Please note:

This response was developed against the 2017 Classical Studies subject outline and has been remarked against the criteria for 2018.

Stage 2 Ancient Studies

Assessment Type 3: Inquiry

***How did ancient Greek and Roman medical knowledge and procedures lay the foundation for our modern practices?***

Although modernised and built upon to suit our ever-changing society, many events, practices and traditions that were begun years, decades and centuries ago are still continued today. This is true of the ancient Roman and Greek medical practices that have laid the foundations of medicine and medical practices that we utilise today. Although medical procedures initially involved casting spells and praying to Apollo and other gods, they grew to become more precise as knowledge of the human anatomy increased. After persons such as Hippocrates and Asciepiades, practitioners were able to use the earlier discoveries to acquire a more detailed knowledge of plant uses, surgical procedures and prognosis of diseases.

Hippocrates was well known for his contributions towards medical knowledge, and much of his research has been acknowledged and is still applied today. His work *Fractures, Dislocations, and Wounds,* contains large amounts of information relevant to our modern understanding of medical practice. The work of such ancient people has allowed others to learn and add to that knowledge, resulting in the awareness of medical information that we base our practices on today. Hippocrates' research was so accurate and advanced for his age that some people believe that 'if we did not have access to anaesthetics and muscle relaxing drugs today we would probably be using Hippocrates' methods' (Loannides, 1999). Hippocrates' findings were documented and used for centuries after his death, and from his research, the knowledge of the human anatomy and treatment of such injuries has compiled into what we know and practise today.

An aspect of medical practice that ancient societies began is the ethical standards of the profession. The well-known 'Hippocratic Oath' details the values and responsibilities of physicians. This oath is still sworn by doctors today, as the ancient principle to 'work with purity and with holiness' (Hippocrates) is also relevant to our modern codes of practice. Just as present day doctors do, ancient practitioners were subject to work 'for the benefit of the sick' (Hippocrates). These standards are still applicable, illustrating how ancient beliefs and ethics have begun the basis of our modern ethical standards.

The ancient Greeks first laid the basis of surgery and scientific medicine that we employ today. It was once believed a person’s health was controlled entirely by the gods, as it was their fate. This religious belief was not completely disregarded when clinical methods were introduced, resulting in treatments combining both religious and clinical procedures. However, ancient practitioners later challenged the belief that all illnesses could be attributed to the gods. Those who chose to practice clinically began to observe and analyse patients in attempt to heal them medically, relying less on supernatural cures. The Greeks' `detailed knowledge of anatomy and its functions led to many surgical operations in line with success rates enjoyed in the modem era' (Viggen, 2005), illustrating their understanding of the subject and extent to which they had benefited from the clinical methods. As there were opposing methods of treatment — clinical and religious, there was competition for patients and between the two techniques. This is similar to the contest between our modern clinical and natural methods, although during both eras, these different treatments also often worked together. This clinical approach made later civilisations, which over time became our modem society, realise the more effective, scientific practices in medicine.

Clinical methods discovered in ancient times that are still used today also had another benefit. When the ancient Greeks realised clinical treatment was valuable, they began to expand on their knowledge of environmental factors that could cause disease. They developed knowledge about causes of diseases and as result could then predict the course of a disease or illness by observing a patient's early symptoms. Hippocrates believed it was a 'most excellent thing for the physician to cultivate Prognosis; for by foreseeing and foretelling, in the presence of the sick, ...he will manage the cure best' (Hippocrates, Book of Prognostics). By realising that environmental conditions were the origin of some illnesses, they were able to reduce the chances of these contaminating people, and therefore develop ways to alleviate and possibly cure them. This clinical method of diagnosing causes and diseases has been carried on today, allowing us to deal with illnesses more appropriately.

As clinical methods did, some natural therapies used to treat ailments in ancient Greek and Roman times began the foundations of modern medicine. Many of these are still used widely today. The Greeks discovered numerous plant extracts that they could use to treat and alleviate illnesses. These early discoveries of the narcotic and stimulating properties of certain plants have been acknowledged and over fifty are still used toady. One plant extract that the ancient world discovered is 'digitalis', derived from foxglove and used 'to treat epilepsy, coughs, and swollen glands' (Norcross, 2005). It is still used commonly to increase the activity of all forms of muscle tissue-mostly the heart, after the ancient practitioners later discovered its stimulating properties. Another plant used in ancient times that is still useful to us is 'Hypericium' (St John's Wort). Hippocrates, Pliny and Galen were all said to have `not(ed) its uses as a vulnerary, diuretic, (and in treating) neuralgic conditions' (American Botanical Council, 2005). From observing ancient records, its usefulness to the earlier civilisations becomes evident, which began investigations into whether it can be clinically useful in our present day. Hypericium is now used widely as an anti-depressant. This use of plants has allowed our modern world to realise the potential of many naturally occurring substances from flora that contain the ability to ease or even cure ailments. Again it is evident that our modem medicines have been based on and developed further from ancient medical discoveries.

Apart from herbal remedies, there are other ways of dealing with illnesses in our modern society that don't involve medication or surgery, as some ancient persons practiced. The first Greek physician to exercise medical practices in Rome was Asclepiades. As many people do these days, he didn't believe drugs and surgery were the best ways to heal an ill person. Instead he aimed for the 'restoration of harmony' and believed 'changes of diet, massages, bathing and exercise' (Asclepiades) would benefit an ill person. To achieve this he recommended regular bathing, change of diet and exercise to replace drugs. These simple lifestyle changes are recognised as some of our present day recommendations for good health. Asclepiades' belief has been accepted, proven effective in cases such as decreasing the chances of cardiovascular disease, and expanded on to work towards the prevention and alleviation of many sicknesses today.

On their knowledge of surgical, herbal and physical remedies, the ancient Romans founded many procedures, including some that are practiced more often today than when the Romans first used them. One ancient method, which was then best described as having a baby 'cut out of its mother' is the caesarean section. In ancient Rome its purpose was to save the child in interest of expanding the population. Usually if a birth resulted in caesarean section, the mother had already died. Today we still use this surgery, but in hopes of saving both mother and child from discomfort, injury and death. Again, it is easy to recognise how the ancient Romans had begun the procedures and knowledge of current medical practises.

The midwife *we* know today also originated from ancient times. When allowed to pursue a career in medicine, women tended to confine themselves to midwifery or nursing. It was customary for the woman of the house to be assisted by her slaves when giving birth. From this tradition, the occupation of a midwife began as women started to travel with their equipment to `the home where the delivery was to take place' (Soranus), as a doctor did. The midwife as we know it today has very similar duties to the ancient midwife such as helping and reassuring the mother, applying medical knowledge to the labour, and ultimately delivering the baby if a caesarean section was not required. This occupation established the acceptance of females in the work force. The ancient midwife had begun a new aspect of medical treatments, founding the modern midwife of today.

It was the Romans who founded the concept of keeping the sick and injured in a common place. Rome didn't have hospitals as such, their military 'hospitals' resembles our modem hospice the most, but they devoted buildings and places for the sick and dying. Temples where the sick would go to pray for a cure were available, and there were houses for the ill, although their main aim was to keep the sick off the streets. Some rich estates might have a valetudinaria- an area assigned for keeping ill slaves to be treated isolated from the family. There were some small residences that allowed physicians to temporarily house and observe their patients, as excavations have shown houses structured 'much like today's nursing home' (Borges, 2004). These ancient housings began the idea of constructing a place where all patients can be treated and kept for procedures and observations- our present day hospital.

At the excavation sites of the 'hospitals', tools the ancient practitioners used were discovered and found to be similar to those still used today. A common implement used by both ancient and modern surgeons is the scalpel. The ancient scalpels differ only from our modern ones by the materials they were made of- bronze, brass, iron and steel, whereas our modern scalpels are made completely of stainless steel. These devices were crucial in almost every surgical procedure, and are still considered necessary in modern surgery. Hooks were also used widely in surgery as they are today. Modern doctors even use the same kinds of hooks the ancient practitioners did-sharp hooks to hold and lift tissues and blunt hooks to probe. An interesting fact is that 'many of (the tools) have the same names and uses today (Burges, 2004), illustrating the extent to which we have continued to use what the ancient societies did. The excavation of these ancient tools and the records of their uses and benefits in surgery began the development of the implements to better suit our modern requirements.

Ancient tools were not only used for surgery of the ill, but also for procedures on those wishing to change a physical trait, as many people still desire to do today. The reasons for cosmetic surgery in ancient Rome compared to our present day vary slightly, yet some haven't changed. As we are, the Romans were able to have 'excess skin or tissues ... trimmed from various parts to improve (their) appearance' (Viggen, 2005). Freed slaves were common customers for the procedures available, as they could have their branding removed, as many modern people do with have unwanted scars or marks. Although the process for removing brands has not been found documented, it is assumed the branded area of skin would be cut away and the edges from the cut sewn up again, or their brand was burnt until made unrecognisable (Burges, 2004). What began with a few, relatively simple procedures in ancient Rome has expanded in our modem society due to huge demand for the numerous surgeries.

The influence and foundations of ancient Greek and Roman societies on our modem medical practices and medications is evident. After religious healing of the sick lessened and clinical treatments were introduced, many new procedures were incorporated into the ancient medical practice that founded what we call our medical system today. Their tools, study and even some of their natural remedies are still applicable now, illustrating their researched knowledge and many accurate anatomical discoveries. By examining the ancient societies' ways of procedures, equipment and the early practitioners recorded findings, it becomes apparent that our medical knowledge and practices were first developed over two thousand centuries ago.

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| It is important to note that this paper was written against the old criteria and therefore the student has not necessarily provided explicit evidence of several features. | | |
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| *Assessment Design Criteria* | *Grade* | *Comment* |
| KU1 | B+ | This feature improves considerably as the paper progresses. The student gives detail not only on the practices but the beliefs that drove the practices. |
| KU2 | C | There is some evidence that the student has distinguished a variety of belief in practice. To strengthen the evidence in this criteria, the student could have done more to identify where Roman and Greek practice differed. |
| KU3 | B | Some depth of knowledge of the notion of continuity and change. The student has located several core concepts in medicine and shown their continuance, and alteration in the contemporary world. |
| RA1 | B | There is a reliance on web-based research but the student has identified some highly specific sites and accessed primary source material through secondary sources |
| RA2 | B | The design of the topic leant itself to this criteria. The student has identified aspects of the ancient world in two societies and linked them to the modern world. The student has made distinction between ancient and modern practice, not in a highly sophisticated way but they have found multiple aspects of connected practice. |
| A1 | B | The student has synthesized material well and has been able to sort material into clear topics. Ideas are acknowledged as well as quotes. Quotes from both primary and secondary sources are woven in to support the student’s argument. |
| A2 | B+ | This is one of the strongest features of the student’s work. The student has a tight control on the structure of this piece and has used the conventions of the essay format to good effect. The introduction clearly outlines the basic argument. Each paragraph has a clear topic sentence relating back to an aspect of the argument. Each paragraph is tightly disciplined with relevant content illustrating one aspect of the argument. The paper is structured logically and leads the reader clearly to the conclusion. The reader has to do minimal work. The student also has control of some subject specific vocabulary throughout the paper. |
| A3 | C | No direct evidence in the discussion. Evidence of engagement with the nature of the sources has to be extrapolated from the bibliography and use of sources. The student has considered the value of primary source material and located and used material from Hippocrates. The student has not accessed highly academic sources which indicates a level of satisfaction with the more popular level of information located. The paper suffers in depth of detail in KU1, and A2 from this decision. |
| **Overall grade** | **B** |  |

Performance Standards for Stage 2 Ancient Studies

| - | Knowledge and Understanding | Research and Analysis | Application |
| --- | --- | --- | --- |
| A | In-depth knowledge and critical understanding of texts, artefacts, ideas, events, and/or people of the ancient world.  Discerning and well-informed recognition of, and insightful reflection on, the political, social, cultural, and/or economic diversity within the ancient world.  Insightful knowledge and understanding of historical and/or archaeological concepts. | Comprehensive research and critical analysis of appropriate primary and secondary sources and perspectives.  Insightful research into and understanding of ideas and innovations that emerged from the ancient world, and in-depth consideration of their influence. | Comprehensive synthesis of evidence and appropriate and consistent acknowledgment of sources.  Clear, precise, and highly persuasive communication of ideas and arguments, using subject-specific language.  Perceptive, consistent, and accurate evaluation of the nature of sources and evidence. |
| B | Some depth of knowledge and understanding of texts, artefacts, ideas, events, and/or people of the ancient world.  Well-informed recognition of, and thoughtful reflection on, the political, social, cultural, and/or economic diversity within the ancient world.  Some depth of knowledge and understanding of historical and/or archaeological concepts. | Well-considered research and critical analysis of appropriate primary and secondary sources and perspectives.  Thoughtful research into and understanding of ideas and innovations that emerged from the ancient world, and some depth in consideration of their influence. | Well-considered synthesis of evidence and appropriate acknowledgment of sources.  Clear and persuasive communication of ideas and arguments, using subject-specific language.  Consistent and accurate evaluation of the nature of sources and evidence. |
| C | Knowledge and understanding of texts, artefacts, ideas, events, and/or people of the ancient world.  Generally informed recognition of, and considered reflection on, the political, social, cultural, and/or economic diversity within the ancient world.  Knowledge and understanding of historical and/or archaeological concepts. | Competent research and analysis of appropriate primary and secondary sources and perspectives.  Research into and understanding of ideas and innovations that emerged from the ancient world, and consideration of their influence. | Description with some synthesis of evidence and acknowledgment of sources.  Informed communication of ideas and arguments, using some subject-specific language.  Consideration and some evaluation of the nature of sources and evidence. |
| D | Recognition and basic understanding of texts, artefacts, ideas, events, and/or people of the ancient world.  Recognition and superficial consideration or description of the political, social, cultural, and/or economic diversity within the ancient world.  Recognition of one or more historical and/or archaeological concepts. | Identification and basic consideration of primary and secondary sources and/or perspectives, mainly using description.  Recognition and superficial consideration of ideas and innovations that emerged from the ancient world. | Description of evidence with acknowledgment of sources.  Superficial communication of ideas and arguments.  Superficial consideration of the nature of sources and evidence. |
| E | Limited awareness of an aspect of the ancient world.  Attempted description and emerging awareness of the political, social, cultural, and/or economic diversity within the ancient world.  Some awareness of a historical or archaeological concept. | Limited identification or use of sources.  Some awareness of an idea or innovation that emerged from the ancient world. | Attempted description of evidence.  Attempted communication of an idea or one or more points towards an argument.  Limited consideration of a source. |