

Weeks 1 & 2 – Introducing Drugs

1. Explain the basics of classical Western humoral theory and practice. Was this historical framework scientific? Give reasons for your answer.

- The humoral theory proposed that illness was caused by an imbalance in the four bodily humors: Blood, Yellow Bile, Black Bile, and Phlegm. These matched the 4 elements that made up the universe: Air, Fire, Earth, and Water respectively.
- **Blood = Air = wetness and heat**, originating from the liver. Conditions such as fevers, flushing or sweating are caused by too much blood – hence treatment involves deliberately induced bleeding.
- **Yellow Bile = Fire = dryness and heat**, originating from the gall bladder. Conditions involving dry heat and anger/irritability are caused by too much yellow bile. Treatment involves deliberately inducing vomiting/bowel movements until bile is produced.
- **Black Bile = Earth = dry and cold**, originating from the spleen. Conditions involving depression, irritability and sadness are caused by too much black bile. Treatment involves deliberately inducing bowel movements e.g. laxatives.
- **Phlegm = Water = wetness and coldness**, originating from the brain and lungs. Conditions involving wetness, coldness and lethargy e.g. colds, flu, chest infections, are caused by too much phlegm. Treatment involves steaming, inhalations, coughing and expectorating.
- This historical healing framework was not scientific for the following reasons:
 - ‘Science’ is a method consisting of **organised efforts** to come up with **explanations of nature**, always modifying and correcting these through **systematic observations**. Although the Hippocratic approach, which propagated the humoral theory, used organisation, explanation, and observation, these alone are not enough to be classified as scientific. For these to be science, developing hypotheses about illnesses and testing different remedies objectively needs to be carried out.
 - Since developing a theory that could be applied to all was more important to the Hippocratic approach than observations, these theories were not validated with testing, which led to the rejection of the idea that observation could refine theory. This may have held back the development of scientific medicine.
 - Lastly, ‘Science’ is not the same as ‘technology’, and ancient technical innovations are not science.