

Byzantine: Obesity and Treatments

Thesis

Obesity is a serious health concern in today's society. Inactivity and poor diet are two of the most common factors that contribute to gaining excessive weight. So, health practitioners recommend a healthy diet and exercise or very low calorie diets, and sometimes they recommend drug therapy, such as appetite suppressants, and surgical procedures. Obesity has been becoming more of an issue in the 21st century than ever before. It is most likely because of the huge portions sizes and the huge amounts of fast food that people eat and as technology grows people become lazier. The people of Byzantium did not have fast food around every corner, nor did they have video games and big screen televisions. So, when thinking about the Byzantine Empire, obesity is not really a health concern that comes to mind. The research proves that it did exist though. In this report, I will list some of the causes and consequences of obesity in the Byzantine Empire. However, the aim of this report is to provide evidence to demonstrate that Byzantine physicians had treatments for obesity that are similar to modern day.

Sources/Limitations of Study

Primary Sources:



From secondary source website: <http://www.thejournal.org/studylibrary/maps/byzantine-empire.html>

Secondary Sources:

Aletra-Christopoulou, Helen, Ph.D., Niki Papavramidou, M.S. (2004). **Methods Used By the Hippocratic Physicians for Weight Reduction.** *World Journal of Surgery*, 28(5), 513-517.

Eastmond, Antony, and Liz James. (2007). **Eat, Drink...and Pay the Price.** *British Library*, 13, 175-190.

Lascaratos, John. (1995). **Medical Management of Obesity in 14th Century Byzantium.** *The Lancet*, 346(8966), 54-55.

Papavramidou, Niki, PhD, Helen Christopoulou-Aletra, PhD. (2007). **Greco-Roman and Byzantine Views on Obesity.** *Obesity Surgery*, 17(1), 112-116.

Papavramidou, Niki, Helen Christopoulou-Aletra. (2008). **Management of Obesity in the Writings of Soranus of Ephesus and Caelius Aurelianus.** *Obesity Surgery*, 18(6), 763-765.

Polychronopoulos, E., Eftychiades, A., Panagiotakos D.B., Chrysohoou Ch., Toutouzas P., and Marketos S. (2004). **Obesity in Byzantine and in Modern Era from a Public Health Perspective.** *Central European Journal of Public Health*, 12(4), 228-230.

Limitations of Study:

The primary source, the map, provides a visual aid to demonstrate the area of Byzantine, which is the region where the physicians that will be discussed lived and worked. Primary source images showing evidence of the obese persons were not found when researching this topic due to limited time and limited resources. The secondary sources provide information to prove the existence of obesity during the Byzantine era and they provide a lot of information on the treatments of obesity offered by physicians during the Byzantine eras. Many similarities in treatments to modern day are discussed. The secondary sources also provide some information on the causes and consequences of obesity. However, it was difficult to find a lot of information on the causes and consequences of obesity because the research is mostly from the view of the physicians who were concerned with prescribing treatments. In addition, only a small amount of information was mentioned on how obesity affected people in society, as limited resources were available to address this area of the topic. Whether it was most common in men, women, or children, young, old, or middle age is not indicated in the research either. However, a couple of examples were given by some of the Byzantine physicians.

Argument/Discussion/Evidence

The Existence of Obesity

It is certain that obesity was a concern for the Byzantine physicians since physicians included treatments for obesity in many of their medical writings throughout the Byzantine eras. “There are several historical manuscripts from the Byzantine years which report that terms like *plenitude of flesh* or *fatness*, were used to describe what we now call obesity. Moreover, the obese people were called *fat fleshed*, *obese limbed*, *abundant of flesh* and *oversized* in Byzantine years” (Polychronopoulos, 2004, p.229). Furthermore, “Oribasius considers obesity as a pathological condition in need of treatment through emaciation and fat reduction” (Papavramidou, 2007, p.113), and “Theophilus Protospatharios refers to obesity in his comments on the Hippocratic Aphorisms” (Papavramidou, 2007, p.114). These physicians and others, Aetius of Amida and Alexander Trallianus, mentioned obesity extensively in their writings. They wrote mostly about the treatments for obesity but several physicians indicated details on what the cause and consequence of being obese could be.

Causes

The causes of obesity are discussed by the Byzantine physicians in their medical writings. Some of the physicians believe that “the cause of this disease is the unnatural increase of food intake” (Papavramidou, 2008, p.763). The physician Oribasius “believes that obesity results from a moist temperament accompanied by flabbiness: extreme moisture may cause obesity not only in the case where it appeared through birth but also due to wrong habits and way of life” (Papavramidou, 2007, p.113). Furthermore, the physician Alexander Trallianus “believes that obesity results from alterations in temperament, but he situates

these alterations in the cavity of the stomach. According to him obesity may result from: 1)extreme frigidity of the temperament accompanied by phlegm concentration, 2)extreme heat of the temperament, and/or 3)malfunction of the “retentive” faculty due either to frigidity or warmth of the temperament” (Papavramidou, 2007, p.114). This temperament that the physician speaks of is also mentioned by some of the other Byzantine physicians. It is best described by the physician Aetius who “ascribed obesity to “*the crasis (i.e. blending inheritance) of the body*”, in other words he adopted the Galenic idea of the “*temperament*” of the body. Despite the familial predisposition which was a key element for obesity, he also blamed “*the harmful thick juiced food*”, “*the fatty-juicy and the multi-nourishing food items*” for the development of obesity” (Polychronopoulos, 2004, p.228). The physicians also believed that lack of exercise was a cause of being obese. They understood that when one was not physically active, food did not get processed as it should and therefore the person could not maintain a healthy weight. Physicians also believed that being lazy could also result in obesity. A 9th century physician, Theophilus Protospatharius, thought obesity “to be responsible for the corruption of the natural faculties. Obesity does not always have an immediate fatal result but it usually leads to death” (Papavramidou, 2007, p.115). Believing that death could be possible demonstrates that Byzantine physicians were very concerned about the consequences of being an obese person.

Consequences

Most of the Byzantine physicians talked about the consequences of being obese. “One of the most immediate consequences of all that eating was fatness” (Eastmond, 2007, 176). This was a common belief among the Byzantine physicians. Some physicians also believed that the patient suffered painfully in some cases. For instance, the physicians Caelius Aurelianus and Soranus believed that “the patient suffers from accumulation of flesh that is fully apparent in the body; he moves in a slothful way, and feels heavy and weak. Only a few steps cause shortness of breath and sweating to such a point that the patient feels suffocated by his own body and cannot endure even light clothing” (Papavramidou, 2008, p.763). They knew obesity was not good for the body and they thought that carrying the extra weight could cause many health concerns for the patient. Women and children particularly had to worry about the consequences of being obese. “When women grow old it can be fatal to be obese. In general, it is more difficult for overweight women to become pregnant than it is for the slender ones...they are unable to know when they have conceived as the size of their bellies can create confusion” (Aletra-Christopoulou, 2004, 514). The consequences for being an obese child were even more severe. “When children are overweight they have troubles with dentition. Moreover their spine bends along with increased body weight and among those children only a few live to their sixtieth birthday” (Aletra-Christopoulou, 2004, p.514). One could also suffer from mental health risks such as “mental derangement, a maniac situation that may also turn to madness” (Lascaratos, 1995, p. 54). Byzantine physicians often referred to “he” when writing about treatments for their subjects. Therefore, obesity was a concern for the men as well. An interesting example is of a Byzantine man who’s wedding was delayed due to fatness; “the bride to be and her mother thought the intended groom was too fat” (Lascaratos, 1995, p.54). The man was told to lose the extra weight so that “his belly would go down and he would appear slimmer and worthy to love because as he was he appeared disgusting with the asymmetry of his flesh” (Lascaratos, 1995, p.54). This demonstrates that the Byzantines did not have a flattering view of obesity. Other physicians used unflattering words to describe obesity. Such as, Soranus and Caelius, who “compare obese people with animals kept in feeding stalls designated for fattening” (Papavramidou, 2008, p. 763). “Prokopios in the *Secret History* was certainly not intending to compliment Justinian when he described him as ‘neither tall nor unusually short ... not at all skinny but rather plump, with a round face that was not unattractive’ and as bearing a strong resemblance to the monstrous Domitian” (Eastmond, 2007, 176). Even though, the

physicians do not mention other consequences in society, Byzantine authors of comedy and satire did demonstrate how they felt about obesity. They often portrayed fat characters as the villains when they wrote, using unflattering words to describe them. For example; “John Komnenos, known as John the Fat, had coarse black hair, full, heavy shoulders and a fleshy bloated head. He looked weak and enfeebled and dripped with sweat” (Eastmond, 2007, p.176). Another undesirable consequence of obesity is the side effect of losing excess weight. “The Hippocratic physicians mentioned as a general remark that any leanness of the body causes corrugation of the collapsing skin; but if one is well nourished the skin stretches; the shrivelling, the smoothness are a sign of each” (Aletra-Christopoulou, 2004, p.516). The physicians prescribed various treatments in order to avoid these consequences.

Treatments

Obesity was treated as a disease that could cause serious health risks. Therefore, many treatments were prescribed by the Byzantine physicians. The physicians prescribed various treatments, such as; a particular diet, exercise, salt baths or hot baths, massages, medications, purging and a treatment similar to modern day liposuction.

Diet

Prescribing different types of foods to eat was one of the main treatments for obesity by the Byzantine physicians. In the 6th century, a Byzantine practitioner of medicine named Alexander Trallianus wrote about his treatment which involved a specific diet. He believed that obesity resulted from different bodily temperaments and depending whether the patient was cold or warm, different foods were prescribed. For example, “in the case where extreme warmth causes obesity, there is no need to give the patient wine, indigestible food or food with cooling properties like that made of peppers, fish-sauce prepared with water, and ankles, breasts, and vulvas and feet of cows” (Papavramidou, 2007, p.114). Some of the other foods that were suggested by Byzantine physicians were lean meats, fish, fruits, and vegetables. They were aware of the types of foods that could help a person lose unneeded weight. “Tralliani, one of the most famous Byzantine physicians, prescribed foods like fish and trip soup, so as to diminish appetite. Furthermore, it is noteworthy to mention that Tralliani also reported: *someone with fatness and plenty of blood is imperative to follow a slimming diet and to refrain from salt and fat intake for several days*. This is the first manuscript to correlate obesity and hypertension with salty and fatty foods” (Polychronopoulos, 2004, p.229). As Papavramidou notes, “Alexander Trallianus especially details the foods and drinks that an obese patient should consume to become slim. Thus, wine, poultry, vegetables, cereals, fish and some pork or lamb meat are suggested” (Papavramidou, 115). Specific diets were prescribed by all of the physicians. It is interesting that such a variety of foods were prescribed. Some prescribed vegetables, some fruits, and others meats, fish, eggs, and chicken. All of them suggested staying away from fatty foods though. The physician Aetius suggested many less fattening foods. “Among the recommended foods he included fish, poultry, lean boneless meat, fruits (especially apples), rice, and vegetables (especially pumpkins). Furthermore, Aetius opposed to eat red meat (i.e. hare) and entrails as they were *thick juiced and multi-nourishing*” (Polychronopoulos, 2004, p.229). Another physician, Orivase, “gave preference to the whey over the rest the rest of the dairy products” (Polychronopoulos, 2004, p.229). Diet alone was not always the best treatment though, so most Byzantine physicians suggested exercise as well.

Exercise

Regular exercise was also an important treatment prescribed by Byzantine physicians. “They noted that walking and running during the night is particularly beneficial as well as walking after gymnastics, which causes a reduction in weight. Early morning walks also reduce weight” (Aletra-Christopoulou, 2004, p.515). Physicians also believed that “swinging the arms when running makes the skin considerably thinner” and “wrestling with the hands reduces and draws the flesh upward; the punch-ball and arm exercises have like effects” (Aletra-Christopoulou, 2004, p.515). Both passive and vigorous exercises were prescribed by physicians. They believed that perspiring was a benefit of the exercise which would help to remove the excess weight on the body. Running exercises were believed to produce this benefit of perspiration. “Running exercises ... have the power to heat, concoct and dissolve flesh ... running in a cloak has the same power and is beneficial to those who have ... excess of flesh which they wish to reduce, and running in a circle, reduces and contracts the flesh of the abdomen” (Aletra-Christopolou, 2004, p.515). Physicians prescribed specific exercises in some cases, but in most cases doing any type of exercise was sufficient. The physicians gave other alternatives for treatment too though.

Heat Baths and Massage

Some Byzantine physicians recommended heat baths and massages. “Thermal baths were recommended as a slimming measure, by the physician, Myrepsus, because of the high temperature and the excess sweating” (Polychronopoulos, 2004, p.229). Hot baths were recommended by other physicians as well. They believed that these baths worked to take moisture from the body which would help reduce the flesh, and “salt water baths could draw the moisture from the body” (Aletra-Christopolou, 2004, p.515). The physicians Caellius and Soranus also suggested “the application of intense heat with the use of hot coals and dry steam as prescribed to reduce flesh” (Papavramidou, 2008, p.764). With regards to massage, the physician Alexander Trallianus did use this as a treatment for obesity and the physician Oribasius suggested “massage with soda and the rougher salts are also helpful” (Papavramidou, 2007, p.113). The hot treatments were suggested mainly because they could help take moisture, sweat, from the body.

Medications

Medications were also used as a treatment for obesity. The physician Oribasius was concerned with using the most powerful medications “as well as the stronger diuretics, particularly the seed of wild rue with its tops, the round birthwort, the small centaury, gentian, poley and Macedonian parsley. All these plants, both alone, or in combination, attenuate and evacuate the body” (Papavramidou, 2007, p.113). Oribasius also suggested other spice mixtures as a treatment. Byzantine physicians prescribed “the use of purgatives and emetics in order to diminish obesity” (Polychronopoulos, 2004, p.229) as well.

Purging

Purging was a common treatment for obesity. In Greek it is known as *catharsis* and it was “most commonly achieved by vomiting, urination, defecation, expectoration, bleeding, and sweating. According to the *Hippocratic Corpus*, any loss from the organism causes weight reduction”. (Aletra-Christopoulou, 2004, p.515). Many of the early Byzantine physicians believed that vomiting was a treatment for obesity. Some later physicians used this method as well. For example, the physician, Soranus of the 2nd century suggested “provoking vomiting when the stomach is empty and then give the patient acrid foods. These diets should

not be prolonged, but they can be used more than once at frequent intervals” (Papavramidou, 2008, p.764). The research suggests that “the Byzantine moral was that what came out was considerable better than what went in” (Eastmond, 2007, p.181). Being fat was considered to be bad and vomiting could purge the body of unwanted bad things.

Modern Day Liposuction?

Another treatment that was recommended by the Byzantine physicians was a treatment similar to the modern day technique of liposuction. The treatment prescribed by the physician Aelianus, involved the “insertion of needles into fatty regions in the upper layer of the skin” (Papavramidou, 2007, p.115). If we consider that liposuction today involves the removal of fat from deposits beneath the skin using steel tubes with a powerful vacuum, then we can certainly see the similarities between the two procedures.

Relation/Significance for Contemporary Society or Education

It is surprising that obesity was such a significant issue that needed to be addressed by physicians so long ago and that the treatments that Byzantine physicians prescribed in the Byzantine era are very similar to what physicians prescribe now. The treatments they used; diet, exercise, spa therapy, massage, medications, and liposuction, have not disappeared. Besides the popular dieting pills and commercial programs that exist now, there are no differences in the type of treatments that we are using currently. Modern physicians recommend a healthy diet and exercise frequently as a treatment for obesity. The foods that are recommended now are virtually the same as what Byzantine physicians prescribed; fish, lean meats, fruits and vegetables. Spa baths, salt baths and massages are an option for treating the obese body at present as well. Surgical procedures are used often nowadays too. The Byzantine physicians’ concerns about the balance of the bodily fluids would most likely be called calorie balancing today. The treatments that the Byzantine physicians used must have been effective to have lasted through the centuries. Although these sources did not provide information on how obesity affected education or how it impacted society and working conditions, we can draw the conclusion that the Byzantines were aware of how important it was to be healthy. Nowadays, health practitioners educate society on how to live in a healthy way. From the significant amount of treatments that Byzantine physicians wrote about, they surely were aware of how the body should be treated to avoid being obese.

Conclusions

Obesity was a health concern for Byzantine physicians. It is clear that it existed as a health concern because Byzantine physicians wrote about methods for treating obesity. Obesity was thought to be serious enough to cause death by some physicians. Obesity was caused by eating too much, and having bodily fluid imbalances. The consequences of being obese were significant. Patients could suffer physical and mental pains, and they could be labelled in unflattering ways by authors of comedies and satires. The Byzantine physicians had many treatments which consisted of diet, exercise, spa, massage, medications, purging and liposuction. These treatments are very similar to techniques that physicians use at present to treat obesity. The Byzantine physicians knew that lean meats, fish, fruits and vegetables were healthy choices when trying to lose weight and that running, walking, and strength training were also key components to losing weight. Nowadays, diet and exercise is an accepted recommendation by health practitioners. The Byzantine physicians provided medical writings with treatments that have survived over the centuries. Their treatments must have worked against obesity or else we wouldn’t still be using these treatments today.