ORIGIPAL ARTICLE

Hygiene and Medicine during Achaemenid dynasty as narrated by Xenophon, the Greek historian, in the *Cyropaedia*

Abstract

To know every phenomenon the first step is to know its root. Hygiene and Medicine have noble origin from the beginning of the recorded human history; in fact, they have been the milestone of human society. *Medical history* will help us to know this background and roots and Achaemenid period as a brilliant age of Iranian heritage is meritorious to be studied.

The present study is an attempt to find instances of hygienic and Medical aspects of Persian life style during this period of as recorded by Greek historians. The main purpose of this study is to answer the following questions: was there a *Medical Tradition*, which could be named as *Persian Medical Tradition*, during Achaemenid era? if yes, the next important question is: How much importance and influence it has had on the contemporary and oncoming Medical Traditions?

Key words: *Medical history*, Achaemenid epoch, Greek literature, Xenophon

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Introduction

Although there are some clues that testify the presence and influence of Persian kings in the southeastern regions of Iranian plateau since the second half of the 6th century BC, the Achaemenid emperorship was founded between 599 to 530 BC by the second Cyrus or Cyrus the Great. During this years and marching he founded an emperorship which overall contains Middle East geographical region.¹

Achaemenian dynasty:

Achaemenied dynasty was one of the greatest Empires throughout the history from India to Macedonia. This great Empire was established by Cyrus II (the Great) who was the king of Fars and Anshan (Southwestern Iran) in about 550 BC. Achaemenides were famous more for their humanistic approach than their power. Achaemenid kings ruled their great territories by justice and respect the beliefs of the nations they ruled over. Finally, this Great Empire was ended by Alexander of Macedonia in 330 BC.²

About Cyrus II:

Cyrus II, who was known as Cyrus the Great, was the founder of the Achaemenid Empire. He was born in about 600 BC. Cyrus was the son of Cambyses I, the grandson of Cyrus I, and the great-grandson of Achaemenes (the founder of Achaemenid kingdom, giving his name to the dynasty). Cyrus the Great changed the local Achaemenid kingdom to a great Empire. He captured the whole of Iran, Mesopotamia, Lydia (Current Turkey), Palestine, Syria etc. Later his son, Cambyses II captured Egypt.³

About Xenophon:

Xenophon was a Greek historian belonging to an aristocratic Athenian family. He was born in about 430 BC. He probably participated in the war with the Sparta until 404 BC. In 401 BC, he along with some the other Greeks, joined the troop of Cyrus the younger in a revelation against his brother, Artaxerex, the Achaemenid king. Having defeated Cyrus the younger revelation, Xenophon became the leader of Greeks to retreat to the Greece.⁴

On the other hand, Xenophon was one of the famous authors and historians who wrote about the life history of Cyrus the Great. He was a prolific author. In addition to writing about hunting, politics, military training and living, his works in Brosius, 2006.
 Editors of Encyclopedia Britannica, 2006.
 Ackermann et al, 2008.
 Hutchins et al, 1990: 193-6. cluded Anabasis, his most famous work, Helenica, Memorabili, and Cyropaedia. In Cyropaedia, he wrote about the life of Cyprus, the Great, in detail. ⁵

About Cyropaedia

Although Cyropedia is known as pseudo-historical account of the Cyrus the Great life story, It is mostly known a historical novel by many scholars. ^{6,7} Dillery climes that there are some streams in the Cyropaedia and Constitution of the Spartans containing passages. Therefore, he suggests "Xenophon's ideal about efficacy of good leadership was the excellence of lifestyle and ideal community life".8 In his story, Xenophon pointed to many medical and hygienic subjects in the Persian society and also in the kingdom court. Although the historical events which were discussed in the Cyropedia is now controversial, his detailed description about social events and subjects such as medicine and hygiene are valuable enough to unearth the unclear points about the history of medicine. It is valuable because he was contemporary with Achaemenid period and created his story in that atmosphere. Therefore, it is expectable that the manner, social events and subjects was close to Achaemenids social facts. In this regard, we tried to consider this historical work to find medical and hygienic points in ancient Persia. It can be valuable to shed light upon some hidden points in the history of Persian medicine.

Method

Owing to the Greek, Arab and Mongol ravage, invasions and library fire, along with limited Archeological research especially on the Medical history, documents or manuscripts written by the natives are either extremely limited or non-existent. This led the researchers to turn to Greek manuscripts. The descriptive writings narrated by Greek authors can unfold the mysteries of the time in general and those related to hygienic and medical behavior of people, in particular. Furthermore, comparing this with other medical traditions is expected to help the researchers to estimate and hypothesize the probable role and influence of Persian Medical Tradition. To accomplish this, we employed the English and Persian translations of Cyropaedia, as the main reference. In this way we tried to find every point indicating Medical and hygienic elements. 5- Xenophon, 2005.
6- Ibid
7- Lee, 2007.
8- Dillery, 1995.

Results

The Cyropaedia of Xenophon consists of eight books and forty one chapters. At the beginning, Xenophon narrates the Cyrus childhood and then through the ongoing chapters he describes the circumstances toward victories until Achaemenid emperorship establishment. At the end of the Cyropaedia, there is a brief descriptive display about Persian nation after Cyrus era.

Scrutinizing Xenophon's statements, we found 31 records related to the various medical and hygienic advice, in addition to those including pieces of advice on life style and the mental health care of soldiers.

In the beginning of the first book in chapter six, it is written as follows:

1.Cambyses who is the great Cyrus's father is advising him. He noted Cyrus some points about necessity of healthy units, finding food sources and skillful concomitant army physician.

2.On the way, Cambyses emphasized on the role of epidemic prevention among camping units. He noted that epidemic prevention is very important even more than cure patient solders.

3. Then he noted to the location significance as an influential point to keep campus healthy.

4.Refrain from so much eating and doing exercise known as cause of well being.

5.Athletic competitions marked as an important element in order to keep solders' physically and mentally in order.

6. Then as an example to show the importance of immediate obedience of unites, Cambyses made a memorandum. He exampled the effective compliance of an unrealistic patience and his attendant to comply the physician orders.

7.In another example Cambyses noted to infamy of a fake physician in the process. He made this to notify his son the importance of expertise and the dishonor, as a consequence, is depicted when a doctor is shamed.^{9,10,11}

After this, up to the book five, chapter four we cannot find any notes about medicine and hygiene. In this part:

1.Battlefield Injuries unction was remarked in so many places.

2. The importance of presence of surgeons along with the army is observed.

3.Using medicines and remedies to cure patients was discerned. ^{12,13,14}

9- Xenophon, 2009.
10- Xenophon, 1914.
11- Xenophon, 1836.
12- Xenophon, 2009.
13- Xenophon, 1914.
14- Xenophon, 1836.

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In book six, chapter two, we find the followings:

1. Xenophon pointed to a custom. He informed that there was a convention among Persian solders to use wine to quench their thirst. Cyrus tried to substitute this habit by drinking water.

2. In this way Cyrus, the great, tried to prevent depression by giving up drinking wine after meal.

3. The role of eating different nutrients in order to illness prevention and to make it a custom is noted.

4. The role of climate and season changing and the skills help units against sunstroke and frost was observed.

5. The role of suitable clothes and bed in soldiers is notified.6. The role of tasting some salt as an appetizer also is considered.

7. The role of suitable appetite to food toward stable and healthy humoral temperament was notified.

8. The role of a complete and integral pharmacy toward remedy illnesses was emphasized. ^{15,16,17}

The eighth book, chapter one says:

 Xenophon pointed to the presence of some skillful agents in the urban loci to control and management of people's food.
 Cyrus the great, permitted people to indigo their eyes and unction by some oils to varnish skin and makes their eyes beautiful, Xenophon revealed.

3. And Finally it is noted that throughout the realm of Persian empire, spitting in public places was strongly forbidden.^{18,19,20}

Discussion

As defined by Jacob Burckhardt, the Swiss historian of art and culture (1818-1897), cultural history: "...consists of the most part of material conveyed in an unintentional, disinterested or even involuntary way by sources and monuments; they betray their secrets unconsciously and even, paradoxically, through fictitious elaboration, quite apart from the material details they may set out to record and glorify, and are thus doubly instructive for the cultural historian."²¹

The introduction of the book states that "A Greek army on the march"²² is disclosed and cited to show why the writer has accepted the Anabasis and its narrated information as useful evidence to describe events and situations. Accordingly, the same logic is used to treat Cyropaedia as a document containing useful information.

In addition, it is assumed that such information is less likely to be manipulated since the physiology of human being has 15- Xenophon, 2009.
 16- Xenophon, 1914.
 17- Xenophon, 1836.
 18- Xenophon, 2009.
 19- Xenophon, 1914.
 20- Xenophon, 1836.
 21- Cotti, 2008: 3-20.
 22- Lee, 2007.

not changed radically from antiquity In the end, we can claim:

The term known as Cultural history is the backbone of our logic for realizing not only medical and hygienic but also all other aspects of Persian lifestyle.

The pieces of evidence listed above are useful to introduce and/or to describe the Persians position of Hygienic and medical behavior.

According to the mentioned evidence, the following points are remarkable:

• Concomitant physician along with the army could show a military healthcare organization. On the other hand urban health care agents who are present to regulate civil healthcare occasions. This statement is deducted from the first point we have found in the first book and the first from eighth book.

• Contagious disease prevention is remarkably noted and the prevention is most important rather than curing ill people. This is resulted from the second note of the first book.

• Some points show the importance of mental and psychological healthcare. For example the athletic competitions (book 1, note 5), alcohol drinking giving up in order to prevent depression (book 6, note 2) are noted.

• Eating behavior in some places is noted. Refrain from eating so much food and doing exercise noted as a critical point of health (book 1, note 4). This probably related to overweighing prevention. The next behavior advices people to taste some salt as an appetizer before meal (book 6, note 6). The other note is guidance in order to malnutrition prevention. This point is cleared in book 6- note 3 which propose to eat different nutrients to prevent illnesses. Suitable desire to food is also noted as a sign and as an element of healthy temperament (book 6, note 7).

• At least four health care specialists are named and classified among health care professionals. First Physicians (book 1, note 1), Surgeons (book 5, note 2), Pharmacists (book 6, note 8), Healthcare agents (book 8, note1). This may be point to a ordered health care system

• There are some memorandums and proverbs which have used the physician as a term and as the main body to clarify the meaning (book 1, notes 6 and 7). This could explain the acquaintance of the term physician to imply the scope of the proverb to the audience, as well as possible.

• A social behavior that could be a hygienic behavior is introduced. Not to spitting in public places in all parts of Persian

emperorship (book 8, note 3).

The researchers assume that there are some other results which could be driven out from these notes and hence: this is not a total deduction but it needs more evidence and discussions. Hereby, it can be claimed that during Achaemenid dynasty, there were effective orderliness related to Hygiene and medical care, especially in army.

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The statue of the Cyrus the Great (500BC), Pasargad, Fars Province, Iran

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