# History of Medicine

## **Prehistory Medicine**

Early humans were hunter-gatherers. The evidence of how prehistoric people lived, what they ate, the sicknesses from which they suffered, and how they treated these illnesses has been gathered from small clues found in various parts of the world beginning as far back as 10,000 years ago.

Since soft tissue decomposes in time, bones and teeth are the most commonly available clues as to what early people's lives were like and what some of their health problems were. If a person is malnourished, for example, the bone marrow will show a depletion of iron because the body must draw from reserve iron stores to survive.

What can be known for certain is that early people fell and broke bones, were injured in hunting accidents, had difficulty finding food, had problems with childbirth, suffered illnesses, and endured aches and pains for which they sought relief.

When a group member became ill or was hurt, the others had to devise healing methods through trial and error. Many of the healing methods that were developed by people in all parts of the world were more similar than might be expected, considering the broad and diverse geographic area that was inhabited by prehistoric people. Magic, religion, and experimentation with plants as healing agents played a prominent role in medical practices everywhere.

#### **Early Diseases**

### Fundamentals of Medicine Lecture 1

The environment in which primitive people lived was harsh and dangerous, but their lifestyles helped them avoid some types of health problems that affected people who were to live later on.

Hunter-gatherers did not stay in one place long enough to pollute water sources. This practice eliminated health risks of contaminated water as well as diseases that can be spread by insects living near polluted rivers or lakes.

Because hunter-gatherers lived in low-density groups and did not intermingle with others, contagious illnesses were also rare. Infections affected Hunter-gatherers primarily came from two types of sources:

- 1. Zoonotic illnesses (diseases carried by wild animals)
- 2. Parasites and bacteria.

#### **Early Management of Diseases**

Primitive people had no knowledge of germs and the role they played in causing illness. Sicknesses were attributed to gods or to curses. Treatments would have often relied on a combination of religious beliefs and practical remedies.

Medical treatment generally was administered by a shaman or a medicine man, the person within a community who was believed to be empowered by the gods. This esteemed member of the group would provide a drink, offer an herbal cure or say a prayer, and then perform a dance or say magic words.

Treatment of an open wound might have included cleaning and packing it with extracts from plants or part of a plant, some of which might have been helpful in cleansing or healing the injury. Cuts were treated with animal fat. Sometimes, animal excrement was rubbed on the wound, and animal skin was used as a

bandage. A broken leg or arm was covered in river clay or mud. This formed a cast of sorts that was hardened by the Sun.

#### **Drugs**

Pharmacological knowledge came from experimentation. Early people, unfortunately, almost certainly located poisonous plants some of the time as they sought to sample and identify ones that might have had healing properties. Primitive people sometimes judged the use and purpose of a plant by examining what the plant resembled (if it looks like an eye, they will use it for eye diseases).

#### **Disease Prevention**

Prehistoric people often carried talismans as a way to guard against disease. Ritualistic mutilations such as circumcision and scarification (intentional creation of scars) were performed for similar reasons. Drinking the blood of warriors was also thought to give strength for healing.

#### **Early Surgery**

The process of **trephination** involves removing a small, circular piece of the skull from a patient to expose the dura mater (fibrous membrane forming the outer envelope of the brain). Trephination was widespread and common within many communities, and evidence of this type of surgery appears on skulls that date as far back as 10,000 years ago.

The reasoning behind this type of skull surgery likely varied with the culture. Headaches, infections, convulsions, or signs of insanity may have led to trephination as a way to relieve suffering.