

One hundred and forty million years ago, Australia's separation from Gondwana led to the development of a unique flora and fauna species (Gondwana supercontinent n.d.). The arrival of the Aboriginal people to Australia meant they had to adapt to the isolation and use these plants and animals as food, medicine, clothing, shelter, tools, ceremonial objects, and adornment (Clarke 2008, 3-4). The isolated and dispersed population meant they had few infectious or fatal diseases, but also prevented them from acquiring knowledge of any scientific and medical breakthroughs that had been discovered in the rest of the world. Despite this isolation, over thousands of years through trial and error, they have developed an extensive knowledge of seasonally and geographically diverse plant and animal treatments for health complaints.

Aboriginal bush medicine falls into three categories; natural, physical and supernatural. Natural causes for illness include: coughs, colds, diarrhoea, childbirth, lactation, aches, pains and minor complaints. Physical causes of illness include: broken bones, snake bites, stings, wounds, and cuts. Supernatural illnesses were thought to be from sorcery, winds, spirits, breaking of religious or social rules, which may be causing physical or spiritual distress. In Aboriginal medicine, if the spirit is well, the body will be well. (Australia 1988, 28)

The Medicine man or clever man was often responsible for diagnosing the type of ailment and prescribing the treatment and was also the medium between the physical and spiritual world (Reed 1969, 107). The Medicine man was called ngangkari or garratji. To force out evil spirits, he would carry out healing rituals such as smoking ceremonies, massage, blowing, sucking, singing, dancing, and clapping (Clarke 2008, 5-6). Women could be a Medicine man however; the majority were men. This knowledge was passed on through direct observance, songs and stories, usually through family lines, passing down through the

generations from parents to children. Women are often referred to as household healers with their traditional plant based medical knowledge.

The nomadic hunter-gatherer lifestyle of the Aboriginal people was very healthy and involved eating a protein and plant based diet. Their lives included walking long distances and a strong community spirit all whilst living harmoniously with the land. They learnt sacrifice and discipline through the clan system. This kept balance with nature and prevented any plants or animals from becoming endangered. (Needham 1981, 4) Roaming over large areas of land meant that their knowledge of medicinal plants was constantly evolving as they ventured into new and changing landscapes. This knowledge included knowing which plants were available throughout the seasons. Experimentation over thousands of years has uncovered a vast array of uses for the flora and fauna, many of which are poisonous if not prepared correctly (James n.d.). Some uses are simple and require little preparation such as using the leaves, seeds, roots, bark and fruit of the plants. These may be ground, infused, macerated, heated or boiled prior to use. Treatments are directed at complaints rather than diseases, as these were not known until European occupation of the land. Much of the knowledge of traditional bush medicine was not recorded in a written form and large amounts of this knowledge has been lost in many parts of Australia, particularly the Eastern states (Packer, et al. 2011, 245). In central and Northern Australia, where bush medicine is still practiced, many studies and books have been written to document and preserve the knowledge gained over thousands of years. There have been one hundred and twenty-four plants identified as being used as bush medicine. These are often made up of species of eucalypts, melaleuca, eremophila, pittosporum, acacia, boronia and mints. (Blainey 2015, 162) Of all the plants in Australia,

the eucalyptus is the most abundant with over 500 species. It is grown in every state and is one of the most useful as every element of the tree can be used. The flowers are used to sweeten water, while the leaves can be heated and used as a poultice. Oil can be extracted from the leaves, through crushing and grinding, to be mixed with animal fat and used as a balm. To treat backache, rheumatism and sore muscles, a bed was dug into the ground with a layer of hot stones and eucalyptus leaves placed on the bottom. The injured person would lay in the hole and be covered with cloaks and steamed. The leaves also play an important part in smoking ceremonies for the spiritual side of treatment. The bark and soft sapwood can be pounded and soaked with hot or cold liquid then used as a mouthwash or a wash for eyes and skin. The gum, if sticky, could be applied directly to sores otherwise was soaked in a small amount of water, then applied to form a plastic skin over the wound (Australia 1988, 116-127). If mixed with a larger quantity of water it is used as a mouthwash, lotion or wash. The dry gum could be crushed and packed directly into open wounds to dry them out. (Zola and Gott 1992). The branches may be used to splint limbs and for crutches when legs are broken.

Many of the plants used in bush medicine have been studied to reveal the active ingredients, many of which closely relate to modern agents in drugs. These include terpenoids, alkaloids, saponins, mucilage, tannins, oils and latex. Terpenoids provide the scent in eucalyptus while tannins are found in the bark and gum. Commercial recognition of traditional bush medicine has built an industry with a global market for natural health products. (Tropical Rainforests world heritage fact sheet - bush medicine n.d.)

Pharmaceutical companies are now recognising the anaesthetic, astringent, anti-inflammatory, aromatic, antiseptic and antimicrobial properties of traditional bush

medicines plants. Commercial products that have been developed and marketed include eucalyptus oil, tea tree oil, goanna oil and manuka honey.

Bush medicine plants are being incorporated in gardens at hospitals, to allow people to access traditional treatments, combined with contemporary Western medicine and health management. A more holistic approach to health care is being employed in some health facilities through collaboration between health workers and traditional healers. This allows the person to be stronger, more resilient, better able to cope with their illness and have a faster healing time.

Australian Aboriginal bush medicine was developed over thousands of years using the unique plants and animals available, to alleviate and cure the illnesses and ailments which were suffered. This knowledge was passed down through generations and is now being studied and analysed to produce new drugs to be used for current medicinal needs.

References

n.d. *Aboriginal Bush medicine*. Accessed August 30, 2017.

<https://au.pinterest.com/pin/118852877640278414>.

n.d. *Aboriginal Medicine Men*. Accessed September 13, 2017.

http://www.gp.org.au/Aboriginal_medicine_men.html.

Australia, Aboriginal Communities of the Northern Territory of. 1988. *Traditional Bush Medicines An Aboriginal Pharmacopoeia*. Greenhouse Publications Pty Ltd.

Blainey, Geoffrey. 2015. *The Story of Australia's People*. Hawthorn: Penguin Books Australia.

Clarke, Phillip. 2008. *Aboriginal healing practices and Australian bush medicine*. Accessed September 5, 2017. <http://www.friendsofglenthorne.org.au/wp-content/uploads/Clarke-Vol-33-2008.pdf>.

Edmanson, Jane. n.d. *Gardening Australia*. Accessed August 30, 2017.

<http://www.abc.net.au/gardening/stories/s3343541.htm>.

n.d. *Gondwana supercontinent*. Accessed September 5, 2017.

<https://www.britannica.com/place/Gondwana-supercontinent>.

Halling, Helen. 1999. *From Ochres to Eel Traps*. Canberra: ACT Department of Education.

n.d. *Healing secrets of Aboriginal Bush Medicine*. Accessed August 20, 2017.

<http://www.bri.net.au/medicine.html>.

Isaacs, Jennifer. 1989. *Bush Food*. Frenchs Forest: New Holland Publishers.

James, Mel. n.d. *Sacred Earth Dreaming*. Accessed August 30, 2017.

<http://www.sacredearthdreaming.com.au/>.

Jones, Graham. 2014. *Indigenous medicine - a fusion of ritual and remedy*. 5 December. Accessed August 21, 2017. <https://theconversation.com/indigenous-medicine-a-fusion-of-ritual-and-remedy-33142>.

Korff, Jens. 2016. *Traditional Aboriginal healing*. 11 March. Accessed September 13, 2017. <https://www.creativespirits.info/aboriginalculture/health/traditional-aboriginal-health-care>.

Laffan, Jennifer, and Cameron Archer. 2004. *Aboriginal landuse at Tocal - the Wonnarua story*. Paterson: CB Alexander Agricultural College, Tocal.

Needham, William J. 1981. *Burrigurra The spirit walked*. Adamstown: Dobson and McEwan Pty Ltd.

Packer, Joanne, Nynke Brouwer, David Harrington, Jitendra Gaikwad, Ronald Heron, Yaegl Community Elders, Shoba Ranganathan, Subramanyam Vemulpad, and Joanne Jamie. 2011. "An ethnobotanical study of medicinal plants used by the Yaegl Aboriginal community in Northern New South Wales, Australia." *Journal of Ethnopharmacology* 244-255.

Reed, A.W. 1969. *An Illustrated Encyclopedia of Aboriginal Life*. Sydney: Halstead Press.

n.d. *Traditional Aboriginal Healing*. Accessed August 30, 2017. <http://beyond2012.net.au/>.

n.d. *Tropical Rainforests world heritage fact sheet - bush medicine*. Accessed September 13, 2017. <http://www.wettropics.gov.au/site/user-assets/docs/bushmedicine.pdf>.

Zola, Nelly, and Beth Gott. 1992. *Koorie Plants Koorie People*. Melbourne: Koorie Heritage Trust.