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Medicine

Anglo-Saxon Medicine and the Nine Herbs Charm in the twenty-first century

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ABSTRACT The Nine Herbs Charm is a collection of nine herbs used by the Anglo-Saxon physicians to treat diseases over a millennium ago. 1 They are Betony, Chervil, Crab-apple, Fennel, Mayweed, Mugwort, Nettle, Plantain and Watercress. Today the Nine Herbs Charm of medicine would pass under the radar for nearly all modern practitioners of evidence based medicine. However modern research shows some of these remedies have beneficial effects. The traditional use and the latest evidence in a search, utilising Google Scholar and Cinahl, of the benefits particularly as antibiotics and anti-cancer medications of the nine Anglo-Saxon herbs is presented.

KEYWORDS:

Introduction:

The Anglo-Saxon era in England, approximately between 400AD and 1000AD is described today as 'The Dark Ages'. For centuries, the popular paradigm of history saw this time as a primitive period following the higher culture of Rome. The conquering Normans then found it convenient to resurrect this concept claiming a return to a higher culture similar that of Rome. Throughout history the need to denigrate the previous regime, often on flimsy precepts, has been magnified by limited right to that power as in the case of the Normans. Indeed, it is a standard practice still frequently utilised today by politicians and autocrats.

Current re-evaluation free of Norman propaganda is throwing new light on those perceptions. The common Saxon man under the laws of Alfred the Great and his successors had much greater rights under this law than under the tyrannical Norman occupation for which William I, the Conqueror, also known as William the Bastard, apologised on his death bed. Saxon women enjoyed the rights to own land, to divorce on their terms, and even to command nations and armies. Norman women were placed on a pedestal, but it was a pedestal of disempowerment, a pedestal on which women functioned only as decorative brood mares. Centuries would pass before women in most countries of today's world would enjoy the same status as Saxon women, or as the men of today. In other countries of today's world, women still have a lower status than men, or than their Saxon sisters.

Similarly, Anglo-Saxon medication would today be dismissed as primitive nonsense by nearly all practitioners of scientific medicine. Those with an interest in the medicine of history would regard it with some curiosity. However; medical historians would not visualize it of any relevance to their current practice. Naturopaths may be surprised to find they recommend the same plants as the English herbalists of more than a millennium ago. Unfortunately; they prescribe with the same lack of methodological rigour as their Anglo-Saxon predecessors in spite the availability of modern statistics and methodology for today's practitioners. Side effects remain unknown, unevaluated or denied in social media medicine.

Endeavours to utilise modern methodology in the evaluation of biological compounds rarely utilise a single identified chemical in a double blind randomised placebo controlled human clinical trial measuring an objective endpoint. Current studies use in-vitro methods, or animals to test mixtures of compounds, or soft symptomatology in humans.

An example is Hashempur's ² study of chamomile oil for carpal tunnel syndrome in humans. Electrodiagnostic quantified assessment showed no objective benefit though symptoms were improved. The active group also were treated with sesame oil, an anti-inflammatory compound, and the placebo group also had low dose chamomile oil to reproduce the characteristic pungent smell in the 'placebo', two serious confounding factors.

In another example, Keefe³ et al demonstrated a reduction in symptoms of anxiety with chamomile, but the study was an open-label trial and there was no reduction of measurable relapse.

Modern scientific practitioners do not undervalue symptomatic relief,

even in the short term, but prefer to believe studies utilising accurate methods, double-blind, placebo controlled randomised trials (DBPCR) in humans with objective quantitative endpoints, and to also cure the disease.

Herbalism is viewed unfavourably by today's major pharmaceutical companies, essentially the only genuine vehicle for the testing and development of therapeutic advances. Naturally occurring plants and compounds cannot be patented. A process for synthesizing a naturally occurring compound or a variation of a naturally occurring compound can be patented. The ability to patent medications from plant hybrids is unclear.

Without watertight patents and guaranteed profits, research evaluation of herbal therapies of a millennium ago will be limited and underfunded.

Modern Herbalism, so-called 'alternative' or 'complementary medicine' appears based on semi-plausible traditional beliefs, datafree vague therapeutic attributions, widespread, sometimes appropriate, use of the terms 'clinical' and 'scientific', pecuniary interest, dissemination of 'sound good treatments' through social media 'echo chambers' and the public gullibility in the current 'post-truth' era. Some herbs are conveniently seen as capable of curing all known diseases, a term known to Germany as 'alles zutraut, and to the scientist as wishful thinking.'

Companies producing 'natural remedies', make many millions of dollars from uncritical customers. They would see no need to waste profits on critical analysis of their products. Hence evaluation of therapeutic benefits of traditional herbs will be slow and limited. Surprisingly some are now undergoing critical research to evaluate their benefits.

The Nine Herbs Charm:

This charm is described in a poem in the 10th century herbal pharmacopeia, Lacnunga. ¹ It originates in German paganism in which the number nine is talismanic. The Norse God, Woden is mentioned in its description. The charm, like many aspects of earlier religions has been adopted into the Christian philosophy.

The following poem depicts pathological concepts of the day, namely poisons, evil spirits and flying maladies, perhaps an early understanding of droplet airborne transmission of infections. ²

These nine attack against nine venoms.
A worm came creeping and tore asunder a man.
Then took Woden nine magick twigs and smote the serpent
That he in nine pieces dispersed.
Now these nine herbs have power
Against nine magick outcasts,
Against nine venoms, against nine flying things,
Against the loathed things that over land rove.

Identification of these nine herbs is problematical and is based on the optimum information. Prior to the Linnaean system some plants went by several names, and alternatively one name could describe several plants.

The nine herbs are as follows:

- 1. Mugwort (Artemisia vulgaris)
- Lamb's cress, watercress or Stune in Anglo-Saxon (Nasturtium officinalis)
- 3. Plantain (Plantago major)
- 4. Mayweed or chamomile (Matricaria chamomilla)
- 5. Nettle (Urtica dioica)
- 6. Crab-apple (Pyrus malus)
- 7. Fennel (Foeniculum vulgare)
- 8. Chervil (Anthriscus cerefolium
- 9. Wood Betony (Stachys betonica)

There seems uniform agreement about the first eight of them, but the identity of the ninth is not clear. In Anglo-Saxon, it was known as Atterlothe, meaning poison-hater. Other possibilities are Cockspur grass (Echinochloa crus-galli), Betony (Stachys officinalis) or Viper's Bugloss or Black nightshade. Wood Betony is selected in this presentation.

1. Mugwort (Artemisia vulgaris):

This plant has feathery green leaves and panicles of purple flowers. It is found all over Europe and was known to the Goddess Artemis. The Greeks believed it was beneficial for women in labour.



Saxon medicine:

The Saxons believed mugwort would ward of evil spirits and demons, make journeys less arduous and treat fevers. It was also used to flavour ale. ¹ The Anglo-Saxon rhyme was: -⁴

You were called Una, the oldest of herbs, you have power against three and against thirty, you have power against poison and against infection, you have power against the loathsome foe roving through the land.

Current 'natural' therapy:

Today various herbalists recommend mugwort to relieve menstrual symptoms, assist dreaming and relaxation, treat epilepsy and psychoneuroses, cleanse the liver, relieve aching legs and improve circulation, diabetes and uterine cancer!

Evidence-based medicine:

Addo-Mensah ⁵ found antibacterial activity in mugwort extract against Staphylococcus aureus, Staphylococcus aureus and Bacillus subtilis using sensitivity disc diffusion.

Human cell lines of leukaemia, and cancers of the breast, prostate, liver and cervix were found to undergo increased caspase dependent apoptosis when treated in-vitro with extract of mugwort. Mugwort oil has over twenty active compounds. The four compounds thought to cause apoptosis of malignant cells are caryophyllene, alphazingiberene, borneol and ar-curcumene.

2. Plantain (Plantago major):

Broadleaf plantain, a flowering Plant native to most of Europe, is one of the most abundant and widely distributed medicinal crops in the world



Saxon medicine:

Known by the Saxons as waybroad in old herbals, for its ability to

thrive beside roadways, they used it as an antidote to poisons, particularly scorpion bites and to infections, headaches and sore throats. The Saxon rhyme was: - "And you, Plantain, mother of herbs, Open from the east, mighty inside.over you chariots creaked, over you queen's rode, over you brides cried out, over you bulls snorted. You withstood all of them, you dashed against them. May you likewise withstand poison and infection

Current 'natural' therapy:

Naturopaths believe plantain can draw out infections and foreign bodies. It makes a soothing poultice for bee stings or insect bites, cuts and abrasions. It can 'sooth' dry sinuses and the digestive system, and can relieve discomfort caused by poison ivy.

Evidence-based medicine:

Ozaslan ⁷ treating Ehrlich ascites tumour mice with Plantago extract found reduced accumulation of ascites and tumour spread. Flavonoids from Plantago have also been shown to have inhibitory and cytotoxic effects on melanoma and breast cancer cell lines. Chiang ⁸ found Plantago extract had inhibitory effects on in-vitro cell lines of leukaemia, lymphoma and cancers of the bladder, stomach, lung, bone and cervix. Chiang also found Plantago extract had an inhibitory effect of herpes- and adeno-viruses

3. Watercress (Nasturtium officinalis):

Watercress, an aquatic plant is one of the oldest known leaf vegetables consumed by humans.



Saxon medicine:

Known as Stune, the Anglo-Saxon rhyme was 'Stune' is the name of this herb, it grew on a stone, it stands up against poison, it dashes against poison, it drives out the hostile one, it casts out poison.

Current 'natural' therapy:

Watercress has a mustard-like taste and is incredibly high in Vitamin C and minerals. It has been used both medicinally and as food for centuries. Herbalists believe it prevents breast and colonic cancer, and is beneficial for the heart, thyroid, brain and eyes, while also helping during the common cold and pregnancy. It is also a natural diuretic.

Evidence-based medicine:

Watercress has progressed further down the road to evidence-based medicine utilisation in the hands of oncologists than any other of the nine herbs. Watercress is a rich source of Phenethyl Isothiocyanate (PEITC). Gupta ⁹ has written a detailed review of PEITC as a chemopreventative and chemotherapeutic agent for malignant disease. Epidemiological data demonstrates a lower rate of cancer in those with a high intake of cruciferous vegetables such as watercress. Malignant processes including cell proliferation, progression and metastasis are inhibited by the action of PEITC on multiple proteins. It is currently being assessed in DBPCR clinical trials as add-on therapy in the treatment of leukaemia and lung cancer.

4. Chamomile (Matricaria chamomilla):

The white petals and yellow flower of chamomile were recognised as therapeutic herbs by Hippocrates and Galen. The two most significant constituents are alpha-bisabolol and chamazulene.



Saxon medicine:

The Anglo-Saxons perceived chamomile as steroids are seen today, a

drug that should always be prescribed in extremis before death occurs! A contemporary rhyme was: -

Remember, Chamomile, what you made known, what you accomplished at Alorford, that never a man should lose his life from infection after Chamomile was prepared for his food.

They believed Maythen, as it was called, would always lift the spirits, and be beneficial for haemorrhoids and dysmenorrhoea.

Current 'natural' therapy:

Camomile is recommended as a cerebral and gastrointestinal sedative, for cutaneous lesions and rashes, eye and gum inflammation, and for dysmenorrhoea.

Evidence-based medicine:

In-vitro and animal studies imply anti-diarrhoeal and anti-secretory properties through activation of potassium channels and blockade of calcium channels. Antimicrobial activity has been detected against many viruses, bacilli and candida albicans. ¹⁰ Camomile has alleviated acute diarrhoea and accelerated healing of inflamed tattoos in doubleblind clinical trials.

Apigenin glycosides from chamomile oil are thought to have beneficial effects on cancer. Srivastava " has demonstrated in-vitro growth inhibition of prostate, breast, cervical, colonic and fibro sarcoma cell lines with these compounds.

5. Nettle (Urtica dioica):

The common stinging nettle, a herbaceous perennial flowering plant native to Europe, is well known and avoided if possible by children.



Saxon medicine:

Saxons called the nettle wergulu. Their concepts of disease were based on wind born poisons and the effect of malign spirits, hence the rhyme about the nettle.

This is the herb that is called 'Wergulu'. A seal sent it across the searight, a vexation to poison, a help to others. it stands against pain, it dashes against poison, it has power against three and against thirty, against the hand of a fiend and against mighty devices, against the spell of mean creatures.

They also used it to flavour beer, tea, soup and porridge.

Current 'natural' therapy:

Naturopathic sources claim the mineral-rich nettle is a "trophorest rative", i.e. a restorer for any system in the body! It is described as good for seasonal allergies, hypothyroidism and adrenal fatigue. Another source states that the nettle 'has shown promise' in treating Alzheimer's disease, arthritis, asthma, bladder infections, bronchitis, bursitis, dandruff, gingivitis, gout, hives, kidney stones, laryngitis, multiple sclerosis, PMS, prostate enlargement, sciatica, and tendinitis. Uncritical consumers appear content to purchase a herb that 'shows promise' in the treatment of almost all diseases!

Evidence-based medicine:

Ranjbari ¹² demonstrated improvement in serum glucose and insulin sensitivity with reduced beta cell damage in rats treated with Urtica dioica. Konrad ¹³ demonstrated an anti-proliferative effect of nettle extract on a cell line of epithelial prostate cancer cells, and Kayser ¹⁴ demonstrated preferential binding of UD lectin to prostate cancer cells. Dar ¹⁵ utilizing the disc diffusion method demonstrated inhibitory activity against Enterococcus faecalis, Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa, Staphylococcus aureus, Shigella flexneri and Salmonella typhi.

Gulcina ¹⁶ also utilising disc diffusion technology also found inhibitory activity against Escherichia coli, Proteus mirabilis, Citrobacter koseri,

Enterobacter aerogenes, Staphylococcus aureus, Streptococcus pneumoniae, Micrococcus luteus, Staphylococcus epidermidis and Candida albicans. Potency was less than parallel discs of amoxicillinclavulanic acid, ofloxacin and netilmicin.

6.Crab Apple (Pyrus malus):

The crab apple tree is a small deciduous tree native to Europe.



Saxon medicine:

The Saxons used crab apples to treat poisoning and infection. The Saxon rhyme was

There the Apple accomplished it against poison that she [the loathsome serpent] would never dwell in the house.

Current 'natural' therapy:

Naturopaths see this as a source of vitamins and nutrients, as well as cleaning teeth and increase energy. It is also seen as therapy for fevers, diarrhoea and constipation.

Evidence-based medicine:

No significant papers were discovered

7. Chervil (Anthriscus cerefolium):

A delicate herb like parsley, it is thought to have been brought to England by the Romans.



Saxon medicine:

Saxons believe this would restore the will to live.

Chervil and Fennell, two very mighty one. They were created by the wise Lord, holy in heaven as He hung; He set and sent them to the seven worlds, to the wretched and the fortunate, as a help to all.

Current 'natural' therapy:

Naturopaths consider Chervil will reduce flatulence, purify the blood, act as a diuretic and lower blood pressure. It can dry up eczema, heals abscesses, stimulate the brain and prevent suicidal thoughts. Poultices can relieve arthritic pains. It is a remedy for bad dreams, burns, headaches, sinusitis, peptic ulcers and infections.

Evidence-based medicine:

No significant papers were discovered

8. Fennel (Foeniculum vulgare):

Fennel is cultivated world-wide. It is known to be rich in potassium, sodium and calcium. Sixty different compounds have been identified in fennel.



Saxon medicine:

Saxons believed fennel conveyed longevity, gave strength and courage, improved lactation and discouraged evil spirits.

Current 'natural' therapy:

Naturopaths believe fennel is good for digestion and relieves flatulence. They believe the oil rubbed on the abdomen will relieve discomfort and that it has beneficial effects on eyesight and obesity.

Evidence-based medicine:

Badgujar ¹⁷ in a review of the properties of *Foeniculum vulgare* noted antimicrobial activity assessed by disc diffusion of crude oil extract against numerous bacteria and fungi. He also noted that mice with Ehrlich ascites carcinoma treated with anethole, the principal antitumour agent of fennel, showed improved survival time and reduced tumour weight, and that anethole is also active against a melanoma cell line in vitro.

9. Wood Betony (Stachys betonica):

Wood betony is a perennial grassland herb growing to 30 to 60 cm in height



Saxon medicine:

The first reference to Betony occurs in a work by the Roman physician Antonius Musa, who claimed it as effective against sorcery. It was planted in churchyards to prevent activity by ghosts. anciently regarded as a cure for all ills of the body and the soul. The Anglo Saxon Herbal recommends its use to prevent bad dreams of 'frightful nocturnal goblins and terrible sights.' Betony was used to unite skull fractures and as a warm solution for ear ache.

Current 'natural' therapy:

Naturopaths believe this is a 'whole-body tonic' that cures headaches and anxiety, heals cuts and eases the discomfort of insect bites, and improves gallstones, heartburn, high blood pressure, migraine, hyperhidrosis and neuralgia.

Evidence-based medicine:

No significant papers on antimicrobial or oncological properties in human cells were discovered

Conclusion:

The nine Anglo-Saxon charm herbs are widely prescribed today for most illnesses in naturopathic circles. Herbal therapies are widely consumed in the hope they are 'trophorestorative'.

However, scientific studies show that six of them, watercress, mugwort, plantain, chamomile, nettle and fennel have in-vitro activity against a wide variety of micro-organisms and malignant diseases.

There appears to a strong case for appropriately conducted clinical double-blind, placebo-controlled, randomised studies of the Anglo-Saxon charm herbs in humans suffering from infectious and malignant diseases at least as add-on therapy to the current evidence based best therapy. Such studies may enhance respect for the Anglo-Saxon period as one of more knowledge than previously perceived.

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