI–XIII веков не уступала западноевропейским аналогам. Некоторые различия связаны с более ранним и сильным влиянием византийской и местных традиций. Военная медицина в то время не была чётко отделена от гражданской. Некоторое отставание от Западной Европы заметно в теоретической части – на Руси так и не сформировались медицинские школы, в отличие от университетов Италии, Франции, Англии и Испании. Некоторые монахи и священники собирали византийские медицинские трактаты, иногда дополняли их описанием местных традиций, но не более того. Светские врачи имели хорошую практику, про что свидетельствуют описание анамнеза болезней и ранений в летописях, но свои знания передавали разве что собственным детям. Это одна из причин того, что в последующем наблюдалось отставание от Западной Европы. **Новизна.** Отдельные статьи древнерусских летописей представлены как источник не только политической и культурной, но и медицинской информации. Впервые продемонстрированы достаточно глубокие знания древнерусских летописцев в этой сфере. Похожая тематика достаточно распространена в зарубежной историографии, но всё ещё остаётся мало исследованной в отечественной. **Практическое значение.** Материал статьи может быть использован при подготовке общих трудов по истории медицины или для дальнейшей научной работы в этом направлении.

Ключевые слова: средние века; военная медицина; (боевые) ранения; анамнез; врачи; князь; Восточная Европа; Русь; Украина.