NATURAL HISTORY MUSEUM

Slavery and the natural world

Plants and People
Chapter 8: Medicines

Context

This material is part of a wider project on slavery and the natural world, carried out at the Natural History Museum, 2006–08. The information is based on documents held in the Museum's libraries, and explores the links between nature (especially the knowledge, and transfer, of plants), people with an interest in natural history (mainly European writers from the sixteenth to eighteenth centuries) and the history and legacies of the transatlantic slave trade[1].

More can be found in the original documents, written by natural historians at the time of slavery. Contact the Natural History Museum Library www.nhm.ac.uk/research-curation/library/ +44 (0) 20 7942 5000. The additional references section has other useful sources such as relevant articles, books, journals and websites.

Please note that the information given is for historical interest only. The Natural History Museum cannot endorse any of the medicines, medical claims or advice given here. Do not take any medicines or treatments without first consulting a qualified practitioner.

1 For more background information see Chapter 1: The project.

Contents

1. Introduction

Plants played an important part in the health of African people. They were a staple part of their diet as well as supplementary foods to improve health, and herbal remedies were used to prevent and cure diseases. It is thought that African people may have taken some of their plants to the Americas when they were enslaved[2]. It is certain they used their knowledge of plants when they got there.

Enslaved Africans saw the indigenous peoples of the Americas using tropical plants as medicines and there is evidence that African and indigenous peoples shared knowledge. European naturalists were eager to document the tropical plants and their uses and many relied on knowledge from African and indigenous American sources[3].

There are examples of many Europeans relying on traditional herbal cures administered by enslaved or indigenous people[4] although some did not believe they worked. In general, enslaved and indigenous people rejected the main European treatments of the time, which were bleeding and purging[5].

At the time of the transatlantic slave trade Europeans were exploiting the natural resources of Africa and the Americas. Many plants were grown for large profits. There was also significant interest in finding and growing plants with medicinal properties. Many of the natural historians travelling abroad at the time were trained in medicine, especially in the use of plants as cures, and doctors also travelled on board slaving ships. There was often a European doctor working in the colonies to help keep enslaved Africans fit for work, although the reality was that much treatment was taken care of within the African communities themselves. Doctors also treated Europeans who were often affected by tropical diseases.

A wide range of plants, such as aloes, okra and even cotton, was used to treat all sorts of illnesses such as water retention, piles and venereal diseases as well as to heal wounds. Herbal remedies were used against diseases, such as malaria, which particularly affected Europeans[6]. Africans also used inoculation as a form of prevention for diseases such as yaws (an infectious tropical disease). As well as using plants as cures, they were sometimes used as poisons to commit suicide or cause abortions[7]. There were very high death rates among enslaved Africans and Europeans, despite all the treatments used.

2. Health problems (dysentery, tetanus, beriberi, malaria)

Africans, Europeans and indigenous peoples of the Americas all faced unfamiliar health problems at the time of the transatlantic slave trade. The movement of people and animals took diseases between countries. A poor diet would have contributed to enslaved Africans' health problems[8] as did overcrowding. Because of the dirty, cramped conditions (particularly

2 See also Chapter 9: Transfer and exploitation of knowledge.
3 See also Chapter 10: Attitudes and acknowledgement. African and indigenous peoples of the Americas were often less enthusiastic about adopting European practices, see Chapter 2: People and the slave trade.
4 See also Chapter 10: Attitudes and acknowledgement for examples of Europeans dismissing African and indigenous knowledge.
5 See Schiebinger, 2004, p80.
6 See Chapter 7: Fevers.
7 See Chapter 6: Resistance.
8 See Chapter 5: Diet and nutrition.

on board the slaving ships) dysentery was one of the biggest killers. One doctor, Thomas Winterbottom, recommended that Europeans should learn more from west African remedies for dysentery:

> 'But their most celebrated remedy, and one which deserves more particular attention from Europeans, is the bark of a large tree, called by the Foolas, bellenda; and by the Soosoos and Mandingoes, bembee; rondeletia Africana[9]. It is employed either in powder mixed with boiled rice, or is used in a strong infusion. This bark is an agreeable astringent, possessing somewhat of a sweetish taste. A quantity of this bark was sent to me at Free Town, from the Rio Nunez, where it had been used with very great success in an epidemic of dysentery which prevailed among the slaves in the factories of that river. I had not an opportunity of trying its effects in dysentery, as a case of that disease did not occur in the colony from the time I received the bark until I left the country; but in several instances of diarrhoea it shewed itself very effectual. After my arrival in London I gave some of it to my friend Dr. Willan, who made trial of it in agues, fevers, sore throat and dysentery, very much to his satisfaction.' (Winterbottom, vol 2, 1803, p45–6)

African children often suffered from tetanus (caused by bacteria entering cuts or wounds) and older people from beriberi or 'dropsy' (oedema – swelling and water retention often linked to heart failure and also one of the symptoms of beriberi)[10]:

> 'But the greatest mortality among the Negroes in the West Indies arises from two other complaints; the one affecting infants between the fifth and fourteenth days after their birth, and of which it is supposed that one-fourth of all the Negro children perish. It is a species of *tetanus*, or locked jaw; but both the cause of it in these poor children, and the remedy, remain yet to be discovered. The other complaint affects adults, or rather Negroes who are past their prime. They become dropsical, and complain of a constant uneasiness in the stomach;' (Edwards, vol 2, 1819, p166–7)

Malaria and other tropical fevers were a particular problem for Europeans, but enslaved Africans and indigenous peoples were initially less affected[11].

Dirt eating was reported among enslaved communities and this concerned plantation holders[12]. It may have been caused by depression, but the planter Bryan Edwards wrote that enslaved people suffering from beriberi often ate dirt, which suggests it was a way of supplementing vitamins or minerals in the diet:

9 *Rondeletia africana* is now known as *Crossopteryx febrifuga*.
10 See also Chapter 5: Diet and nutrition.
11 See Chapter 7: Fevers.
12 See for example Walvin, 2001, p125–7.

> 'They become dropsical, and complain of a constant uneasiness in the stomach; for which they find a temporary relief in eating some kind of earth. The French planters call this disease *mal-d'estomac*, or the stomach-evil. I have formerly heard of owners and managers who were so ignorant and savage as to attempt the cure by severe punishment; considering *dirt-eating*, not as a disease, but a crime. I hope the race [of savage owners] is extinct. The best and only remedy is kind usage and wholesome animal food; and perhaps a steel drink may be of some service. Of one poor fellow in this complaint, I myself made a perfect cure by persisting some time in this method.' (Edwards, vol 2, 1819, p166–7)

The psychological traumas of enslavement and dietary diseases were likely to cause mental health problems as well as physical illness. There is also evidence of suicide, which may be linked to this[13].

3. African traditions

Enslaved people had access to some European medicines and treatments (it was in their owners' interests to get them fit and back to work as quickly as possible). But they often opted to use their own traditional remedies in preference to European treatments, especially to treat diseases with which they were already familiar such as yaws[14].

3.1 Treatments for yaws (inoculation; Majoe bitters, *Picramnia antidesma*)

Yaws is an infectious tropical disease caused by a spirochaete bacterium, *Treponema pertenu*. It enters through cuts in the skin, causing a large ulcer at the point of infection, and multiple other ulcers on the body. It also affects the joints and bones. Yaws affected many enslaved Africans in Africa and in the Americas. It is most common in areas of poverty, poor sanitation and overcrowding. A closely related bacterium, *Treponema pallidum*, causes syphilis.

13 See Chapter 6: Resistance.
14 See for example Sheridan, 1985, p87. Today yaws can be treated easily with antibiotics.

William Smith, a church minister and an amateur natural historian, described his servant Oxford[15] suffering from yaws, which he suggests was transmitted from Oxford's parents:

'My man *Oxford*, had once on a sudden, got a Crebouga, (that is to say, a fleshy substance, not unlike to a Wart), growing out in the middle of his Right Foot, that was about the size of a common Nutmeg, and quite lamed him: He was cured in the following manner, *viz*., An old experienced Mulatto Woman, took a good sharp Pen-knife and cut it, till it bled; then she seared it with a red hot Iron, and applied to the Burn, half of a Lime or Bastard Lemon, which in two or three days time, brought out the whole Crebouga, just like the Core of an Apple: *Oxford* was not lame for it above sixteen days: But to let you better into the Case, I must acquaint you, that his Parents had the French Pox, under which circumstances his Blood was tainted, and showed its Corruption, by his breaking out with the Yaws or running Sores all over, when he was about six or seven years old in his own Country, *viz*., *Morumbo*: and the Crebouga is the last ill Symptom of that Distemper among Negroes. The Yaws we usually cure by a gentle Salivation.' (Smith, 1745, p232–3)

There are several written examples of Africans treating yaws, and some Europeans acknowledged that they were more effective than European methods:

'The green Herbs, the principal Remedy in use amongst the *Negroes*, are of such wonderful Efficacy, that tis much to be deplored that no *European* Physicians has yet applyed himself to the Discovery of their Nature and Virtue; for I don't only imagine, but firmly believe, that they would prove more successful in the Practice of Physick than the *European* Preparations, especially in this Country, because before they reach us they have lost all their Virtue, and are mostly corrupted: Besides which, our Constitution is in some Measure changed here by the Climate; and therefore this Country Remedies, in all probability, are better for our Bodies than the European.

Those who are come to this Country, may, if they please, endeavour to explore these Plants; for my part I shall here take my Leave of them, with only informing you, the better to evince the strange Efficacy of these Herbs, that I have several Times observed the *Negroes* cure such great and dangerous Wounds with them, that I have stood amazed thereat.' (Bosman, 1721, p216–17)

Inoculation (inserting micro-organisms into the skin to prevent disease) has a long history of use around the world, but was only introduced to Europe at the beginning of the eighteenth century[16]. There is evidence that Africans used inoculation against diseases such as yaws. Africans took their knowledge of inoculation with them to the Americas. Bryan Edwards wrote that children from the Gold Coast were inoculated against yaws:

15 See also Chapter 2: People and the slave trade.
16 See Schiebinger, 2004, p100–104.

'Clara, a most faithful well-disposed woman, who was brought from the Gold Coast to Jamaica the latter end of 1784, relates, that she was born in a village near Anamaboo;... She informed me also, in answer to some other inquiries, of a remarkable fact (i.e.), that the natives of the Gold Coast give their children the yaws, (a frightful disorder) by *inoculation*; and she described the manner of performing the operation to be making an incision in the thigh, and putting in some of the infectious matter. I asked her what benefit they expected from this practice? She answered, that by this means their infants had the disorder slightly, and recovered speedily, whereas by catching it at a later time in life, the disease, she said '*got into the bone*,' that was her expression.' (Edwards, vol 2, 1819, p80–1)

▲ Majoe bitters (*Picramnia antidesma*), Sloane Herbarium, collected 1687–89, ID 896 © The Natural History Museum, London

'Among the diseases which Negroes bring with them from Africa, the most loathsome are the *cacabay* and the yaws; and it is difficult to say which is the worst... Young Negro children often catch the yaws, and get through it without medicine or much inconvenience. At a later period it is seldom or never thoroughly eradicated; and as, like the small-pox, it is never had but once, the Gold Coast Negroes are said to communicate the infection to their infants by inoculation. I very much doubt if medicine of any kind is of use in this disease.' (Edwards, vol 2, 1819, p166–7)

Very often Europeans omitted to name or credit the people who gave them medical knowledge[17]; Clara, named above, is one of few examples. Another, is recorded by Henry Barham who described how an enslaved woman, Majoe, had a plant Majoe bitters (*Picramnia antidesma*, also known as Macary bitters[18]) that helped treat yaws named after her:

'This admirable plant hath its name from Majoe, an old negro woman so called, who, with a simple decoction, did wonderful cures in the most stubborn diseases, as the yaws, and in venereal cases, when the person has been given over as incurable by skilful physicians, because their Herculean medicines failed them; viz. preparations of mercury and antimony.' (Barham, 1794, p96)

3.2 African healers (self-heal, *Ruellia paniculata*)

Africans were known for using plants as herbal remedies in Africa and in the Americas. William Bosman was Chief Agent for the Dutch at Cape Coast Castle on the Gold Coast, west Africa. He admired the skills he saw in Ghana in 1695:

17 See also Chapter 10: Attitudes and acknowledgement.

18 *Picramnia antidesma* is from the same tropical Simaroubaceae family of plants that Quassia belongs to, and it was also used to treat malaria; see, for example, Hernández-Medel and Pereda-Miranda, 2002.

'The chief Medicaments here in Use, are first and more especially Limon or Lime-Juice, Malaget, otherwise called the Grains of Paradise, or the Cardamom, the Roots, Branches, and Gumms of Trees, about thirty several Sorts of green Herbs, which are impregnated with an extraordinary Sanative Virtue. The Remedies used here frequently seem pernicious in the Case wherein they are given, and yet are found very successful, as an Instance of which please to take one of the most common Mendicaments. In the case of a violent Cholick, they give to drink Morning and Evening for several Days successively, a good Calabash of Lime Juice and Malaget mixt, and in other Diseases full as contradictory Ingredients... Wherefore I shall rather leave it to you and others, better Judges than my self; and only add, that how contradictory and improper soever these Med'cines may seem, yet I have seen several of our Country Men cured by them, when our own Physicians were at a Loss what to do.' (Bosman, 1721, p216–17)

▲ *Quassia amara*, a decorative ceiling panel from the roof of the Natural History Museum's Central Hall, Picture Library reference 48863 © The Natural History Museum, London

Henry Barham, while in Jamaica, described the plant self-heal (*Ruellia paniculata*[19], also called allheal, Christmas Pride or Pickering's herb) named after Captain Pickering, who was the European it healed[20].

Kwasi, an enslaved African, was credited with finding a medicinal plant, *Quassia amara*, which was named after him[21].

However, researchers today indicated his knowledge either came from the indigenous people in Suriname[22] or the Maroon community.

'... an unknown Negro slave named Qvassi discovered a medicine that he began using for his fellow slaves' severe fevers, and that with such success, that even the masters sought his help.' (Linnaeus, 1763, p5)

The plant, *Quassia amara* or Quaciae bitter, became a valuable export from Suriname:

'... and, notwithstanding this medicine is now less in repute in England than formerly, it is highly esteemed in many other parts of the world for its efficacy in strengthening the stomach and restoring the appetite. It has, besides this valuable property, that of being a powerful *febrifuge*[23], and may be successfully used when the bark is nauseated, as is frequently the case.' (Stedman, vol 2, 1806, p359)

19 *Ruellia paniculata* is from the Acanthaceae family. Self-heal is a common name applied to a number of unrelated species. In Europe and throughout the northern hemisphere *Prunella vulgaris* is called self-heal. It is a member of the mint family (Lamiaceae).
20 See Chapter 10: Attitudes and acknowledgement.
21 See Chapter 2: People and the slave trade. Kwasi was highly unusual in having the plant named after him by the Swedish scientist Carl Linnaeus.
22 See Schiebinger, 2004, p213.
23 Anti-fever medicine.

▲ Flos Pavonis (*Caesalpinia pulcherrima*), Merian, 1705 © The Natural History Museum, London

Many medicinal plants could be both cures and poisons depending on the quantities administered. The peacock flower (*Caesalpinia pulcherrima*) was used to abort unborn children[24]. Research now suggests that extracts from the flower, stem, leaf, fruit, root, and seed of *Caesalpinia pulcherrima* are also effective against wheezing, bronchitis, malarial infection, tuberculosis, other bacteria, fungi, and some parasites...' (Counter, 2006) [25].

3.3 Kola (*Cola nitida*)

Kola originated in Africa and was taken from there to the Americas as a direct result of the transatlantic slave trade[26]. Kola had social and medicinal uses. It was chewed as a stimulant, made into a drink and used against colic and other stomach complaints[27]. Chewing *Cola nitida* caused yellowing of the teeth[28]. The west African Akan name for kola was bichy and a variation of this name – bissy – is still used in Jamaica today.

'Not only the *Negroes*, but also some of the *Europeans*, are infatuated to this Fruit: We call it Kool or Cabbage, and the *Negroes Boesi*: It is chawed in the Mouth, and after the Juice is sucked out, the Remainder is spit out. Its Taste is very harsh, and almost bitter, and draws the Chewer's Mouth almost close: And its sole Virtue is Diuretick.' (Bosman, 1721, p287)

▲ Kola (*Cola nitida*), Sloane, 1725, Tab 184 © The Natural History Museum, London

The natural historian Hans Sloane brought a sample of kola from Jamaica in 1688, which came from a seven-year-old tree grown from a seed brought from west Africa.

'Altho' this tree was but seven Years old, rais'd from Seed, which was brought from *Guinea*, yet it was twenty Foot high... The Seed brought in a *Guinea* ship from that Country was here planted by Mr. *Goffe*, in Colonel *Bourden's* plantation beyond *Guanaboa*. It is called *Bichy* by the *Coromantin* Negro's, and is both eaten and used for Physick in Pains of the Belly.' (Sloane, vol 2, 1725, p60–61)

24 See also Chapter 2: People and the slave trade and Chapter 6: Resistance for information on Maria Merian and accounts of abortion among indigenous and enslaved women in Suriname.
25 See also, for example, Chiang et al, 2003, jac.oxfordjournals.org/cgi/reprint/52/2/194 and Promsawan et al, 2003, www.thieme-connect.de/ejournals/abstract/plantamedica/doi/10.1055/s-2003-42782.
26 See Chapter 5: Diet and nutrition and www.nhm.ac.uk/jdsml/nature-online/seeds-of-trade/. Kola, along with cacao (*Theobroma*), belongs to the Sterculiaceae family.
27 See Iwu, 1993.
28 See, for example, Ashri and Gazi, 1990.

▲ Kola (*Cola nitida*), Sloane Herbarium, collected 1687–89, ID 781 © The Natural History Museum, London

Kola nuts contain caffeine, a stimulant, and a diuretic, which helps the body get rid of excess water[29]. It was good for treating water retention (oedema or 'dropsy'), which was common in enslaved communities and one of the symptoms of beriberi[30].

'There is another Tree, upon which grows a Fruit, by the *Portugals* call'd *Kola*; by the *Blacks*, *Toglouw*; five or six inclosed in a Shell, having a bitter taste, but a rare Medicine against the Dropsie; and used also in Inchantments and Witchcrafts. The *Portugals* drive a great Trade with it, as having an high esteem thereof.' (Ogilby, 1670, p384)

Kola was mixed with salt and Guinea pepper or maniguette (*Aframomum melegueta*) in Ghana, and salt and 'capsico' (chilli pepper) in Jamaica:

'It is commonly eaten with Salt and *Malagueta*.' (Bosman, 1721, p287)

'A Nigritis in Jamaica vocatur Bichy vel Colu, et ibi femina per se vel cum Sale et Capsico commista ad dolores ventriculi pro remedio habentur.'[31] (Broughton, 1792, p32)

Africans used kola long before Europeans appreciated its useful properties and scientifically named it in 1832. Europeans only started using it significantly in the late nineteenth century, when kola syrups were sold as tonics. It is thought that kola may have been a key ingredient of the original Coca-Cola[32].

4. Other medicinal plants

A range of other plants was used for medicine. Cocoa was an important food supplement as well as medicine[33]. Plants often had multiple uses. A sedge (*Cyperus articulatus*) was used in Jamaica as a perfume[34] as well as medicinally for stomach upsets, vomiting, nausea and diarrhoea. Many herbal remedies, particularly those using green-leaf plants or fruits, may have provided much-needed vitamins. Some of the other important medicinal plants used by enslaved Africans and described by natural historians are covered in the rest of this section.

29 A diuretic increases the amount of water excreted in the urine.
30 See Chapter 5: Diet and nutrition.
31 This translates as: 'It is called Bichy or Colu by the blacks in Jamaica, and there by women it is taken by itself or mixed with salt and capsicum [chilli pepper] as a remedy for stomach aches'.
32 See: www.nhm.ac.uk/jdsml/nature-online/seeds-of-trade/.
33 See Chapter 3: Commercial plants.
34 See Chapter 4: Everyday life.

4.1 Worm-grass (*Spigelia anthelmia*)

Worm-grass was also called pink root/weed and Indian pink. The natural historian Patrick Browne described how it was grown in Jamaica and its traditional use for curing humans infected with worms:

> 'This plant grows naturally in most parts of *South America*, and is now cultivated in many of the gardens of *Jamaica*... This vegetable has been long in use among the Negroes and Indians, who were the first acquainted with its virtues; and takes its present denomination from its peculiar efficacy in destroying of worms; which, I dare affirm, from a great number of successful experiments, it does in so extraordinary a manner, that no other simple can be of equal efficacy in any other disease as this is in those that proceed from these insects, especially when attended with a fever or convulsions.' (Browne, 1756, p156)

Patrick Browne also wrote how it was prepared by boiling the entire plant and roots in water and then mixing it with a little sugar and lemon juice into syrup.

▲ Fit weed (*Eryngium foetidum*) Sloane Herbarium, collected 1687–89, ID 62 © The Natural History Museum, London

4.2 Fit weed (*Eryngium foetidum*)

Fit weed was used against convulsions and fits. It was also believed to have magical or spiritual properties and was used against duppies35 or ghosts. Again, Patrick Browne described its use among enslaved people and poorer Europeans in Jamaica:

'This plant is frequent in Jamaica, as well as in most of the other sugar colonies... All the parts of this plant are reckoned very powerful antihisterics, and much used by negroes and poorer whites, on all occasions of that nature; it is chiefly administered in decoctions or infusions.' (Browne, 1756, p185)

4.3 Velvet leaf (*Cissampelos pareira*)

Velvet leaf was also a diuretic and used to treat problems with the urinary tract. In this report, Browne described how enslaved communities used it more than Europeans:

> 'This plant is looked upon as an excellent diuretic, and in frequent use among the negroes in all obstructions of the urinary passages; but it has not been yet much known among the whites... The root, which is the part chiefly used, has a pleasant bitterish taste, and answers well in decoctions.' (Browne, 1756, p357)

35 *Duppy* is a Caribbean word of west African origin meaning ghost or spirit and was important in Caribbean folklore.

4.4 Allspice Tree (*Pimenta dioica*)

▲ Allspice tree (*Pimenta dioica*), Sloane Herbarium, collected 1687–89, ID 814 © The Natural History Museum, London

Hans Sloane wrote about the use of allspice leaves, commonly called pimento, to treat swollen legs:

> 'The Leaves are very much made Use of in Baths for Hydropick Legs, &c. by the Indians, Negroes and Surgeons, and may be substituted wherever Bay Leaves are thought useful, they resembling them in every thing.' (Sloane, vol 2, 1725, p76)

4.5 Okra (*Abelmoschus esculentus*)

As well as being an important food[36], okra was also used as a medicine, as a cream and to help excretion:

▲ Okra (*Abelmoschus esculentus*), Sloane Herbarium, collected 1687–89, ID 442 © The Natural History Museum, London

▲ Okra (*Abelmoschus esculentus*), de Tussac, 1808 © The Natural History Museum, London

> 'As a medicine ochra may be employed in all cases where emollients and lubricants are indicated. In Dr. Dancer's medical Assistant a decoction of the leaves and pods is recommended in the place of linseed tea.' (Lunan, vol 2, 1814, p12)

> 'An infusion of the fruit, and also the leaves, is much recommended in affections of the urinary organs.' (Macfadyen, vol 1, 1837, p66–7)

4.6 Soursop (*Annona muricata*)

Soursop was a common fruit in the Caribbean at the time of the transatlantic slave trade.

> 'This shrubby tree grows wild in all the low lands of Jamaica, and is one of the most common plants in every *Savanna*... and bears a very large succulent fruit, which is generally agreeable to new comers, and most other over-heated habits.' (Browne, 1756, p255–6)

It contains niacin, a much-needed vitamin[37]. Soursop was traditionally used in medicine in the tropical Americas. Medical researchers now believe it can attack cancer cells[38].

36 See Chapter 5: Diet and nutrition.
37 See Chapter 5: Diet and nutrition.
38 For example, Pinto et al, 2005, www.icuc-iwmi.org/files/R7187_-_Annona%20monograph%202005.pdf; see also: www.nhm.ac.uk/nature-online/life/plants-fungi/roots-herbs/index.jsp.

▲ Soursop (*Annona muricata*), de Tussac, 1808 © The Natural History Museum, London

▲ Aloe, a decorative ceiling panel from the roof of the Natural History Museum's Central Hall, Picture Library reference 48857 © The Natural History Museum, London

Traditional Caribbean medicine used parts of the plant for fevers, dysentery, colds and nervous conditions (which were also linked to poor diets). Scientists are now looking to see if soursop contributes to the neurological condition, Progressive Supranuclear Palsy, which is similar to Parkinson's disease[39].

4.7 Aloe (*Aloe vera)*

Aloe plants originated in Africa, but aloes became an important product exported from the Caribbean[40]. They were used as a laxative and for skin problems[41]. Griffith Hughes and Patrick Browne described their use in Barbados and Jamaica:

'Aloe is much made use of in Purges, and justly esteemed of great Service in many Cases. However, Dr *James*, in his Medicinal Dictionary, says, it ought not to be given to Women with Child, nor to Persons subject to the Piles; for it rarefies the Blood too much, and causes Hemorrhoids.' (Hughes, 1750, p153–5)

'The *Aloes* is naturally purgative, and an active warm stomachic; it is an excellent medicine in all weaknesses and obstructions of the viscera proceeding from colds, inaction, an over-load of the vessels, or languor of the fibres; it brings on the menses and haemorroids, promotes digestion, raises the appetite, and strengthens the stomach. It is frequently prescribed for the worms, and deservedly esteemed one of the most effectual medicines in nervous cases proceeding from inaction, or a viscidity of the juices: it is often given with great success in many disorders of the head arising from indigestion, or a foulness of the viscera; but is generally ordered mixed up with other medicines that are more ready in their operations, and of a warm or purgative nature. It is an ingredient in many compositions of the shops, but is always observed to be most effectual when mixed with the more gummy juices of the plant.' (Browne, 1756, p192–3)

39 See: www.psp.org/page/faq.
40 Aloes are still important exports from Barbados and Jamaica and are used there to treat sunburn.
41 See: www.nhm.ac.uk/jdsml/nature-online/seeds-of-trade/index.dsml.

4.8 Physic nut (*Jatropha curcas*)

Griffith Hughes's account of aloes causing haemorrhoids (piles) was supported by Oliver Hering in Jamaica. He described how he was cured with the physic nut (*Jatropha curcas*[42]) thanks to a woman originally from Ghana. The physic nut originated in the Caribbean and central/northern America (although it spread to Africa and Asia). This raises the question how the Ghanaian woman knew of its medicinal qualities.

> 'I was attacked by the piles, I believe in consequence of taking aloes with calomel, and suffered for several weeks incredible torments. The sphincter and rectum were violently swelled and indurated, the latter apparent for some inches upwards, and there was a considerable discharge of pus. My medical friends apprehended that I had a fistula, and were considering of the usual operation, but gave me some time to decide on submitting to it. In this interval I used an ointment made of the milk of the physic-nut shrub, mixed with half its quantity of melted hogs-lard, and applied inwardly as far as it could be pressed. In five days all the swelling and induration were reduced, and in a week I was perfectly free from pain. This remedy was told by an old Coromantee woman to her mistress, who is my neighbour, and by her communicated to me. It is very astringent, and gives an ugly stain to linen. I have since heard that this juice, which is acquired by cutting or breaking the branch of the shrub, is commonly used by negroes in dispelling tumours. In mercy to sufferers in the same way this ought to be published.' (Hering, quoted in Lunan, vol 2, 1814, p62–3)

Physic nuts have many medicinal properties. They are used as a laxative and research is investigating the plant's properties to treat tumours and its effects on HIV[43].

4.9 Commercial plants (tobacco, sugar, cotton and hardwoods)

Although tobacco, sugar, cotton and hardwoods were grown mainly as important cash crops[44], they also had some medicinal uses.

Patrick Browne described the many medicinal uses of tobacco among Europeans. Tobacco had traditionally been used medicinally as well as ceremonially by the Arawaks[45].

42 *Jatropha curcas* is now widely grown for bio-diesel, especially in India, Pakistan and Africa. The compound *jatrophine*, collected from its sap, is believed to possess anti-tumour properties. See for example: www.timesonline.co.uk/tol/news/world/article2155351.ece and www.fao.org/docrep/x5402e/x5402e11.htm.

43 See www.nhm.ac.uk/nature-online/life/plants-fungi/roots-herbs/index.jsp; www.inchem.org/documents/pims/plant/jhast.htm and Matsuse et al, 1998.

44 See Chapter 3: Commercial plants.

45 See Chapter 2: People and the slave trade.

▲ Tobacco (*Nicotiana tabacum*), a decorative ceiling panel from the roof of the Natural History Museum's Central Hall, Picture Library reference 37159 © The Natural History Museum, London

'This plant was probably first introduced here by the *Spaniards*. But it is still cultivated by the negroes and poorer sort of white people in many parts of the Island: it has some narcotic qualities, but it is chiefly used among us as a sternutatory [an aid to sneezing]. The lighter decoction of the leaves, &c. are both purgative and emetic, as well as the juice; but when it continues for a considerable time upon the fire, the more acrid particles evaporate, and it becomes a strong resolutive and sudorific, and has been frequently observed to answer beyond expectation in old catarrhs, and asthmas... The leaves pounded are frequently applied to foul or neglected sores in *America*, and observed to answer better than any ointments in most of those that lie in the depending parts. Both the infusion and juice of the plant is used indiscriminately to wash and cleanse the sores of cattle, for it has long been observed to preserve them free from maggots, and to destroy most sorts of vermin.' (Browne, 1756, p167)

Today we know sugar, and indeed tobacco, damage teeth, but at the time of the transatlantic slave trade it was argued that sugar was beneficial:

'It has been alleged that the eating of sugar spoils the colour of, and corrupts, the teeth: this, however, proves to be a mistake, for no people on earth have finer teeth than the Negroes in Jamaica.' (Wright, 1828, p234)

William Wright, a plantation holder and supporter of slavery, went on to describe how sugar was used on ulcers:

'In medicine I need say little of the use of sugar. Externally it is often useful: mixed with the pulp of roasted oranges, and applied to putrid or ill-disposed ulcers, it proves a powerful corrector.' (Wright, 1828, p234)

Chocolate, mixed with other ingredients, was also spread over ulcers on the skin[46].

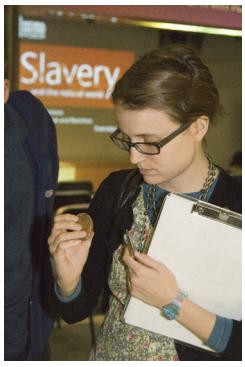
Cotton, which was grown as a cash crop particularly in America, was used medicinally, too:

'The seeds and tops of the twigs, either by themselves, or given with other things, are good against the bloody flux. A mucilage of them is us'd by the Indians against fevers, diseases of the breast and poisens corroding the stomach and guts...The seeds are venereal, and stop coughs, the ashes of the cotton-wool stop haemorages, and the Oyl of the seed takes away freckles.' (Sloane, vol 1, 1707, p68)

46 See Chapter 3: Commercial plants.

As well as harvesting ironwood or lignum vitae (*Guaiacum sanctum*) for its wood[47], the gum (*gum guaiac*) was also valuable. Indigenous peoples of the Americas used it to treat a wide range of medical problems. From the early sixteenth century Europeans tried to use it to treat syphilis and gout.

5. Alternative interpretations



This chapter presents research information and context. The evidence itself can be seen in different ways and raises many questions and some further areas for research. Through the Natural History Museum's slavery and the natural world public programme many alternative interpretations and questions relevant to this chapter have been collected and some of these are summarised below:

- To what extent were medicines/poisons used in sorcery/magic among the enslaved people?
- In the slave trade was it the British that brought disease to Africa or was it the Africans that brought diseases to Britain?
- Is any research being done to find individuals, scientists or doctors from the Caribbean, South America or Africa to enhance knowledge of plants whose original uses are not fully known? They had a medical system, some was good, some not. Just like today.
- How did enslaved men and women treat the psychological effects of their enslavement? What plants were particularly used?

Homeopathic remedies

Many people attending the events were very knowledgeable about herbal remedies in the past and some of those still used today, but the range of plants and their uses impressed them. It was very important, particularly to people of African descent to have a way of, 'knowing the qualities of them, how they can be used today, how they can be used for remedies and how we can reclaim some of the knowledge that we have lost, about herbal cures, herbal remedies'.

It was also noted that 'It is worth registering that enslaved Africans (as the Europeans) may well have learnt about the nutritional, medicinal and industrial uses of New World material resources from the Native Americans'[48].

47 See Chapter 3: Commercial plants.
48 This is covered in Chapter 2: People and the slave trade and Chapter 9: Transfer and exploitation of knowledge.

Questions included:

- Are these plants used in biomedicine today? It would be interesting to know if any of the plants are still used today for curing illness in their natural form.
- What are the similarities between herbal medicine used by enslaved people and alternative therapies available today?
- What modern medicines are based on the things we see around the room?
- What about pain relief?

A participant raised the important point that the use of herbal remedies,

'comes from a complete medical tradition, it comes from a system of knowledge... and I think there was a lot of knowledge transfer'. Another added: 'I am amazed at the collective knowledge regarding medicine, and I am leaving this event in awe of plants and human ingenuity.'

People drew on their own experiences in Africa and/or in the Caribbean – 'you can use banana leaves over sores' – as well as knowledge remembered from their ancestors.

'I could remember banana leaves were used to take swelling down and my grandparents used to use that and there is another tree called the leaf of life that we have in Jamaica – I do not know what else it is called. They tend to eat those as well and I can't remember what that was used for.' Someone else added that it was the 'Leaf of life – not sure of its other names'.

Tobacco leaves and antidote cocoon (*Fevillea cordifolia*) were also used as types of plaster. 'Warm a tobacco leaf on warm stove, roll in palm to get the nicotine out. Could be used on sores for healing.' '*Fevillea* fruit was grated, mixed with kerosene and green banana to make a paste and used as a cure for cuts and grazes.'

People also linked different uses of plants. Ackee was discussed as a food, but one person said that, 'the juice from the ackee with blue [a substance used to whiten shirts] – I do not know if you know it but it would get rid of the ringworm'. Ackee tree leaves and other leaves were also used over the eyes, particularly among older people, in Jamaica. As it was said, 'let medicine be your food and let food be your medicine'.

Okra

Okra, which featured as a food in the events, generated a great deal of discussion. People had a number of examples of how it was used for fertility, pregnancy, constipation and medicinal uses.

'... amongst the female pregnant communities [in St Lucia] – they would eat a lot of okra a few months before the labour to make the labour easier'.

'What I have heard is a slightly different story; it was more for the men for mobility of the sperm – okra again for sperm mobility prior to conception.'

'In India – we use okra because it is a mucilage which takes the whole digestive system and you know your alimentary canal so you do not get constipated because constipation means dryness. So when you use okra it is introducing the mucus back then your stools just slide through very quickly.'

People also said okra was good for joints, and that:

'Okra is also used for curing jaundice and in Asia we call it ladies fingers.'

Kola

Some people had considerable knowledge and experience of using kola. One person said:

'Kola can be bitter or sweet. It's down to luck when you buy!' There was a discussion about its use in drinks. It is grated to make tea, although when it is dried and preserved, it is hard to grate. It is also made into a powder and drunk 'with water as a breakfast drink called Gari. When cooked in hot water it is called Eba'.

Kola was described as having cleansing properties, and 'also to take away poisons', as well as being an appetite suppressant.

The value of kola was discussed:

- 'Kola is used when you visit people's houses. Also used for worship in Africa.'
- 'I've been told to take Kola as a gift. Still valued for energy but I don't know how you chew them.'

Quinine

There were some questions about the medicinal uses of quinine and whether tonic water prevents cramp. A Natural History Museum researcher said:

'In biomedicine, conventional medicine, they prescribe quinine sulphate for cramps so it does work.'

She also said that,

'you can just have bananas for instance which is very rich in potassium so if you just suffer from just cramps ordinarily just replace it with bananas every day but then if the cramps are harsh then when you go to your GP that is what they prescribe – quinine sulphate'.

The participants shared advice 'about taking quinine or taking tonic water with quinine for night cramp'.

People also raised the point that too much quinine can be bad for your ears. And also that quinine was used to induce abortions in the Caribbean. The plant Quassia, which contains quinine, is boiled and the water used as an insecticide.

Worm-grass

One participant remembered using worm-grass in St Lucia when he was a young boy. It was drunk mixed with cod liver oil. Another person thought: 'It is something like spinach I think – not the English spinach, West Indian spinach.'

The Natural History Museum researcher added that worm-grass was used to get rid of worms, but in homeopathy it is now used for the cardiovascular system and digestive disorders. 'So if people have... pains in the chest, and you know there are so many other symptoms... also connected with the digestive system, then that is one of the plants that are used.'

People also commented:

- Use products relevant to today – Ackee, Ceraisse tea.
- Ceraisse is used to cleanse blood. Used as bush tea (Jamaica).
- The African American members of the Gullah Nation have remedy information.

- Bissy – Grate Jar – white rum. Leave it to mature and top it up as it evaporates. The longer you leave it the more mature it becomes and it is excellent for curing food poisoning – just a sip cleans out the body.
- European version of antidote to poison was Bezoar stone – ground up in wine.
- NIM [neem] – used in Ghana for treatment. Pineapple skins were also used as treatment.
- Neem is used as an insect repellent.
- Neem good for dandruff as well as keeping mosquitoes at bay.
- Side effects of malaria medicine – weird dreams. Use homeopathic now. Lack natural checks and balances of the plant.
- Centipede soaked in rum – drink it as an antidote against snake poison.
- Noni (*Morinda citrifolia*), which is related to soursop, (but indigenous to Asia) is used as a tonic against headaches.
- Pine needles were used to cure colds.
- *Moringa oleifera* is a prophylactic for malaria in west Africa and the oil is used for watches. It is being used and developed by pharmaceutical companies.
- Physic nut purges after birth.
- Dog blood is used for period pain, belly pain.

6. Additional references

There is a full list of references, including all of the research documents, in Chapter 1: The project. These references offer additional reading specifically relating to this chapter.

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