Anglo-Saxon Medicine: A fuller picture

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The medicine of Anglo-Saxon England has been a source of fascination since the Victorian period, when a translation of the extant medical texts in Old English was first published.[1] These texts, later results of Alfred the Great's translation project, are unique survivals, providing a rich source of information about early medieval ideas and treatments. As such, they have been well studied, to the neglect of the fact that doctors working in England also had a corpus of Latin texts, and this has resulted in a somewhat skewed view of pre-Conquest learned medicine.[2] This paper aims to provide a more comprehensive and accurate picture, describing both the Old English and Latin corpora. I will consider examples from one intriguing area of medicine, that of insanity and 'disorders of the head'. This area is particularly informative, showing perhaps the greatest divergence in ideas between the two sets of sources.

There are six main extant texts in Old English, known to modern editors as: *Bald's Leechbook* (*I* and *II*)*, Leechbook III,* the *Lacnunga,* the *Old English Herbarium*, and the *Liber medicinae ex animalibus* by Sextus Placitus.[3] The first three are preserved in London, British Library, MS Royal 12. D. XVII, probably produced at Winchester in the mid-tenth century, whilst the *Lacnunga* is a later commonplace book found in British Library, MS Harley 585. There are four extant copies of the *Old English Herbarium*, which include Sextus Placitus.[4] Apart from the interest aroused by their very existence, these texts have been objects of curiosity for their contents. Firstly, there are some interesting ailments and problems. Alongside salves for ears and blisters we find one which works against mysterious 'nocturnal visitors' (*nihtgengan*).[5] Amongst herbal drinks for spring ague and pock-disease, there are others against evil incantations (*ælcre yfelre leodrunan*).[6] There are conditions known as elf-sickness (*ælfadle*) and water-elf

disease (*wæterælfadle*), and patients could suffer 'with a dwarf' (*wið dweorg*).[7] These medical books further include such treatments as those for horses suffering scabs, to assist a dog to conceive, and a charm for lost cattle.[8]

The vernacular texts contain many unusual treatments and descriptions of treatments. One well-known extract from the *Lacnunga* is a poem, known as the 'Nine Herbs Charm' which addresses nine medicinal plants:

> Remember mugwort, what you revealed
> What you set out in mighty revelation
> 'una' you are called, oldest of plants
> You have might against three and thirty
> You have might against poison and infection
> You have might against the evil that travels around the land.[9]

Anglo-Saxon medicine overall was largely herbal, the *Herbarium* survives in several Old English and Latin copies, and around 90% of ingredients were plants, such as rue, pennyroyal or vipers bugloss.[10] However animal products could also be beneficial; typical examples from the *Liber medicinae ex animalibus* included laying a wolf's head under the pillow for sleeplessness or 'for sore of ears, take lion's suet, melt it in a dish, drop it into the ear; it will soon be well with it'.[11]

Sometimes, the plant or animal material might have been worn on the body as a curative or protective ligature; thistle roots tied around the neck treated and prevented sore throats, and carrying the herb *heraclea* on a journey saw off robbers.[12] Some treatments involved rituals or religious elements, which would require a priest or monk. For example, a recipe for 'a bone salve against headache and against disease of all limbs' ends with the instruction to 'sing thereover '*benedictus dominus deus meus ... benedictus dominus deus israel*' and '*magnificat*' and '*credo in unum*', and the prayer 'Matthew, Mark, Luke, John'', before applying it.[13] To prevent fatigue on a journey, it was advised that a man should take mugwort and

> He should say these words first: 'I will take you, O mugwort, (so that) I am not tired on the road.' Make the sign (of the cross) on them when you take them up.[14]

Other treatments might involve salves, ointments, herbal drinks, bloodletting, cupping glasses, poultices, baths or even surgery. Detailed instructions were given for delicate operations, like repairing a hare lip and daunting ones such as amputating a gangrenous leg.[15]

The texts very much focus on remedies with little theory. There is often little explicit description of physiological processes or the nature and etiology of disorders, we must infer what we can. Usually a disorder is stated as 'leg ache' or 'sore eyes' which is self-explanatory but there is no description of what 'elf disease' might be, or of how an elf might cause it; presumably this was understood by the original readers. This is less true of the more sophisticated *Bald's Leechbook*, where unusually we find a long description of the liver, where it is sited, the symptoms of its being disordered, and of its functions, said to be the making and cleaning of the blood.[16] Most sources are not very informative about causes of illness. Audrey Meaney has discussed references to causes in Old English medical texts, many of which were natural, such as cold, diet, worms, 'venom', 'flying venom', and the humours.[17] The four humours, blood, phlegm, bile and black bile, were the cornerstone of ancient medicine and were long known of in England. However Old English lacked a stable set of specific terms and the vernacular texts frequently used the vague term *wæta,* meaning moisture, pus, phlegm or 'humour'.[18] On the other hand different kinds of spiritual beings could be blamed for illness, such as elves (seen as similar to demons), the devil, or, according to the *Lacnunga,* 'the evil (loathsome thing) that travels around the land'.[19] This was perhaps a natural conclusion to draw given their Christian world view, and enabled them to draw upon their faith for religious solutions in the face of intractable illness and suffering.

Anglo-Saxon medicine has been much studied and sometimes criticised; Greenfield wrote that it was 'degenerated knowledge ... that merits more the name of magic than of medicine'.[20] Charles Singer described it as 'a mass of folly and credulity' lacking in any rational element or basis in practical experience.[21] Subsequent authors have re-

evaluated the area, emphasising the need to see Anglo-Saxon medicine on its own terms.[22] Riddle argued that this medicine may have lacked theory, but it was based on years of empirical experience, and included drugs and procedures which could have been of practical benefit.[23] However this debate has sometimes overlooked the fact that much in the vernacular texts was drawn from continental, Latin medicine, and that many Latin medical texts were available in pre-Conquest England. Archbishop Theodore of Tarsus, trained in both Byzantium and Rome, had given instruction in scientific and medical matters in the seventh century, probably with the help of Latin (and possibly Greek) texts.[24] In the eighth century Bishop Cynehard of Winchester wrote that he had 'a goodly quantity' of books of secular medicine, which prescribed unknown and inaccessible drugs, suggesting these were foreign, Latin texts.[25] Bald himself had a collection of texts, of which he writes that 'no richest treasure is so dear to me as my books'.[26] Looking at this whole range of medical texts available is necessary to gain a full view of the medicine of the time.

What might Bald's 'dear' books have been? The key Latin medical works that are known, or thought to have been available, are listed below:

Pliny the Elder, *Historia Naturalis*
Isidore of Seville, *Etymologies*
The *Epistula Hippocratis ad Antiochum Regem*
Vindicianus, *Epitome Altera* and *Epistula Vindiciani ad Pentadium Nepotem*
Oribasius, *Synopsis* and *Euporistes*
Alexander of Tralles, *Practica Alexandri*
Marcellus of Bordeaux, *De Medicamentis*
Theodorus Priscianus, *Euperiston* and *Physica*
Cassius Felix, *De Medicina*
Latin versions of the *Herbarium* complex with the *Liber medicinae ex animalibus*
The *Liber Aurelii*, *Liber Esculapii*, the *Liber Tertius*, *Ad Glauconem*, and the *Tereoperica*, (a group of texts with shared content, passed down in the *Passionarius* and the *Petrocellus*).[27]

Following an overall analysis of these sources, Cameron noted that Bald clearly had access to a collection of works, covering 'the best that Roman and Byzantine medicine of the third to sixth centuries had to offer'.[28] D'Aronco concluded that such Latin texts were widely circulated in England and of high quality.[29] The wide availability of the texts is contested, but this Latin base is well established. Medicine in Old English was in large part derived from ancient Graeco-Roman sources.[30]

Appreciating that the Latin base existed, does not however mean that it has been fully taken into account by historians of early English medicine. Cameron's excellent survey gave a detailed picture of Anglo-Saxon medicine based on the vernacular texts but did not address the actual *content* of the Latin texts that he listed as available to them. The only scholarship encountered that has done this is that of McIlwain, who looked at both sets of sources in his studies of ideas about the role of the brain and about the disorder of paralysis.[31] This is partly because, of the Latin texts, only Pliny has been translated into English; most are only available in Latin editions, often as Renaissance printed versions, some still only in manuscript form. However, to do the translation work on these texts does change the picture of pre-Conquest English medicine considerably. To illustrate this, we will take one area of medicine as an example, from my own research on mental, behavioural and neurological disorders.

Conceptualisation of disorders of the head

According to the Old English texts, patients could suffer from fever of the brain with inflammation and discharging of the brain (*brægenes hwyrfinesse ⁊ weallunge wiþ seondre exe*), brain disease and infirmity of mind *(brægenes adl 7 ungewitfætnes*).[32] They might have *gewitleaste* ('witlessness' or insanity), *disgunge* (imbecility) or be *ungemynde* or *gewitseocne* ('wit sick' or insane).[33] They could get *weden heorte* (literally 'mad heart', translated as frenzy or mania) or *ofergytulnys* (forgetfulness) which the *Herbarium* helpfully translates as lethargy.[34] They could be *monaþ seoc* (literally 'month-sick' sometimes translated as moon-sick or lunatic).[35] The problem of being *hræcseocum* (brain sick) has been translated as lunacy but may well be epilepsy; epilepsy is

also mentioned several times as *fylleseocnysse,* the falling sickness.[36] None of these disorders or their symptoms are explained or described, although sometimes clear individual emotional or behavioural symptoms are discussed. People could have *scinlace 7 wið eallum gedwolþinge* (apparitions and delusions), suffer *wið anðan* (envy) *wið ogan* (fear), or children be *ahwæneð* ('very upset').[37] There are treatments for sleeplessness, nightmares, drunkenness and aggression.[38]

Most of the texts, both in Latin and Old English, are set out in head-to-toe order to some extent, beginning with illnesses of the head; *Bald's Leechbook I* starts with many remedies for headaches and fractured skulls.[39] However none of the disorders above, which we would consider mental or brain-based, are given in this first section in the vernacular texts. It seems that for many in pre-Conquest England, the site of the mind was not necessarily the brain but in the heart and chest, a cardiocentric view. In vernacular literature, the concept of *breostsefa*, the mind-in-the-breast, is seen in statements such as 'wisdom (resides) in the breast, where a man's mind-thoughts are'.[40] Mental activity is usually spoken of as in the breast, sometimes in the abdomen, but not in the brain. Scholars have long considered such ideas to have been metaphorical, but Lockett has argued that this may have been regarded as actual physiology in this early worldview.[41] At one point *Bald's Leechbook* states that *ungewitfæstnes* (madness) is a consequence of *brægenes adl,* brain disease; however a number of organs, such as the stomach or womb, were associated with adverse mental states in Old English, and Lockett has explained that the brain could be interpreted as causing them through its putative role in generating phlegm.[42]

Most challengingly for modern interpreters, a patient could be *deofel seoc, feond seoc* or suffer *fienda adl* (devil/fiend sick/fiend's disease), he could be *deofel fede* (devil-possessed), suffer *deofler costunga* or *feondes costungum* (temptations/ afflictions of the devil).[43] He could suffer from *ælfcynne* (elven kind) *aelfsiden* (elvish tricks or influence) or *nihtgengan* (nocturnal visitors).[44] *Bald's Leechbook* helpfully explains that to be *feond seocum* (fiend-sick) is 'when the devil feeds a man or controls him inside with sickness'.[45] Although we may imagine that such conditions manifested themselves in hallucinations, delusions or disturbed behaviour, again we are not told how these

conditions presented, as the symptoms are nowhere described. *Deoful seocnysse* (devil sickness) is sometimes considered the same as madness, (*gewitleaste)* and the terms *feonda adl* (fiend-sickness) and *ylfige* (elfish) sometimes relate to convulsions or epilepsy.[46] Audrey Meaney concludes that 'the term devil sickness is used for illnesses that turn the minds and affect the bodies of the sufferers so that they lose control'.[47]

We have a large number of often ill-defined terms scattered throughout the vernacular texts, and we are left unsure what many of the terms refer to, and it seems that they lacked precision even for those who originally used them. However, at the same time that these texts were written, alternative descriptions were available in the Latin texts known to be present in England. Since Roman times the terms *phrenitis, mania, melancholia, epilepsia* and *lethargia* had been established as the major categories of mental disorder, distinct disease entities, with particular sets of symptoms, course and prognosis, aetiologies and treatments.[48] These terms seem to have been generally understood and used with consistency across the different texts. Although the focus was usually on treatment, most authors presented at least some description of symptoms; sometimes they give a great deal, for example Priscianus gives the symptoms of *melancholia* as follows:

> In despair ... they desire death ... they are often in tears, preferring deserted places, they avoid company ... They complain of constant bloating of the praecordia (stomach) ... suffer sweating of the whole body, and cold joints. They are deprived of their natural strength, their stomachs are frequently fatigued with indigestion, and they have horrible, unpleasant belchings. They become darker in colour and are often afflicted by pains in their internal organs.[49]

Sometimes distinctions between these mental disorders are explained, for example the *Passionarius* sets out the differences between illnesses related to whether or not there was fever.[50] Where novel disorder names are mentioned, they are often explained; in the case of '*anteneasmo*' in the *Passionarius*, it is described as a very dangerous kind of mania with self-harm.[51]

Such disorders were also understood as arising in the head, and usually given as such in the first chapters of the Latin medical texts. Their accounts of mental disorders also frequently indicate that these were due to brain pathologies.[52] Oribasius informs us that frenzy and lethargy are caused by an illness of the brain and its meninges, in which they have become dry and inflamed.[53] Isidore's explanation of mental disorders suggests a role for the ventricles of the brain, as mania, for example, is said to arise in the memory (the rear ventricle).[54] McIlwain argued that medical texts available in England clearly localised the mind in the brain from early on.[55] Several Latin authors present the cephalocentric view; Alexander, for example, states that the 'chief comprehension of the senses' occurs in the head, the brain being the place where the soul dwells.[56]

Of course we cannot be sure how widely known these Latin texts were in England, or whether they were available in their entirety. Insofar as they were, their cephalocentric ideas were not readily assimilated, barely mentioned in the vernacular texts that drew from them.[57] When Anglo-Norman copyists came across a description of the mental functions of the brain in copies of the *Petrocellus* arriving in the late eleventh century, these sections were often omitted or changed, presumably because they were not of interest or considered incorrect.[58] Longstanding shared paradigms are not easily overturned, but a range of ideas was certainly available.

Causes of mental disorder

The vernacular texts rarely say anything explicit about the causes of mental or neurological disorder. However, Bald or his compiler, was concerned about harmful humours which could cause certain problems, and complained,

> Many people have not heeded this nor pay no heed; then, from those harmful humours come either hemiplegia or epilepsy.[59]

Later *Bald's Leechbook* tells us that hemiplegia arises when the sinews are filled with a slippery thick evil humour.[60] Mental problems related to the stomach could come from bilious or 'harmful venom-bearing humours'.[61] Although it has been thought that the vernacular texts

reflected a lack of interest in humoral theory, more recent scholarship has indicated that such adjectives and explanations were often given to try to specify which humour was involved.[62] Certain qualities could cause problems, *brægenes adl 7 ungewitfæstnes* (brain disease and infirmity of mind) being attributed to a cold moist stomach.[63] These explanations in terms of humours or qualities mostly apply to neurological conditions, and derive from Latin sources, either Oribasius or Alexander's *Practica;* generally however, texts like *Bald's Leechbook* seem to have ignored their Latin sources in this area of medicine.[64]

Another physical cause, that of fever, is often associated with mental disorders, which frequently arise in sections also addressing fever, such as *lenten adl* (spring fever). In *Leechbook III* the disorders *feondes costunga*, *nihtgengan*, *lencten adle* and *maren* (nightmares), are all grouped together, and again in a later chapter spring fever is treated alongside *feondes costungum* and *aelfsidenne* (elvish tricks).[65] Fever and delirium of course may be associated with disturbed mental states or behaviour, and hallucinations.[66]

Although not often stated explicitly, as we have already seen the names of several apparently mental or behavioural problems indicate that they were (or at least had been) thought to be due to spiritual beings such as the devil or elves. The regular use of ritual elements, such as holy water or 'Christ's mark', which is less commonly seen for physical complaints, also indicates a suspicion that evil forces were at work.[67] This is one of the most striking features of the Old English texts, but in this they agreed with the wider Christian world view that demons were the cause of mental disorders, or that they arose as punishment for sin. In hagiographies and accounts of the miraculous healing of mental disorders, devils or spirits are often responsible. For example, a man healed at Bardney Abbey in the seventh century who had convulsions and foamed at the mouth, was considered to be possessed by the devil.[68] Hallucinations, delusions and disturbed behaviours, disorders without an obvious physiological component, would easily have been interpreted as having a demonic explanation, as would epileptic fits. The Old English vernacular medical texts also cite problems caused by the activity of elves, a Germanic, pre-Christian concept which had been incorporated into Christian ideas as similar spiritual agents to demons.[69]

Ælfcynne and *ælfsiden* seem to relate to mental disturbances, *ælfcynne* (elven kind) being associated with *nihtgengan* and *þam mannum þe deofol mid hæmð* (nocturnal visitors and those people with whom the devil has sex); these might have been hallucinations or nightmares.[70] *Ælfsiden* seems to denote some kind of magic, used to inflict altered states of mind and hallucination.[71] Other kinds of magic are mentioned, *yfelre leodrunan* evil incantation, *malscra 7 yflum gealdorcræftum* (enchantments and evil charm workings).[72] Many of these problems remain opaque to us. When it comes to such beliefs, we might agree with Schmitt that we 'are lacking ... the conceptual instruments necessary to understand them'.[73]

Meanwhile most Latin authors routinely include explicit comments about the causes of disorders in their descriptions; some, like Oribasius and Alexander, can give a lot of detail on this.[74] Their ideas about etiology were not grounded in much theory, only Isidore gives brief notes on the human body, the soul and how it relates to the mind, and the nature of disorder.[75] However humours were held responsible for most ailments, both physical and mental, and Isidore wrote that both melancholy and epilepsy were caused by black bile, and frenzy by bile.[76] Phlegm was responsible for lethargy in Alexander's work, and blood the cause of apoplexy in the *Passionarius*.[77] Isidore implicated the ventricles and Vindicianus explained that if the movements of the brain increase it tends to arouse madness.[78] These are of course physiological causes of illness without a suggestion of any demonic origin. Where explanations are given for epilepsy in the Latin texts, these are naturalistic, which is striking given the presentation of the tonic-clonic fit.[79] Isidore does not endorse the view of the 'common people', who attribute epilepsy to 'the insidious forces of demons'.[80] In fact writing on the frightening experience of incubus, (understood in modern terms as sleep paralysis), Oribasius explains that '*incybus* is not a demon but a certain powerful illness': he understood it as possibly a symptom of mania, epilepsy or apoplexy, caused by black bile.[81] Only the *Petrocellus* gives a treatment for demoniacs, in versions arriving after the Conquest.[82]

Treatment of mental disorder

Predominantly practical remedy books, the vernacular texts provide an abundance of treatment possibilities for these conditions. As we have seen, Anglo-Saxon medicine is best understood as herbal medicine, and a majority of treatments are herbs or herbal recipes. The *Herbarium* offers peony for the *monaþ seoc*, rue for *ofergytulnys* and hogs fennel for *weden heorte*.[83] *Bald's Leechbook* gives two recipes with ingredients like marshmallow, lupin and betony for the problems of *ungemynde* and *dysgunge* (insanity and imbecility).'[84] The *Liber medicinae ex animalibus* offers various animal products such as a drink of boar's testicles for the falling sickness, and the flesh of a lion or wolf for devil sickness and apparitions (*deofol seocnysse* and *scinlac*).[85]

Some herbs were to be worn, for example, aster should be hung around the neck for epilepsy.[86] Some were picked with a ritual; periwinkle was thought useful against *deofol seocnysse*, and should be picked at certain days of the moon's cycle with a request made in Latin for the plant's protection.[87] Animal parts might also be part of a ritual; a goat's brain should be passed through a golden ring then fed to a child with the falling sickness.[88] There were often religious elements, such as the use of holy water, or more involved ceremony. For the *weden heorte*, a herbal drink was prepared saying the litany, the *credo* and *pater noster*, with twelve masses said over the plants.[89] Religious remedies were particularly called for in the case of afflictions by demons or elves; *Bald's Leechbook* offers the following, requiring the participation of a priest:

> A drink for demoniacs to be drunk from a church bell: corncockle, hounds tongue, yarrow, lupin, marsh mallow, poison-bane, sedge, iris, fennel, church moss, moss from a cross, lovage, make the drink of clear ale, sing seven masses over the herbs, add garlic and holy water and drip into any drink that he intends to drink, and sing the psalms *Beati immaculati* and *Exurgat* and *Saluum me fac deus* and then drink the drink from a church-bell, and the mass priest should sing this over the drink: *Holy Lord, Father omnipotent*.[90]

The *Lacnunga* gives a rather involved procedure for those affected by *aelfsidene* (the magic of elves) involving words written on a eucharist plate, stones, plants, masses, psalms and prayers.[91] Although rituals and religious elements are present for other, more straightforwardly physical conditions, we probably see Anglo-Saxon medicine at its most religious in the case of these conditions which were perhaps most distressing and hard to cure. Of course, where the cause was spiritual, a religious remedy would have been appropriate.

When mad people appeared in non-medical sources of the period such as hagiographies, they often needed to be bound, St Wulfstan healed three cases of madness necessitating restraint.[92] However the Old English medical texts make no reference to restraint, and there is only one measure which seems particularly unpleasant; unfortunate *monaðseoc* patients might be whipped with a flail made from a dolphin's skin.[93] Although it is clear that blood-letting was used as a routine health measure, (and of course would be the right remedy in conditions due to excess blood), in the spheres of mental or neurological disorders it is recommended only for paralysis and hemiplegia.[94]

Finally, one issue with the Old English texts generally is a frequent lack of clear instructions or quantities, as in this recipe for those *wið ungemynde 7 wið dysgunge* (insanity and imbecility):

> Put marsh mallow in ale, and lupin, betony, southern fennel, lesser calamint, hemp agrimony, corncockle and wild celery, then drink.[95]

Often the instructions for the prayers and masses are more precise than for the weights or preparations of drugs. However, it seems that oral tradition and teaching were important, the texts perhaps serving as a reminder of what the physician had already been shown. Dun and Oxa were said to have taught their remedies, and there are references to treatments 'after the manner which doctors know' without full explanation.[96]

At the same time, the Latin texts often offered careful therapeutic directions for treating 'disorders of the head'. For example, Cassius Felix's *De medicina* gives very detailed advice for epileptics. Treatment

could involve taking a daily decoction of thyme dodder, an evening bath, application of cupping glasses, blood-letting from the forehead for three to five days, sneezing, vomiting and then six months of a special diet.[97] He gives a recipe for pills:

> Take castoreum, southern wood, roots of opoponax, all 4 drams, white pepper, garden rue, 2 drams, saffron and galingale one dram, mix with vinegar and make pills of a dram each, give one in a drink, those with a strong body take with 4 glasses of honeyed wine, those weaker with honeyed water. After taking the drink it is necessary that the patients go for a run, and after this apply a poultice with a drug made from seeds or marjoram.[98]

These careful instructions and measures are not, however, seen uniformly. Oribasius' gargle recipe for loss of memory is given without quantities or instructions for administration.[99] *Materia medica* could be plants, animal parts or products or stones, and used in pills, drinks, gargles, poultices or clysters, or to provoke sneezing or vomiting. Apart from medication, diet, baths, sleep, exercise or environmental change could be prescribed. Alexander's *Practica,* in particular, often based treatment around such factors. In the case of melancholy,

> It is useful to have apples or pears before food, and breast of chicken. And when they have eaten, they must have rest and sleep, and after ... be led to the bath ... and having clothed themselves again, they are fed bread and wine ... They must recoup their strength through sleep, and allow them to talk with their friends and family, who will respond with firm reasoning, so that they put aside strange ways.[100]

This all sounds very soothing, and we also see here the use of psychological strategies. Elsewhere, Alexander discusses various ways of challenging delusions, one example being that of a man who believed he had been decapitated being given a lead hat to wear so he could feel the weight of it on his head. A woman who thought she had swallowed a snake, was made to be sick and a snake put in the vomit to make her think she had now got rid of it.[101]

Some treatments could be unpleasant, with purging, vomiting and blood-letting the mainstays of many treatments. Not just unpleasant, Alexander warned that purgative medicines could be risky, as choking, fainting and convulsions quite frequently followed.[102] For lycanthropy (a form of melancholy where the patient thought they were a wolf), Oribasius advises taking blood until they are distressed.[103] For patients suffering from mania the *Passionarius* and the *Petrocellus* recommend cauterising the back of the head down to the bone, removing the flesh.[104] In cases of frenzy, the patient might need to be restrained, although this was to be with soft ties, to calm him down – learned medicine, of course, catered mainly to the elite.[105]

There is some variation in the approaches of the various Latin authors known. Pliny provided dozens of treatments from classical authors, with folk remedies and others which he regarded as odd or dubious, coming from the 'Magi'.[106] In the case of epilepsy he recommended the use of the liver of a vulture, the blood of a tortoise or swallow, driving a nail into the place where an epileptic hit his head, or drinking water from a man's skull.[107] In general, epilepsy, being a particularly intractable and sometimes dramatic condition, does seem to have attracted some unusual remedies. Cassius Felix suggested taking a swallow born at the new moon, finding stones in its belly and hanging them on the patient in a calf skin.[108] None of these, however, involved significant ritual, there is only one, probably later, treatment for demon possession; when there are treatments for *incubus*, they are naturalistic, such as dietary changes and phlebotomy.[109]

Conclusion

Our understanding of English medicine over a thousand years ago is necessarily incomplete, resting on a few archaeological remnants, booklists, references in non-medical letters and texts, but predominantly on medical texts. We are very fortunate in the survival of a handful of vernacular texts, and a knowledge of what other Latin texts were known, although it is difficult to know how representative these are of the medical thought and practice of the time. We have little idea of how many physicians had either the Latin or Old English texts available to them, or how many were even literate. Furthermore, Siraisi

reminds us that 'medical texts are essentially prescriptive, unreliable and inadequate sources of information about actual medical activity and its social context'.[110] The average doctor may well have relied on some kind of practical training and experience, his practice perhaps similar to that reflected in the *Herbarium* or *Lacnunga*. All we can do is look at what we have, and at the whole picture of what we have, which, being based on literary sources, is medicine for those who had access to expensively-trained physicians.[111] Anglo-Saxon medicine at its most informed could have involved a large range of texts, from the theory of the *Etymologies* and the detailed practical medicine of the *Practica Alexandri*, to the more eclectic *Lacnunga* and parts of Pliny, with many other sources in between.

In looking at mental and neurological disorders, we see Old English medicine at probably its least straightforward, sometimes almost incomprehensible to modern readers. We cannot be sure what the conditions were, what their symptoms were, or how they arose. Many seem to have been thought to be due to attacks by supernatural forces, and it is perhaps a modern imposition to try to fit them into the category of a mental or indeed medical disorder. It is also partly anachronistic to put them in the category of 'disorders of the head', since until quite late on, a majority of inhabitants of pre-Conquest England probably thought that the mind was to be found in the heart and breast. In contrast, the Latin texts are much clearer in their simple and long-established classification of disorders, they describe their presentations and usually their causes. They are clear that they generally derive from problems of the brain or else connections to the brain. The Latin tradition makes almost no reference to demons or supernatural causes. Causes are natural, usually humoral, with the four humours usually specifically named when they are responsible for an illness. The former view of Anglo-Saxon medicine as 'disintegrated', or 'irrational' is unfair; the idea that it was cardiocentric and supernatural is incomplete without including their Latin texts which are the other side of the same coin.[112] English doctors did have some clearer explanations, and both religious and naturalistic views of illness, both cephalocentric and cardiocentric understandings, were available to them, even if they did not always take them on board.

This is not to claim that the Latin medicine was always a more 'advanced' or 'rational' contribution to the Old English medicine. These were often troubling conditions, hard to understand or treat. They sometimes manifested themselves in problematic behaviour, disturbances such as hallucinations and delusions, or the dramatic convulsions of some epileptic fits. It is understandable and reasonable that within a Christian society they could be seen as attacks by supernatural forces. Meanwhile, the Latin texts available, many of them pre-Christian, explained them in terms of Galenic humoral theory, but this itself is now seen as a two-millennia long blind alley in which medicine became stuck. Neither version of medicine offered much theoretical base and the treatments given in both vernacular and Latin texts are often without any clear rationale. Both shared much *materia medica* coming from similar sources, but if Latin texts were sometimes more precise in drug quantities and preparation, that does not mean this was safer medicine. The purgatives Alexander used could unintentionally cause convulsions and choking, whilst many painful and now thought harmful procedures were a deliberate part of treatment, such as cauterisations and blood letting. The vernacular medicine often seems gentler, with the exception of the dolphin-skin scourging. Both may have included helpful elements, such as hot baths and rational conversation for the melancholic, sedative betony or *attorlope* for the *feondseoc* or *bræseoc.*[113] The Latin tradition gave almost no ritual elements in treatments, but in fact the religious, ritualistic and other elements of Old English treatments have been shown to harness the placebo effect most effectively.[114] Nevertheless we have to acknowledge that nearly all of it was 'bad medicine', mostly ineffective and sometimes harmful, with placebo action perhaps the best that early medicine had to offer.[115] What the Latin texts added in terms of helpful therapeutics was no better or worse, but it was certainly different. The people of Anglo-Saxon England were concerned to treat the sick, the mad and the possessed, and through both their vernacular and Latin medical writings they had a wide range of possible ideas and treatments.

Notes

1 *Leechdoms, wortcunning and starcraft of early England*, ed. and trans. by Thomas Oswald Cockayne, 3 vols (Cambridge: Cambridge University Press, 2012).

2 Following Cockayne early studies on the vernacular texts include those of Grattan and Singer (J.R.H. Grattan, and Charles Singer, *Anglo-Saxon Magic and Medicine* (London: Oxford University Press, 1952) who, focussing on the *Lacnunga,* were very critical of Anglo-Saxon medicine. It was reassessed rather more sympathetically by Talbot (C.H. Talbot, *Medicine in Medieval England* (London: Oldbourne, 1967), perhaps less so by Rubin (Stanley Rubin, *Medieval English Medicine* (Newton Abbot, Devon: David and Charles, 1974)), both of whom showed an awareness of the contribution of the Latin texts, but without including their contents in the discussion. Many other authors such as Riddle, Meaney and Voigts have shed light onto these early medical ideas (see John M. Riddle, 'Theory and Practice in medieval medicine', *Viator, 5* (1974), pp. 157-84; Audrey L. Meaney, 'The Anglo-Saxon View of the Causes of Illness' in *Health, Disease and Healing in Medieval Culture,* ed. by Sheila Campbell, Bert Hall and David Klausner (Houndmills, Basingstoke: Macmillan, 1992), pp. 12-33; Linda E. Voigts, 'Anglo-Saxon Plant Remedies and the Anglo-Saxons', *Isis,* 70 (1979), pp. 250-68). Cameron usefully summarised the field (M. L. Cameron, *Anglo-Saxon Medicine* (Cambridge University Press, Cambridge, 1993)). Van Arsdall (Anne Van Arsdall, *Medieval Herbal Remedies: The Old English Herbarium and Anglo-Saxon Medicine* (New York: Routledge, 2002)) critiqued Cockayne's approach and gave a positive view of early medieval herbal medicine, providing a new translation of the *Herbarium.* Edward Pettit provided a new critical edition of the *Lacnunga* (Edward Thomas Pettit, 'A critical edition of the Anglo-Saxon Lacnunga in BL MS Harley 585' (PhD thesis, Kings College London, 1996)) and more recent work by Conan Doyle (Conan Turlough Doyle, 'Anglo-Saxon Medicine and Disease: A Semantic Approach' (PhD thesis, University of Cambridge, 2017)) gives a translation of *Bald's Leechbook* with helpful analyses of its sources.

3 See Cameron*, Anglo-Saxon Medicine,* ch. 8,

4 London, British Library, MS. Harley 585, London, British Library, MS. Harley 6258 B, London, British Library, MS. Cotton Vitellius C. III, and Oxford, Bodleian Library, MS. Hatton 76.

5 *Leechbook III,* in Stephen Pollington, *Leechcraft: Early English Charms, Plantlore and Healing* (Ely, Anglo-Saxon Books, 2000), pp. 394-7.

6 *Bald's Leechbook I,* chs. 40, 64 and 65, in Doyle, 'Anglo-Saxon Medicine and Disease'*,* II.
7 *Leechbook III*, pp. 397-401. *Ælfādl* (elf disease) is a term apparently for any ailment caused by an elf, whilst *wæterælfadl* ('water elf disease') may be a skin disorder or wound (Alaric Hall, *Elves in Anglo-Saxon England; Matters of Belief, Health, Gender and Identity* (Woodbridge: Boydell Press, 2007), pp. 105-7). *Wid dweorg* appears to mean disturbed sleep with fever (Conan Doyle, '*Dweorg* in Old English: Aspects of Disease Terminology', *Quaestio Insularis,* 9 (2009), p. 99).
8 *Bald's Leechbook I*, ch. 88; *Bald's Leechbook II*, ch. 60; *Lacnunga,* in Pollington, *Leechcraft,* p. 229.
9 *Lacnunga,* pp. 210-1
10 Cameron, *Anglo-Saxon Medicine,* pp. 32, 101.
11 Cockayne, *Leechdoms,* I, pp. 361, 365.
12 Van Arsdall, *Medieval Herbal Remedies,* chs. 70, 74.
13 *Lacnunga*, p. 191.
14 *Bald's Leechbook I,* ch. 86.
15 *Bald's Leechbook I,* chs. 35, 13.
16 *Bald's Leechbook II,* ch, 17.
17 Meaney, 'The Anglo-Saxon View of the Causes of Illness', pp. 12-33.
18 The *Lacnunga* and *Leechbook III* make no clear mention of humours, only the four qualities of heat, cold, dryness and moisture. The other vernacular texts use the term *wæta* amongst other possible words relating to humours (Lois Ayoub, 'Old English *wæta* and the Medical Theory of the Humours', *The Journal of English and Germanic Philology*, 94 (1995), pp. 341-4).
19 *Lacnunga*, p. 211. A belief in elves and their connection with illness in England came from Germanic ideas pre-dating the advent of Christianity, but subsequently incorporated into the Christian world view as a kind of demon. They were associated with Satan as early as the late eighth/early ninth century in the Royal Prayerbook BL, MS Royal 2 A.XX, fol. 45v (Peter Dendle, *Demon Possession in Anglo-Saxon England* (Kalamazoo, Medieval Institute Publications, 2014) p. 126, note 56). They attracted similar treatments to demons in the medical literature (Emily Kesling, *Medical Texts in Anglo-Saxon Literary Culture* (Cambridge, D.S. Brewer, 2020), pp. 74-6 and 81-3).
20 Stanley B. Greenfield, *A Critical History of Old English Literature* (New York, 1965), pp. 61-2, cited in Cameron *Anglo-Saxon Medicine,* p. 3.
21 Grattan and Singer, *Anglo-Saxon Magic and Medicine,* p. 92

22 E.g. Barbara Brennessel, Michael D. C. Drout and Robyn Gravel, 'A reassessment of the efficacy of Anglo-Saxon medicine', *Anglo-Saxon England*, 34 (2005), p. 195.

23 Riddle, 'Theory and Practice in medieval medicine', p. 165; Cameron, *Anglo-Saxon Medicine,* ch. 12. Indeed, tests of an eye-salve from *Bald's Leechbook* have shown some promising antimicrobial properties.

24 Bede, *The Ecclesiastical History of the English People,* ed. by Judith McClure and Roger Collins (Oxford: Oxford University Press, 2008), pp. 172, 239; Michael Lapidge, 'The School of Theodore and Hadrian' *Anglo-Saxon England,* 15 (1986), pp. 50-3.

25 Letter 114 in M. Tangl, *Die Briefe des heiligen Bonifatius und Lullus, Monumenta Germaniae Hdendistoria, Epistolae selectae* (Berlin: Weidman, 1916) translated and cited in *Medieval Medicine: A Reader,* ed. by Faith Wallis (Toronto: University of Toronto Press, 2010), pp. 110-1.

26 Colophon to *Bald's Leechbook*, translation by Wright cited in Cameron, *Anglo-Saxon Medicine*, p. 20.

27 Cameron, *Anglo-Saxon Medicine,* pp. 68-72; M. L. Cameron, 'Bald's *Leechbook*: its sources and their use in its compilation', *Anglo-Saxon England,* 12 (1983), pp. 162-4; M. L. Cameron, 'The sources of medical knowledge in Anglo-Saxon England', *Anglo-Saxon England,* 11(1982), pp. 135-52; Maria Amalia D'Aronca, 'How 'English' is Anglo-Saxon Medicine? The Latin Sources for Anglo-Saxon medical texts' in *Britannia Latina: Latin in the Culture of Great Britain from the Middle Ages to the Twentieth Century,* ed. by Charles Burnett, and Nicholas Mann (London and Turin: Warburg Institute Colloquia 8, 2005), p. 32.

28 Cameron, *Anglo-Saxon Medicine,* p. 148.

29 D'Aronca, 'How 'English' is Anglo-Saxon Medicine?', p. 32.

30 We only have good evidence for the circulation of the *Herbarium,* furthermore we cannot be sure how similar extant versions of these texts are to those which were available in England during this period, or whether the works were known in their entirety. Opinions vary, see Leslie Lockett, *Anglo-Saxon Psychologies in the Vernacular and Latin Traditions* (Toronto: University of Toronto Press, 2011), p. 441.

31 James T. McIlwain, 'Brain and Mind in Anglo-Saxon Medicine', *Viator,* 37 (2006), pp. 103-12; James T. McIlwain, 'Theory and Practice in the Anglo-Saxon Leechbooks: The case of paralysis', *Viator,* 39 (2008), pp. 65-73.

32 *Lacnunga*, pp. 236-7; Pettit, *The Anglo-Saxon Lacnunga,* pp. 117-9; *Bald's Leechbook II*, ch. 27.

33 Van Arsdall, *Medieval Herbal Remedies*, ch. 132, (Pollington, *Leechcraft*, pp. 344-5), also described as 'possession by devils'; *Leechbook III*, ch. 64, pp 400-1 and ch. 41, pp. 392-3; *Bald's Leechbook I*, ch. 66.

34 Van Arsdall, *Medieval Herbal Remedies*, ch. 91, (Pollington, p. 324). Pollington translates *weden heorte* as frenzy (pp. 402-3); Doyle, *Anglo-Saxon Medicine and Disease,* translates *weden heorte* as frenzy or mania (pp. 142 and 16).
35 *Leechbook III,* ch. 40, pp. 390-1; Van Arsdall, *Medieval Herbal Remedies,* ch. 10, (Pollington, *Leechcraft*, pp. 288-9).
36 E.g., *Bald's Leechbook I*, ch. 63; Van Arsdall, *Medieval Herbal Remedies,* ch. 61, (Pollington, *Leechcraft,* pp. 312-3).
37 *Bald's Leechbook II*, ch. 64; Sextus Placitus, *Medicina de Quadrupedibus* in Cockayne, *Leechdoms*, I, pp. 361 and 365; Van Arsdall, *Medieval Herbal Remedies,* chs. 179 and 20, (Pollington, *Leechcraft,* pp. 368-9 and 294-5).
38 Van Arsdall, *Medieval Herbal Remedies,* ch. 54; *Bald's Leechbook I,* chs. 82, 64, 80 and 85.
39 *Bald's Leechbook I*, ch. 1. *Leechbook I, Leechbook III* and the *Lacnunga* are roughly head to toe, *Leechbook II* covers internal disorders not including the head.
40 Leslie Lockett, 'The Limited Role of the Brain in Mental and Emotional Experience According to Anglo-Saxon Medical Learning' in *Anglo-Saxon Emotions: Reading the Heart in Old English Literature, Language, and Culture*, ed. by Alice Jorgensen, Frances McCormack and Jonathon Wilcox (Aldershot: Ashgate, 2015), pp. 35-51.
41 Lockett, *Anglo-Saxon Psychologies*, Introduction.
42 *Bald's Leechbook II,* ch. 27; Lockett, *Anglo-Saxon Psychologies,* p. 442; Lockett, 'The Limited Role of the Brain', pp. 47-51.
43 *Leechbook III*, ch. 67, pp. 402-3; *Bald's Leechbook I*, ch. 63; Van Arsdall, *Medieval Herbal Remedies*, ch. 179, (Pollington, *Leechcraft,* pp. 368-9); *Bald's Leechbook II*, ch. 1; *Leechbook III*, ch. 64, pp. 400-1; *Lacnunga*, pp. 188-9.
44 *Leechbook III,* ch. 61, pp. 396-7, ch. 41, pp. 392-3, ch. 54, pp. 394-5.
45 *Bald's Leechbook II,* ch. 63, p. 141.
46 Devil sickness seems to be the same as insanity in the *Herbarium,* Van Arsdall, *Medieval Herbal Remedies*, ch. 132, (Pollington, *Leechcraft,* p. 344). Sometimes *feonda adl* (fiend-sickness) and the word *ylfige* (elfish) translate terms for convulsions or epilepsy in the original Latin sources (Meaney, 'The Anglo-Saxon View of the Causes of Illness', p. 17).
47 Meaney, 'The Anglo-Saxon View of the Causes of Illness', p. 17.
48 Peter N. Singer, 'Classification, explanation and experience: Mental disorder in Graeco-Roman antiquity' in *Systems of Classification in Premodern Medical Cultures: Sickness, Health and Local Epistemologies,* ed. by U. Steinart (London: Routledge, 2021), pp. 286 and 291.

49 'In principio causae salutis suae desperatione primo proponentes mortis desiderium frequenter coguntur in lacrimas, et deserta loca potius appetentes hominum incipiunt vitare consortia... Circa praecordia vero de assidua inflatione queruntur, et cum sudore totius corporis inportuno frigidos articulos saepissime patiuntur. Privari se ob hoc etiam viribus naturalibus asseverant. Indigestione frequenter stomachi fatigantur, ructus suos varios et insuaves perhorrescunt. Color eorum nigrior fiet, et interiorum viscerum frequentius doloribus attemptantur', Theodorus Priscianus, *Theodori Prisciani Euporiston Libri III cum physicorum fragmento et additamentis pseudo-Theodoreis*, ed. by Valentino Rose, (Leipzig: Teubneri, 1894), ch. 18, p. 152.

50 Gariopontus, *Galeni pergameni passionarius doctis medicis multum desideratus, egritudines a capite ad pedes usos complectens : in quinquos libros particulares divisus* (London: Antonius Blanchardus, 1526), Book 1, ch. 8.

51 *Ibid*, Book 1, ch. 11.

52 McIlwain, 'Brain and Mind', p. 111.

53 Oribasius, *Œuvres d'Oribase,* ed. by Ulco Cats Bussemaker and Charles Daremberg, 6 vols (Paris: L'Imprimerie Nationale, 1856-76), VI, p. 204

54 Isidore of Seville, *The Etymologies of Isidore of Seville*, ed. and trans. by Stephen A. Barney, W. J. Lewis, J.A. Beach and Oliver Berghof (Cambridge: Cambridge University Press, 2006), p. 111.

55 McIlwain, 'Brain and Mind', pp. 103-12.

56 *Ibid*, pp. 105-6. Cepholocentric views were also available in highly educated circles, part of the Platonic view of the tripartite soul, and expounded in the preaching of Aelfric (c.950-1010); M. R. Godden, 'Anglo-Saxons on the mind' in *Learning and Literature in Anglo-Saxon England: Studies presented to Peter Clemoes* ed. by Michael Lapidge and Helmut Gneuss (Cambridge: Cambridge University Press, 1985), p. 290; *Ælfric's Catholic Homilies: The First Series* ed. by Peter Clemoes (London, 1997), cited in McIlwain, 'Brain and Mind', p. 104.

57 Lockett, 'The Limited Role of the Brain', p. 42.

58 *Ibid*, pp. 39-44.

59 *Bald's Leechbook II*, ch. 30. Hemiplegia is paralysis or weakness of one side of the body following a stroke, or in medieval terms, apoplexy.

60 *Ibid*, ch. 59, p. 308.

61 *Ibid,* ch. 1, pp. 174-5.

62 Cameron wrote that the Anglo-Saxons paid 'only lip-service' to the humoral theory underpinning the Latin sources (Cameron, *Anglo-Saxon Medicine,* p. 161). See Doyle, 'Anglo-Saxon Medicine and Disease', I, p. 195.

63 *Ibid*, ch. 27, p. 237.

64 *Ibid,* pp. 248, 308, 174-5 and 237.
65 *Leechbook III,* pp. 376-7 and 392-3.
66 Christopher. Pell, "*Him Bid Sona Sel*'; Psychiatry in the Anglo-Saxon Leechbooks', *History of Psychiatry*, 22 (4), pp. 434-447 and 439.
67 *Bald's Leechbook I*, ch. 66; *Bald's Leechbook II,* ch. 65.
68 Bede, *Ecclesiastical History of the English People,* pp. 126-8.
69 See note 19.
70 *Leechbook III*, pp 396-7. Alaric Hall has made a linguistic study of the words used in these texts relating to *aelfe*. Hall, *Elves in Anglo-Saxon England,* chs. 4 and 5.
71 *Ibid,* pp. 155-6, 129.
72 *Bald's Leechbook I*, ch. 64; *Leechbook III*, pp. 376-7 *Mascra* seems to be *malstrunag* (bewitchment), (Meaney, 'The Anglo-Saxon View of the Causes of Illness', p. 21).
73 S. Zavoti, 'Blame it on the Elves – Perception of Sickness in Anglo-Saxon England' Conference Presentation, June 2012, SAMEMES, Lausanne; Jean-Claude Schmitt, *The Holy Greyhound: Guinefort, Healer of Children since the Thirteenth Century* (Cambridge: Cambridge University Press, 1983), cited in Hall, *Elves in Anglo-Saxon England,* p. 168.
74 E.g. Oribasius on frenzy and lethargy, Oribasius, *Œuvres d'Oribase*, VI, pp. 203-5, and Alexander on melancholy, Alexander Trallianus *Medici libri duodecim* (London: Antonium Vincentum, 1560), Book 1, ch. 16, digitised copy at https://archive.org/details/alexandertralli00tralgoog [accessed 19/4/23].
75 Isidore, *Etymologies,* pp. 321-343 and 110-2.
76 *Ibid,* p. 111.
77 Alexander Trallianus, *Medici libri duodecim*, Book 1, ch. 14; Gariopontus, *Galeni pergameni passionarius,* Book 5, ch. 19.
78 Isidore, *Etymologies,* p. 111; Vindicianus, *Epitome Altera* in *Theodori Prisciani Euporiston Libri III,* p. 468.
79 For example, Cassius Felix gave black bile and phlegm in the nerves, or fumes arising in the stomach as the cause. Cassius Felix, *De Medicina*: *ex Graecis Logicae Sectae Auctoribus Liber Translatus sub Artabure et Calepio Consulibus (anno 447)*, ed. by Valentino Rose (Leipzig: Teubneri, 1879), p. 169.
80 Isidore, *Etymologies,* p. 111.
81 Oribasius, *Œuvres d'Oribase*, VI, p. 205. Sleep paralysis can be very frightening, sometimes involving hallucinations.
82 Unfortunately, our only full copies of the *Petrocellus* date from the first half of the twelfth century and we cannot be sure that this was in earlier versions of the *Tereoperica* source.

83 Van Arsdall, *Medieval Herbal Remedies,* chs. 66, 127, and 96, (Pollington, *Leechcraft*, pp. 314-5, 324-5 and 328-9).
84 *Bald's Leechbook I,* ch. 66..
85 Cockayne, *Leechdoms*, I, pp. 359, 365, 361.
86 Van Arsdall, *Medieval Herbal Remedies*, ch. 61.
87 *Ibid*, p. 227.
88 Sextus Placitus, in Cockayne, *Leechdoms*, I, pp. 350-1
89 *Leechbook III*, p. 403.
90 *Bald's Leechbook I,* ch. 63.
91 *Lacnunga*, pp. 188-9.
92 For example, St Wulfstan healed three cases of madness necessitating restraint. William of Malmesbury, *Saints' Lives: Lives of SS. Wulfstan, Dunstan, Patrick, Benignus and Indract*, ed. and trans. by M. Winterbottom and R.M. Thomson (Oxford: Clarendon Press, 2002), pp. 69-75.
93 *Leechbook III,* pp. 390-1.
94 *Bald's Leechbook I*, ch. 59; *Bald's Leechbook II,* ch. 59.
95 *Bald's Leechbook I,* ch. 66.
96 Cameron, *Anglo-Saxon Medicine,* p. 21; *Bald's Leechbook I*, ch. 35.
97 Cassius Felix, *De Medicina,* ch. 71, p. 171
98 *Ibid*, ch. 71, p. 172, author's translation.
99 Oribasius, *Œuvres d'Oribase*, VI, p. 202.
100 Alexander Trallianus, *Medici libri duodecim*, Book 1, ch. 16, pp. 129-30.
101 *Ibid*, Book 1, ch. 16, p. 124.
102 *Ibid*, Book 1, ch. 16, pp. 128-9.
103 Oribasius, *Œuvres d'Oribase*, VI, pp. 215-6.
104 *Petrocellus*, London, British Library, MS Harley 4977, fols. 60v-61r; Gariopontus, *Galeni pergameni passionarius,* Book 1, ch. 10.
105 Oribasius, *Œuvres d'Oribase*, VI, p. 204; Theodorus Priscianus, *Euporiston,* p. 109.
106 Pliny the Elder, *Natural History,* trans. by W. H. S. Jones (Cambridge, MA: Harvard University Press, (Loeb Classical Library), 2014), Book 30.
107 Pliny, *Natural History,* Book 30, ch. 27, Book 32, ch. 14, Book 28, chs. 17 and 2.
108 Cassius Felix, *De Medicina*, p. 172.
109 Cambridge, Cambridge University Library, MS Peterhouse 251, fol. 172v; Gariopontus, *Galeni pergameni passionarius*, Book 5, ch. 17.

110 Nancy G. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice*. (Chicago and London: University of Chicago Press, 1990), p. xi.

111 Karen Louise Jolly, *Popular Religion in Late Saxon England: Elf Charms in Context* (University of North Carolina Press, 1996), p. 104.

112 Grattan and Singer, *Anglo-Saxon Magic,* pp. 92-4.

113 Alexander Trallianus, *Medici libri duodecim*, Book 1, ch. 16, pp. 129-30; *Bald's Leechbook I*, ch. 63. Evidence for therapeutic benefits of the herbs used is given in Pell, '*Him Bid Sona Sel',* pp. 442–5.

114 Pell, '*Him Bid Sona Sel'*, pp. 440-2.

115 Peregrine Horden, 'What's Wrong with Early Medieval Medicine?', *Social History of Medicine,* 24 (2011), p. 20.