# HEALTHCARE





### **TEACHER BACKGROUND NOTES**

As a young boy growing up in Blantyre, along the banks of the River Clyde, David loved to study different types of plants. He used a book called Culpeper's Complete Herbal to identify plants with healing properties. David's interest in natural science and his desire to help others inspired him to study medicine at Anderson's College in Glasgow, which is now part of Strathclyde University.

Once David graduated as a doctor, he set sail for Africa to work as a medical missionary. At the time, scientific and medical understanding in Britain was not as advanced as today. For example, David and his colleagues thought a fever was an illness, rather than a symptom of an illness. David worked closely with African traditional healers (also known as diviners) because he found there were a lot of diseases in Africa that were different to the ones in Britain. At this time modern-day germ theory did not exist nor did the discipline of tropical medicine. Traditional healers taught him what they knew about these illnesses and showed him African plants that had special healing qualities. But there were still many diseases that had no known cause (viruses like malaria and trypanosomiasis were unknown), treatments or cures.

One of the worst illnesses David experienced was malaria but no-one knew exactly what it was and what caused it. However, when David's two children got malaria, he was able to closely study their symptoms and began to work out a treatment. He used quinine (a liquid from the bark of trees found in South America) mixed with rhubarb and other ingredients to make a special medicine. He advised that people suffering from malaria should take enough of this medicine to make their ears ring! The medicine was named 'Livingstone's Rousers' because it would rouse even the sickest of patients.

Livingstone's Rousers were 'composed of from six to eight grains of resin of jalap, the same of rhubarb, and three each of calomel and quinine, made up into four pills, with tincture of cardamoms, usually relieved all the symptoms in five or six hours. Four pills are a full dose for a man – one will suffice for a woman. They received from our men the name of 'rousers,' from their efficacy in rousing up even those most prostrated' from Livingstone, David, and Charles Livingstone. 1865. Narrative of an Expedition to the Zambesi and Its Tributaries. London: John Murray (accessible http://www. gutenberg.org/ebooks/2519)

The David Livingstone Birthplace museum collection includes examples of the Livingstone Rousers and also of the traditional healer or diviner medical kits.



### ACTIVITY 1 VICTORIAN DOCTOR

l am developing my understanding of the human body and can use this knowledge to maintain and improve my wellbeing and health. HWB 2–15a

When David was training to be a doctor, he learned about lots of different diseases that were common in Britain at that time. **Do you think you could be a Victorian doctor?** 

#### TASK A

Work in small groups of up to seven. One or two of you should be the doctor/s, the rest should be **PATIENTS**. Make sure you have the right patient or doctor cards for your role!

The **CURE** cards should be placed answer facing down. Each patient should have a turn to explain their symptoms to the doctor who should decide what their illness is. The patient should then choose a random cure card.

Once all the **DISEASES** have been matched to the patient, everyone should check the diseases match the symptoms. As a group, match the most appropriate cures to the disease. **Which disease is the most serious?** 

To show my understanding, I can respond to literal, inferential and evaluative questions and other close reading tasks and can create different kinds of questions of my own. ENG 2–17a



*Medicine chest used by David Livingstone, Europe, 1860–1873.* Science Museum, London. Attribution 4.0 International (CC BY 4.0)



Patient cards

# MAGDA

Magda can't go to work at the cotton mill today because she's been vomiting all morning and has a bad fever.

# AMIR

Amir feels so ill! His muscles really hurt, he's noticed a rash on his arms and he has the worst headache ever.

### KWAME

Kwame has recently noticed that he has lost some weight and he is coughing blood. He's really scared.

# NANCY

Nancy is worried about her baby, Jane. She has a horrible rash, she feels really hot and her eyes are red and puffy.

# AGNES

Agnes felt fine an hour ago but now she's vomiting, her stomach really hurts and her face looks blue.

### BILLY

Billy's legs aren't working. He's really worried because he needs to go to work as a chimney sweep tomorrow. Disease cards

# **CHOLERA**

Symptoms include vomiting, stomach pain, leg cramps and skin may turn greyish-blue.

# TYPHUS

Symptoms include headache, cough, rash, muscle pain and fever.

### **MEASLES**

Symptoms include rash, fever, red eyes, coughing and difficulty breathing.

# POLIO

Symptoms include paralysed muscles and difficulty breathing.

# INFLUENZA

Symptoms include fever, headache, muscle pain, sore throat, coughing and vomiting.

# **TUBERCULOSIS**

Symptoms include coughing blood, fever and weight loss.

Cure cards

# REHYDRATION

Get the patient to drink lots of clean water to rehydrate the body. This cures illnesses where the patient has been sick and has therefore lost a lot of water and become dehydrated.

# PURGING

Give the patient laxatives to bring on diarrhoea or vomiting in order to relax the inside of the body and relieve pressure. Cures vomiting illnesses and stomach pains.

# **SWEATING**

Keep the patient as hot as possible to sweat out the poisons from their body. Once drenched in sweat, throw cold water over the patient then give them a massage. Cures fevers.

# **PLASTERING**

Cover the patient in a thick paste made of mustard, bread, milk and cow dung. Cures colds and internal pain.

### **BLEEDING**

Cut open the patient to release bad blood. This works on lots of different illnesses.

# **BLISTERING**

Use hot pokers or acid to burn the patient's skin in order to burn out a wide range of illnesses.



# ACTIVITY 2 CHILDREN AND HEALTH

l am developing my understanding of the human body and can use this knowledge to maintain and improve my wellbeing and health. HWB 2–15a As I explore the rights to which I and others are entitled, I am able to exercise these rights appropriately and accept the responsibilities that go with them. I show respect for the rights of others. HWB 2–09a

#### TASK A

Have a look at the Global Goals if you don't already know about them. https://www.globalgoals.org/

Which Goal would David have been working towards?

What do you think the planet would have been saying in response to the children's question below?

Compare your ideas with the rest of the cartoon: http:// cdn.worldslargestlesson.globalgoals.org/2016/06/A-To-Do-List-for-the-Planet\_Page\_04\_Image\_0001.jpg

#### TASK B

Look at the articles of the UNCRC in symbols on the Children and Young People's Commissioner website: https://www.cypcs.org.uk/rights/uncrcarticles/symbols

Which article represents the right to be healthy? Draw your own picture for what being healthy means to you. You/your teacher could scan this into the computer and share with the David Livingstone Birthplace social media. https://cypcs.org.uk/rights/uncrc/articles/



### ACTIVITY 3 MEDICINAL PLANTS

Through carrying out practical activities and investigations, I can show how plants have benefited society. SCN 2–02b

David was taught a lot about Southern African plants which could be used to cure illnesses, such as mupanda to sweat out a fever, mutuva to cure coughs, munyazi to cure the wounds of poison arrows and musheteko to cure ulcers. He also learned about plants that were used as poison, such as the strophanthus kombe.

When David was a boy he learnt about medicinal plants that grew in Scotland and Northern Europe from a book called Culpeper's Complete Herbal. Many still use the healing properties of plants today. Some can be cultivated by humans and others grow in the wild:



Strophanthus kombe Oliv. © Kew http://specimens.kew.org/herbarium/K000233786

**DAISY** Treats flus and colds; helps create a sweat to get rid of a fever; heals wounds and mouth sores. **DANDELION** Increases appetite; improves digestion; lowers cholesterol.

**DOCK LEAF** Treats blisters, burns, nettle stings and boils.

LAVENDER Treats sleep disorders; gives better concentration; reduces anxiety; soothes headaches. MINT Cleanses the stomach; treats acne; whitens teeth; combats bad breath; cools the skin.

**PARSLEY** Prevents gas and bloating in the stomach; reduces allergic reactions.

#### TASK A

Go for a walk outside. Which plants can you find in your playground, garden, park or local woodland?

Write a few words or a sentence to describe what you find, take a photograph or draw a picture. You could also make a nature journal using recycled materials to document what you see (for inspiration you can watch this great video from the Natural History Museum, London) https://www.youtube.com/ watch?v=4EnmiuKqBXl&feature=emb\_title

You could even look at plants through a pocket microscope – how different do they look?

### TASK B

Follow this recipe to create your own natural exfoliator and moisturiser to treat dry hands.

#### What you need:

Lemon Granulated sugar Honey Avocado

#### Instructions:

Put one cup of granulated sugar in a bowl. Squeeze the lemon and pour the juice into the bowl of sugar. Mix the juice and sugar together to make a gritty paste. This is your natural exfoliator.

Now mash one ripe avocado in a separate bowl. Add two tablespoons of honey to the avocado and mix together. This is your natural moisturiser.

#### How to use:

Put your hands in the bowl of sugar and lemon exfoliator. Rub your hands together until the sugar starts to melt into a glaze. Rub this glaze all over your hands. Once your hands are fully covered leave the glaze on for 5 minutes. Rinse with warm water then pat your hands dry.

Now rub the avocado and honey mixture all over your hands and leave on for 10 minutes so that your skin can absorb the natural moisturiser. Rinse with warm water then pat your hands dry. Your hands should now feel soft and smooth!





Culpeper's Complete Herbal © David Livingstone Trust