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# *LEECH, MEDICO, PISS-PROPHET, WATEROLOGER* OR *007*: WAYS OF NAMING MEDICAL DOCTORS IN THE HISTORY OF ENGLISH

The present paper examines references to medical doctors in the history of English. Particular attention will be given to less formal expressions to trace the changing attitudes towards those involved in the healing art. Also, we will take a look at different ways of forming the terms under scrutiny, including the most productive word building processes (e.g. derivation, compounding, abbreviation) and formations characteristic of non-standard medical vocabularies. The study is based on the lexical material collected from dictionaries (the *Historical Thesaurus of English* (HTE), *Thesaurus of Old English* (TOE), *Bosworth Toller's Anglo-Saxon Dictionary* (B-T), *Middle English Dictionary* (MED), *Oxford English Dictionary* (OED), and *Green's Dictionary of Slang* (GDS)).

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## 1. Introduction and aims

English medical lexicon and its development have attracted various degrees of attention. Much scholarly work provides in-depth terminological studies from a historical perspective. For instance, Norri (1992, 1998, 2004) presented linguistic analyses of the names of sicknesses and body parts recorded in medical texts written in the 15th and 16th centuries. In addition, Norri (1991) discussed Middle English names of chemical substances used in preparing medicines. About three decades later, the latter lexical field was further explored by Cruz-Cabanillas and Diego-Rodriguez (2021)[1]. Other studies on early English medical word-stock were undertaken by, among others, Sylwanowicz, who (1) examined

[1] There is also a study by Grund (2013), who explores the entries of alchemical vocabulary in MED. Although alchemy was mostly associated with astrology or astronomy, there are medieval

the medieval terminology of mental diseases (2006, 2007), with the main focus on two terms: *madness* and *insanity*, (2) presented a preliminary survey of the names of medieval surgical instruments (2011), scrutinized the semantic development of the early English names of medical practitioners (*leech, doctor, physician*)[2] and of the medieval synonyms of *sickness*-nouns (2003, 2014). Later, she turned her attention to the names of pharmaceutical preparations in Middle and Early Modern English (2015, 2018) and to the earliest references to pharmacists (2021). Another scholar, Esteve Ramos (2008), investigated the evolution of the lexicon of ophthalmology. Early English medical works abound in herbal remedies and there are also works that deal with the names of plants (e.g. Hunt 1989; Wallner 1992; Norri 1996; Sauer 1996, 2011). Some studies, apart from examining the provenance and textual distribution of the terms under study, concentrated primarily on the question of compounding and derivation as productive processes in medical English (e.g. Crespo 2011). The brief survey of the works that deal with the early development of medical terminologies shows that there is still much to be done and many areas of medical vocabulary to be explored.

As regards the works on modern English medical lexicon, a large number of the contributions are handbooks designed to acquaint medical students, researchers, teachers, historians, and healthcare marketing specialists with medical terminology and help them to understand it. Many of these works are written by medical practitioners whose choice of the material is often unsystematic and whose style of writing is journalistic rather than academic. They simply take the readers for a trip through the history of medical English language to present a sampling of the most characteristic, fascinating or intriguing (for them) examples of the medical lexicon (e.g. Dirckx 1983; Gerald 2013).

Other works manifest a more scholarly approach to the analysed material. This has resulted in a number of studies exploring, among other things, word-formation processes used in creating medical terms (Maglie 2009; Džuganová 2013; ten Hacken and Panocová 2015; Kleparski and Mosior 2020). The authors of these publications highlight the fact that "in medical language, word formation is particularly prominent because there is a steady growth in the number of concepts that need to be named." (ten Hacken and Panocová 2015: 14). The main and most productive processes, as singled out and discussed in the literature of the subject, are derivation (e.g. *myocardium*, *cytology*), compounding (e.g. *heart*

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alchemical texts that "claim medical applications of their procedures" and some medical texts of that period include fragments concerning the transmutation of metals (Grund 2013: 582-583).

[2] The findings concerning the development of these three references to early English medical practitioners were later verified and confirmed by Gajek (2020), who concentrated on the distribution of these terms in non-medical prose texts.

*attack, collar-bone, whiplash*), forming of multi-word phrases (e.g. *Acquired Immune Deficiency Syndrome*, *Severe Acute Respiratory Syndrome*), and shortened forms (especially initialisms and acronyms), which are becoming increasingly popular in medical English (e.g. *AIDS, SARS, DNA* 'deoxyribonucleic acid', *TMD* 'temporomandibular disorder', *CSD* 'cervical spine dysfunction'). To the less productive processes belong: conversion (*blind > to blind, position – to position*), back-formation (*paramedical > paramedic, euthanasia > to euthanize*) and clipping (*flu < influenza, polio < poliomyelitis*) (Džuganová 2013: 58-59).

Naming needs can also be fulfilled in other ways, such as sense extension (*cell* 'a dwelling consisting of a single chamber inhabited by a hermit or anchorite' –> 'a small unit of the body', OED *cell* n.) or borrowing (Lat. *femur*, *mandible*, Gk. *diabetes*, *ophthalmia*, Fr. *cartilage*, *physician*). There are many words and phrases that refer to medical issues in a figurative way, e.g. culinary metaphors (*port wine stain, cauliflower ear, sausage digit, coffee bean nuclei, doughnut cell, popcorn cell, sandwich sign lymphoma, pancake brain)* are, among others, frequently found in medical discourse (Karska and Prażmo 2017; Masukume 2016; Milam et al. 2015). There is also a group of terms represented by eponyms (*Addison's disease* (after a physician), *Christmas disease* (after a patient, Stephen Christmas[3]), toponyms (*Bornholm disease, Lyme disease*), or mythonyms (*Achilles tendon, gigantism*)).

Many recent publications have focused on formations characteristic of non-standard medical vocabularies, often referred to as medical slang (e.g. *dyscopia* 'a patient who fails to cooperate', *whale* 'an obese patient', *road pizza* 'an injured patient', *UFO* 'unidentified frozen object; referring to a homeless patient', *PITA* 'pain in the ass', *humpty-dumpty doctor* 'physiotherapist', *stream team* 'urologists', *big C* 'cancer', *bug juice* 'treatment with antibiotics', etc.). The overview of works focusing on such terms has revealed that only few studies (e.g. Dirckx 2004; Kleparski and Mosior 2020) provide a thorough examination of the patterns used in the formation of such terms. Instead, most publications concentrate on psychological, ethical or legal issues concerning the use of medical slang (e.g. Fox et al. 2003; Goldman 2014).

The aim of the present study is to examine the references to medical doctors, i.e. specialists in general medicine, in the history of English. Particular attention will be given to different ways of forming the terms under scrutiny. Also, we will attempt to trace the changing attitudes towards those involved in the healing art.

[3] Stephen Christmas (1947-1993), British-born Canadian photographer, was the first person in whom the disorder (a type of haemophilia) was definitively identified (OED, *Christmas disease* n.).

## 2. Data and methodology

In order to establish the list of lexemes referring to medical doctors, a number of lexicographical works were consulted, chiefly: the *Historical Thesaurus of English* (HTE), the *Thesaurus of Old English* (TOE), *Bosworth Toller's Anglo-Saxon Dictionary* (B-T), *Middle English Dictionary* (MED), *Oxford English Dictionary* (OED), and *Green's Dictionary of Slang* (GDS)[4]. In the HTE the references to medical practitioners are listed in the category *healer*, which are further grouped under ten noun categories: *physician*, *surgeon*, *one skilled in obstetrics or midwifery*, *specialist*, *general practitioner*, *health officer*, *medical student*, *alternative practitioner*, *paramedic*, and *nurse*. Since the aim of the present study is to concentrate on general references to medical doctors, only 116 items from the first group, *physician*, were selected. This list was supplemented by six OE items (*hēahlǣce*, *lācnystre*, *lǽce*, *riht-lǽce*, *unlǣce*, *woruldlǣce*) found in the B-T and TOE with the sense 'physician, one who heals', which are not listed in the HTE. Three more items were identified in the OED, i.e. *butcher*, *mountebank* and *urine-caster.* Although originally applied to 'a person whose trade is the preparation and selling the meat', *butcher* developed a figurative sense for a physican 'who is incompetent or too readily inclined to operate on patients' (OED, *butcher* n.). *Mountebank* is not explicitly defined by the OED as a reference for a *physician*, but the quotations in which this term is recorded reveal that the noun was a depreciative label for anybody offering healing services (cf. quotation 5 in section 3.5 in this paper). As regards *urine-caster*, it does not have a separate entry in the OED, but is listed in the quotations for *urine* meaning 'urine-monger', a physician 'who diagnoses diseases by inspection of the urine'. In addition, MED lists *phisike*, *idiote*, and *mortherer*. The first is defined, among other things, as 'physician', whereas the remaining two items are identified with figurative senses for incompetent medical practitioners. Finally, the list of nouns under scrutiny was completed by 21 examples found in GDS, and not recorded in other lexicographical sources. These include less formal and often pejorative references to physicians: *pill-driver*, *bolus monger*, *crocus-pitcher*, *pill-box*, *knight of the pisspot*, *pill-masher*, *corpse provider*, *cow-killer*, *bone-juggler*, *body-snatcher*, *stir croaker*, *med-man*, *cross-bones*, *Ford*, *needle puncher*, *needle man*, *bond-aid*, *007*, *dr Death*, *king's proctor*, *gumble and proctor*. The next step was to read through publications on medical lexicon in order to look for items that might not be present in

[4] The *Dictionary of Medical Vocabulary in English* 1375-1550 by Norri (2016) is not considered in this study because, as stated in the introduction to the dictionary, the vocabulary of only four lexical fields is included, namely terms for body parts, sicknesses, instruments, and medicinal preparations (Norri 2016: 2). Thus, no references to medical practitioners are listed in the dictionary.

dictionaries. These sources include (1) articles or books whose authors (mostly medical doctors) aimed, among other things, to reveal the secret code of doctors used in the hospital environment (Shem 1978; Huskill and Jackson 1961; Fox et al. 2003; Goldman 2014; Hodgets et al. 2021), and (2) scholarly studies that (i) list lexemes of medical slang and group them semantically, (ii) discuss the use of figurative speech in medical discourse, or (iii) present a preliminary examination of the processes that have contributed to the formation of medical slang terms (Dirckx 2004; Stoianova 2007; Tajer 2012; Džuganová 2013; Baker 2014; Gyuró 2017; Karska and Pražmo 2017; Toupin 2018; Kleparski and Mosior 2020). None of these sources included new items that could supplement the list of general references to medical doctors.

The collecting of lexemes for this study resulted in a body of material consisting of 149 items (see Table 1 below).

Table 1: References to medical doctors in the history of English[5]

| hēahlǣce OE | medicinary 1599 | loblolly doctor 1710 | pill-masher 1891 & 1894 |
|---|---|---|---|
| lācnystre OE | body-curer 1602- | wizard 1746- | resident 1892- |
| læce OE - | medicastra 1602- | bolus monger 1750 | corpse provider 1893 |
| riht-læce OE | velvet-cap 1602- | house physician 1753- | internist 1894- |
| unlǣce OE | water-caster 1603- | butcher 1759- | cow-killer 1899 |
| woruldlǣce OE | doctrix 1604- | urine 1763 | bone-juggler 1901 |
| physician c1225- | healer 1611- | urine-caster 1763 | pill-shooter 1911 |
| lechere c1374 & 1887 | Galen a1616- | water doctor 1763- | whitecoat 1911- |
| practicer c1387-1890 | physiner 1616 | medical man 1784- | body-snatcher 1914 |
| phisike 1393-1475 | clyster 1621 | crocus 1785- | medical officer 1916- |
| botener a1400 | treacle-carrier 1621- | doctorer 1804- | M.O 1916- |
| doctor a1400- | clyster-pipe 1622-1672 | meester 1812- | stir croaker 1921-1953 |
| flesh-leech a1400 | hakim 1623- | Sangrado 1812- | vet 1925- |
| idiote 1400–1475 | water-monger 1623- | urine-doctor 1815 | right croaker 1929-1959 |
| mortherer c1400 | medic 1625- | dukun 1817- | med-man 1931 & 1943 |

[5] Items shaded with grey colour are examples of less respectful, often negative references to medical practitioners. These items are discussed in more detail in section 3.5.

Table 1. cont.

| | | | |
|---|---|---|---|
| Doctor of Physic c1405- | piss-prophet 1625- | medical examiner 1820- | cross-bones 1933 |
| mediciner a1425- | urine-monger 1625 | medical 1823- | prick farrier 1961- |
| miri a1425 | practicant 1630- | pill-gilder 1824-1896 | Ford 1968 & 2000 |
| M.D. 1425- | quack 1638- | therapeutist 1830- | needle puncher 1965-1970 |
| experimentator a1425- | medicaster 1639- | sangrador 1832- | needle man 1965 & 2002 |
| medicine c1450-1632 | doctoress 1641- | pill 1835- | feel-good 1972- |
| guarisher 1474 | medico 1647- | registrar 1836- | dr Feelgood 1973- |
| leechman 1483- | physicker 1649- | pill-roller 1843- | ressie 1982- |
| dogleech 1529-1874 | urinal monger 1650-1763 | empiricist 1844- | bond-aid 1982 |
| woman physician 1533- | stercorarian 1651 | bomoh 1851- | 007 1987- |
| practitioner 1543- | amethodist 1654-1844 | med 1851- | dr Death 1990- |
| minister 1559-1580 | urine-prophet 1654 | pill-peddler 1855 | king's proctor 1992- |
| empiric 1562- | waterologer 1654-1807 | therapeutic 1858 | health provider 1995- |
| doc 1563- | physicianess 1662- | squirt 1859 | gumble and proctor 1998- |
| artist 1565-1800 | quack doctor 1670- | croaker 1859- | |
| mountebank 1566- | stage doctor 1671- | urine-inspector 1863 | |
| medicus 1570- | examiner 1672- | medicine man 1866 | |
| doctress 1577- | charlatan 1680- | consultant 1878 | |
| medicianer a1578-1634 | lady doctor 1684- | health worker 1878 | |
| quacksalver 1579- | physicster 1689 | pill pusher 1879 | |
| Aesculapius 1586- | Aesculapian 1694- | crocus-pitcher 1882-1934 | |
| Dr a1593- | pill-driver 1706-1923 | pill-box 1882-1917 | |
| pisspot 1592 | pill-monger 1706- | therapist 1886- | |
| medician 1597 | treacle-conner 1706 | doser 1888 | |
| physicianer 1598-1836 | quackster 1709- | knight of the pisspot 1890-1904 | |

The items included in Table 1 are listed chronologically (as given by the dictionaries used for the present study). In some cases the dates indicate the first and the last record of the item with the sense 'medical doctor', in the case of one date only, a given noun has only one record in the quotation provided by the dictionaries. If the lexeme is still used in the sense 'medical doctor' then the date is followed by a hyphen (-).

The majority of the lexemes (127 items) is represented by (i) simplex[6] terms, (ii) derivatives (iii), and compounds. The remaining 22 lexemes were formed in other ways (e.g. clipping, conversion, abbreviation), and these are grouped as (iv) other formations. The percentages representing each group are shown in Figure 1 below.

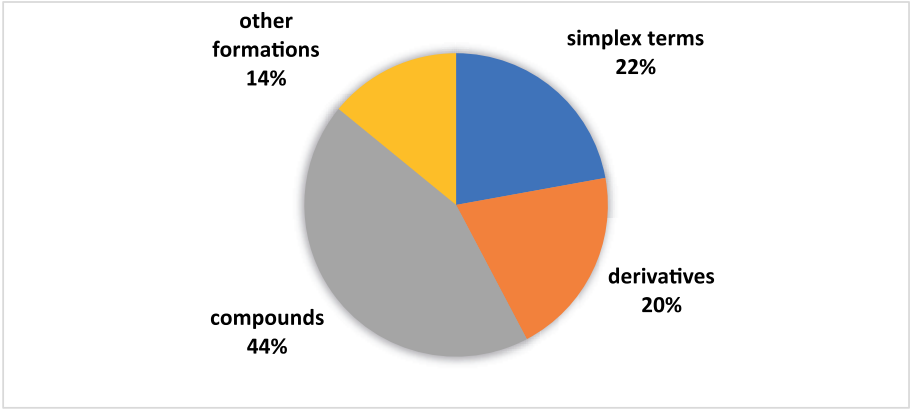


Figure 1: The ratio of examined word-formations

For practical reasons, to enhance the clarity and quality of the following analysis, we will start with the discussion of each group of items in separate sections. Later, we will also concentrate on answering the question whether the lexemes reveal how the attitudes towards medical practitioners have been changing throughout the centuries.

## 3. Discussion and data presentation

### 3.1. Simplex terms

This group of terms is represented by 33 items, of which only one is of Anglo-Saxon provenance (OE *lǽce*). The majority (24 items) come from either French or Latin, whereas the remaining eight terms entered English via Italian or

[6] The term *simplex* is adopted after Bauer (1983: 29-30), who uses it with reference to expressions not divisible into smaller parts (cf. also Norri 1992: 90, Sylwanowicz 2018: 26-27).

Spanish (*medico*, *mountebank*, *sangrado*), Dutch (*quacksalver*, *meester*), Persian (*hakim*), Malay (*bomoh*), Javanese (*dukun*). Many of the borrowed terms (15 items) did not enter English with the sense 'healer, medical doctor'. With time they developed a figurative sense to denote medical practitioners that were, for instance, incompetent (*butcher, charlatan, clyster, idiote, medicaster*, *medicastra, mountebank, squirt, quacksalver*) or highly skilled (*artist, consultant, empiric, experimentator, examiner, meester*).

### 3.2. Derivatives

This section comprises 31 nouns, of which 24 (77%) items are recorded in the primary sense 'one involved in the healing practice/medical doctor', e.g. *amethodist*, *botener, doctorer, doctoress, doctress, empiricist, guarisher, healer, lacnistre, lechere, medician, medicianer, medicinary, mediciner, physicianer, physicianess, physicker, physicster, practicer, practitioner*, *therapeutist, therapist, unlæce*, etc. The remaining 7 instances (21%) consist of examples that refer to medical doctors in a figurative way, e.g. *Aesculapian, croaker, doser, mortherer*, *quackster, stercorarian, wizard*.

If we consider the structure of the examined items, only one is formed with a prefix, which denoted an unskilled physician (B-T, *un-lǽce* n.). Other examples (especially those of Germanic provenance and some hybrid formations[7]) include 21 derivatives ending with the suffixes *-er/-ar, -estre/-ster* and *-ess*. The first pair of suffixes, used to form agent nouns, is combined with either verbs (e.g. *guarisher*, *doser, registrar*) or nouns (e.g. *medicianer*, *mediciner*, *physicianer*, *practitioner*, *physicker*). The suffix *-estre/-ster* was originally combined with verbs to form feminine agent nouns as in OE *lacnistre* (*lacnian* v. + *-estre*) 'a female healer'. With time, especially from the 16th century onwards, the older forms with *-estre/-ster* lost their feminine association and the suffix is found in combinations with nouns[8] rather than verbs, as in *physicster* (*physic* n. + *-ster*), a derogative designation for a medical practitioner first recorded in the 17th century (OED, *physicster* n.), and *quackster* (*quack* n. + *-ster*) '[a] quack, a quacksalver' (OED, *quackster* n.) to denote medical charlatans, pedlars of false cures. The suffix *-ess*, on the other hand, is found in three lexemes denoting female medical practitioners (*doctress, doctoress, physicianess*).

The other derivatives include four combinations with the suffix *-ist* that is used to designate a person who practices some art, method or who devotes

[7] In this study *hybrid formations* involve "complex forms which mix elements from the native Germanic part of the vocabulary with elements from the borrowed Romance part of the vocabulary" (Dalton-Puffer 1996: 201).

[8] The OED provides the following examples: *gamester, drugster, jokester, punster, trickster, tipster*.

themselves to some science (OED, *-ist* suf.). According to the OED, this suffix was originally found with words of Greek origin (here *therapeutist* and *therapist* 'one who practices therapy, today esp. psychotherapist'), and later with words of Latin origin (here *amethodist* 'an untrained and unqualified physician; not following any method', *empiricist* 'a doctor guided by direct observation of patient's symptoms and progress in treatment'). There are examples with suffixes *-ian* (*medician*) and *-an* (*Aesculapian*, *stercorarian*), representing respectively Lat. *-ianus* and *-anus, -ana, -anum* in the sense 'belonging to'. The first derivative, *medician*, denotes a person belonging to or enaged in medical practice. *Aesculapian* is a reference to the ancient Greek god of medicine, which is a positive designation for any physician, though with time it was recorded with a humorous reference to physicians. The last item, *stercorarian*, is a derisive appellation for a physician following obsolete methods of practice (cf. *stercorary* adj. 'pertaining to dung'; and n. 'a place where manure is stored', OED *stercorary* adj. and n.). In addition, there is one form with *-ary* (*medicinary* 'a medical practitioner, doctor'), a ME suffix, originally borrowed from Lat. *-arius*, and used to form nouns referring to 'a man (or male) belonging to or engaged in sth.' (OED, - $ary_1$). The last term to consider is *wizard*, a combination of a Germanic adjective *wise* with suffix *-ard* that came to Middle English with some Old French agent forms (e.g. *bastard*, *coward*, cf. OED *-ard* suffix).

### 3.3. Compounds

This section focusses on 63 references to medical practitioners that have been recorded in the examined sources[9]. As expected, the majority (48 examples / 75%) constitute compounds with at least one item of Romance origin (37 hybrid formations and 11 combinations with two items of Romance provenance). The lexicon of medical English, from its beginnings, has been heavily influenced by Latin and French medical works, which explains a high number of compounds including Romance items, e.g. *bolus*, *clyster*, *curer*, *doctor*, *Dr*, *med*, *medical*, *medicine*, *pill*, *piss*, *treacle*, *urinal*, *urine*, all being directly or indirectly related with medicine and health care. The remaining compounds consist of 13 examples (20% of all forms) composed of native elements only (*hēahlǣce, riht-lǽce, woruldlǣce, flesh-leech, leechman, water-caster, water-monger, health worker, cow-killer, stir croaker, right croaker, feelgood, needle man*) and 2 combinations

[9] Blends (e.g. *medicastra*, *medwife*) are also included in this section. Blends have been described as shortened/clipped forms of compounds (see Lehrer 2007: 117; Miller 2014: 187) or "extra-grammatical formations which syntactically and semantically resemble appositional or copulative compounds, except that their constituents are obscured" (Mattiello 2013: 115) (after Roig-Marín 2021: 33). Marchand (1969: 451) defined blending as "compounding by means of curtailed words" (after Mattiello 2021: 6).

of a native item and a form of unknown origin (*body-snatcher*, *dogleech*). As regards the structure of the collected compounds, they are combinations in which the head noun is one of the following:

a) a general term for 'one who heals', e.g.: *flesh-leech, riht-lǽce, woruldlǽce, hēahlǽce, dogleech, body-curer, quack doctor, loblolly doctor, water doctor, woman physician, urine-doctor*;
b) a reference to a poorly qualified doctor (usually prison doctor), e.g.: *stir croaker, right croaker*;
c) a reference to 'a male person', e.g.: *leechman, med-man, medicine man*;
d) a figurative reference to 'one who heals', who is compared to or associated with for instance a: 'trader' (*urine-monger*, *water-monger, bolus monger, pill-driver, pill- monger, pill-gilder, pill-peddler, pill pusher*), 'provider' (*corpse-provider*, *health provider*, *pill shooter*), 'prophet, miracle maker, interpreter' (*piss-prophet*, *urine-prophet, water-caster, waterologer, urine-caster)*, 'vagabond, traveller' (*crocus- pitcher*), 'inspector' *(urine-inspector, treacle-conner, medical examiner)*, 'craftsman' (*pill-masher, body-snatcher, needle puncher, cow-killer*), 'instrument' (*clyster-pipe, pisspot, pill-box, velvet-cap, whitecoat*).

The modifiers mostly specify:

a) body or parts of the body (including bodily fluids), e.g.: *body-curer, bone-juggler, urine-monger, water doctor, urine-prophet*;
b) medications/drugs, e.g.: *bolus monger, pill-peddler, pill-masher, treacle-conner*;
c) qualities or features of the medical practitioner (virtues or vices), e.g.: *riht-lǽce, hēahlǽce, quack doctor, right croaker, stir croaker;*
d) instruments or utensils, e.g.: *needle puncher, needle man*.

If we consider the structural patterns of the examined items, the most common, as expected, are noun-to-noun combinations (52 instances, 84%). As explained by Widawski (2011), "given the possibility to use a noun to modify another noun, there is less need for distinctive adjectives in English." Moreover, such combinations are usually used with reference to concepts and persons (here medical practitioners) with specific characteristics. The second, but less frequent compound pattern identified in the examined material is a combination of adjective and noun (only 8 examples, 12%). The remaining lexemes are two verb-to-noun combinations (*stir croaker, cross bones*) and one verb-to-adjective item (*feel-good*).

In the group of noun-to-noun combinations we find nicknames with the following pattern: title (here abbr. for a Doctor) + an expression referring to the characteristics of the person in question, as in *Dr Death* and *Dr Feelgood*. The

first is, according to GDS, a label applied to a prison doctor in Australia (first recorded in 1990) because prisoners claimed they received "inferior medical treatment in gaol" (Tupper and Wortley 1990). The form was also applied to Dr. Jack Kevorkian, who advocated helping people to die, and to the neuro-surgeon Christopher Duntsch, whose medical malpractice resulted in patients' deaths or incurable injuries. Another item, *Dr Feelgood* is a nickname of Max Jacobson, a physician who treated many high-profile clients in America, including J.F. Kennedy. He is known for prescribing "vitamin shots" that included highly addictive substances, such as amphetamine and methamphetamine (Lertzman and Birnes 2013). This term (and its alternative form *feel-good*) is now commonly used to refer to modern doctors whose unscrupulous prescription of drugs caused their patients harm or death.

### 3.4. Other formations

Apart from simplex terms and lexemes formed by compoundig and derivation, the list of examined references to a medical practitioner consists of 12 examples of shortenings[10] and one conversion. The first group includes nine instances of clipping (back-clipping, to be more precise): *crocus* (< *crocus-man*), *doc* (< *doctor*), *med* (< *medic* or *medical*), *medicine* (< *medicine man*), *physiner* (< *physicianer*), *quack* (< *quacksalver*), *ressie* (< *resident*), *urine* (< *urine-monger*), *vet* (< *veterinary*). There are also three abbreviations *M.D.* (< *Medical Doctor*), Dr (< *Doctor*) and M.O (< *Medical Officer*). As regards the example of conversion it is represented by *medical* (adjective > noun conversion).

There are also four eponyms: *Aesculapius*, *Galen*, *Sangrado* and *Ford*. The first lexeme is, to be more precise, a mythonym (i.e. an eponym originating in mythology), as it refers back to the Greek god of medicine. Greek mythology was an inspiration for earlier physicians who came up with such names as *Achilles tendon*, *Diogenes syndrome*, *Oedipus complex* or *gigantism*. Later, since the 19th century onwards (Džuganová 2013: 63) eponyms in medicine started to be more common, as newly discovered diseases, symptoms, and anatomical parts were named after the physician-discoverer (e.g. *Fallopian tube*, *Bartholin's gland*, *Addison's disease*). *Galen* is after a celebrated 2nd century A.D. physician whose medical theories remained alive until the 17th century. He relied upon the Hippocratic *Aesclupian.* Thus, the form *Galen* was used either jocularly with

[10] In this study, the label *shortening* is understood as a form "produced in two different ways. The first is to make a new word from a syllable (rarer, two) of the original word. […] The second way … is to make a new word from the initial letters of a word group". (Soloshenko and Zavhorodniev (1998: 60) after Kleparski and Mosior 2020: 10). Thus, apart from abbreviations (here understood as initialisms) and acronyms, also clipped forms are included in the discussion of shortenings.

reference to physicians or served as a critical comment about those who resorted to humoral theory rather than to the latest discoveries in medical treatment. The next term, *Sangrado,* comes from the name of a character in the French novel *Gil Blas by* Alain René Lesage. Doctor Sangrado's "sole remedies were bleeding and the drinking of hot water" (OED, *Sangrado* n.). As regards *Ford/ford* 'any generally antagonistic or unhelpful doctor', the term is after a Ford car, which was perceived as inferior. Hence it became a backronym for 'found on run dead' (GDS, *ford* n.).

The group of items discussed in this section includes also two combinations with the head noun followed by an *of*-phrase (*Doctor of Physic* and *knight of the pisspot*). The first was a degree awarded by the faculty of medicine. *Knight of the pisspot*, on the other hand, is a negative term which suggests that a practitioner relies on on-the-spot guesses concerning patient's condition.[11] Interestingly, the use of the form *knight* in such labels was very common in slang of the 16th and 18th centuries. As pointed out by Green (2011: 50), it "was common to elevate an ordinary person or criminal practising a distinctly ignoble occupation by awarding them the chivalric honour of knighthood".[12]

In addition, there is an example of a numeronym[13] *007*, inspired by a well-known fictional British Secret Service agent, and used with reference to 'a doctor with a license to kill', i.e. an incompetent or very bad doctor whose patients usually have a habit of dying.

Interestingly, there are also two constructions (*king's proctor*, *gumble and proctor*) typical for rhyming slang, i.e. a "variety of (originally Cockney) slang in which a word is replaced by words or a phrase rhyming with it" (OED, *rhyming slang* n.).

### 3.5. The changing attitudes towards doctors

This section concentrates on answering the question if the examined lexemes reflect the attitudes towards medical doctors in the history of English. The nouns under scrutiny can be divided into neutral and negatively loaded terms. The first consists of 87 items which, according to the lexicographical sources consulted for the present study, are recorded with the sense 'medical doctor, one who

[11] This is an allusion to the earlier practice of detecting disease by merely examining patients' urine (by judging its colour, smell or taste) (Porter 2001).

[12] Green (2011) lists, among others, the following names: *knight of the cleaver* 'butcher', *knight of the grammar* 'teacher', *knight of the napkin* 'waiter', *knight of the pestle* 'apothecary', *knight of the whip* 'coachman'.

[13] Numeronym is here understood as a word that includes or is fully composed of numerical figures (cf. Borisova 2015; Ugli 2020; Hałys 2021), such as *L8R* 'later', *4NR* 'foreigner' or *143* 'I love you', where each numerical represents a number of letters in words.

heals'. The latter group consists of 62 items that include (i) depreciative or contemptuous references to medical practitioners (*clyster*, *clyster-pipe*, *dr Death*, *mortherer*, *physicster*, *pisspot*, *stercorarian*, *treacle-carrier*, *treacle-conner*, *water-monger*, *waterologer*, *water doctor*, *007*), (ii) labels for inexperienced, ignorant, and barely qualified practitioners (*butcher*, *cross-bones*, *dogleech*, *empiric*, *experimentator*, *Ford*, *idiote*, *stir croaker*, *unlǣce*), (iii) labels for practitioners pretending to have some medical knowledge and experience (*amethodist*, *charlatan*, *crocus*, *crocus pitcher*, *medicaster*, *medicastra*, *mountebank*, *piss-prophet*, *quack*, *quack doctor*, *quacksalver*, *quackster*, *Sangrado*, *sangrador*, *stage doctor*, *urinal monger*, *urine*, *urine-caster*, *urine-doctor*, *urine-inspector*, *urine-monger*, *urine-prophet*, *water-caster*, *wizard*), (iv) labels that are jocular or sarcastic comments that diminish the value of practitioners (*Aesculapius*, *Aesculapian*, *bone-juggler*, *corpse-provider*, *cow-killer*, *knight of the pisspot*, *medico*, *pill-shooter*, *prick farrier*, *squirt*, *vet*), and (v) labels implying immoral or illegal practices (*body-snatcher*, *croaker*, *right croaker*, *dr Feelgood*, *feelgood*). In Figure 2, showing the distribution of neutral and negatively loaded terms, we can observe how the perception of medical practitioners differed in particular historical periods.

In Old English, out of seven recorded items only one term (*unlǣce*) was used in a negative sense. The lexeme, as explained in section 3.2 starts with a negative prefix *un-*, which implied that a referent (here *lǣce*) was an unskilled medical practitioner. In Middle English the number of derogative terms was also marginally represented (3 out of 17 lexemes) and all of them denoted healers in a figurative sense. The first, *idiote*, whose original sense was a 'mentally

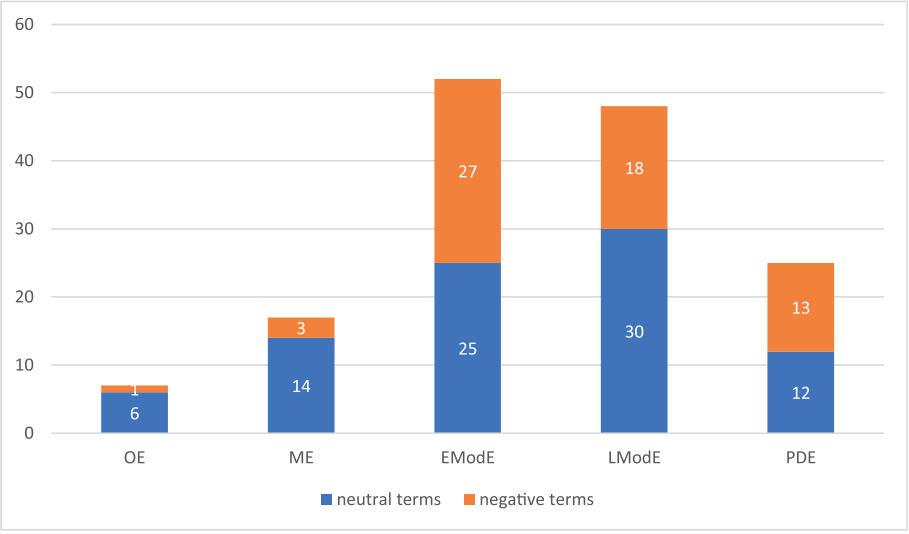


Figure 2. The ratio of neutral and negative terms for a medical doctor in the history of English

deficient person' or 'a simple, uneducated person', is found in the writings of medieval medical authorities such as Lanfranc or Chauliac, who criticised untrained physicians and simply referred to them as idiots, cf.:

(1) But þe modir of þat child sente for a lewde leche [L layco]..Þanne a fisician.. blamede þe modir & hir freendis þat þei hadden left counseil for þilke **idiotis** biheeste (MED, a1400 Lanfranc (Ashm 1396) 69/21).
(2) It is made terme of finding of heling & demyng, which is knowen to alle **ydiotez** [*Ch.(2): ydeotes i. vnwyse men; L ideotis]; þat forsoþ þo be founden which shal replete it is of a crafty man [L artificis] (MED, ?a1425 *Chauliac(1) (NY 12) 60b/b).

The next term, *mortherer* 'a murderer, assassin', explicitly suggested that some healers, did more harm than good and their practice led to patient's death.

(3) For **morthereres** [vrr. morþereris, morareres] aren mony leches..Þei do men deye þorw here drynkes. (MED, c1400(c1378) PPl.B (LdMisc 581) 6.2775)

The least derogatory term was *experimentator*, which denoted a medical practitioner who relied on experience and practice rather than theoretical knowledge, cf.:

(4) To þe same entension gentyl **experimentatours** [Latin *experimentatores*] haþ endited an vnguent of limaceis, i. snayles. (OED, ?a1425, *translation of Guy de Chauliac, Grande Chirurgie (N.Y. Acad. Med. MS.) f. 108$^{v}$ (Middle English Dictionary)*)

In Early Modern English, as seen in Figure 2, we can observe a significant rise in the number of negative references to medical doctors (27 out of 52 items, i.e. 52% of all records from the period). This striking change in the image of doctors can be explained by the proliferation of medical practitioners with rich experience but little education that took place by the end of the 16$^{th}$ century. These empirics "rather than give learned advice about how to live a life, and a bit of medicine, (...) administered tried and true remedies or invented ones, mostly intervening actively against illnesses" (Cook 1994: 18). Thus it seems that university-trained physicians, who relied on offering good advise and little medicine, felt that their position was challenged by ignorant "empiriks, or unlearned Physicians" (Dunk 1606: 20-21), who were considered a public danger. This resulted in a fair amount of "antiquack" lexical items used with reference to non-university-educated medical practitioners, such as *mountebank*, *quacksalver*, *quack*, *quack doctor*, *dogleech*, *stage doctor*, *charlatan*, *medicaster*, *medicastra*, *empiric*, *amethodist*, *Aesculapius*, *Aesculapian*, *physicster*, *medico*. A selection of quotations from OED shows how strong the criticism of lay practitioners was, cf.:

(5) Men..will often preferre a **Mountabanke** or Witch, before a learned Phisitian. (OED, 1605, *F. Bacon*, *Of Aduancement of Learning ii.* sig. Kk3$^{v}$)
(6) O this lousie close-stoole Empricks, that will vndertake all Cures, yet know not the causes of any disease. **Dog-leaches**. (OED, 1629, *J. Ford*, *Lovers Melancholy iv.* 57)
(7) Many **Medicasters**, pretenders to Physick, buy the degree of Doctor abroad. (OED, 1654, *R. Whitlock*, *Zωοτομία* 107)
(8) It cannot be lookt for, that these **Empiricall Amethodists** should understand the order of Art, or the Art of order. (OED,1654, *R. Whitlock*, *Zωοτομία* 89)
(9) One accidental rash cure of a disease..makes a **Quacksalver** a great Physician. (OED, 1658, *J. Rowland*, translation of T. Moffett, *Theater of Insects* in *Topsell's History of Four-footed Beasts* (revised edition) 1074)
(10) **Charlatans** make Diseases fit their Medicines, and not their Medicines Diseases. (OED, a1680, *S. Butler*, *Genuine Remains* (1759) *vol. II.* 197)

Another group of contemptuous labels for medical practitioners (*pisspot, water-caster, water-monger, piss-prophet, urine-monger, uribnal-monger, waterologer, urine-prophet*) consists of examples that refer to a medieval practice of uroscopy, that is the examination of urine for the purpose of diagnosis and prognosis. Uroscopy, dating back to the ancient Babylonians and being recommended by classical authorities, gave foundations for medieval medical practice. Many medieval doctors examined the colour, smell or, in rare cases, the taste of the patient's urine, and after consulting a vademecum, i.e. a book of diagnoses, and a urine chart made on-the-spot guesses about patient's health. Hence pisspot "the urine flask became the identifying symbol of the late medieval physician, who was often shown examining a sample" (https://publicdomainreview.org/essay/troubled-waters/). This cheap and relatively convenient way of examining and diagnosing patients soon became popular among less qualified practitioners who were consulted by patients that could not afford university-trained physicians. As a result "professional trust in uroscopy waned considerably after ca. 1500" (https://publicdomainreview.org/essay/troubled-waters/) and the practice began to be associated with lay medical practitioners and their poor skills, as illustrated by the following quotations:

(11) Had Phisition Iohn liu'd,..a sinode of **Pispots** would haue concluded, that Pierce Pennilesse should be confounded without repriue. (OED, 1592, *T. Nashe*, *Strange Newes* sig. G2$^{v}$)
(12) Now would I willingly demand of the most cunning **Pisse-prophet**, what could he haue found out by either of these vrines? (OED, 1625, *J. Hart*, *Anatomie Urines i.* ii. 32)

(13) That damn'd **Urinal-monger**..has not so much physick as would cure the toothach. (OED, 1650, *A. Cowley, Guardian ii. v. sig. B4*)
(14) The water will shew you more, (though the two maine things it can shew, is, that **Waterologers** are Knaves, and such Patients Fooles, that take the Urinall for an Oracle). (OED, 1654, *R. Whitlock*, *Ζωοτομία* 47)

Besides uroscopy, the practice of cleaning patient's bowels served as a source for derogatory labels for physicians. Namely, the name of the instrument used in enema, such as *clyster pipe* and its clipped form *clyster*, cf.:

(15) What's that to you, or any, Yee dosse, you powdered pigsbones, rubarbe **glister**? (OED, 1621, *J. Fletcher* et al., *Tragedy of Thierry & Theodoret i.* i. sig. B3$^{v}$)
(16) Thou stinking **Glister-pipe**, where's the god of rest, Thy Pills, and base Apothecary drugges Threatned to bring vnto me. (OED, 1622, T. Dekker and P. Massinger, Virgin Martir iv. sig. HS$^{v}$)
(17) John Haselwood, a proud starch'd, formal and sycophantizing **Clisterpipe**, who was the Apothecary to Clayton when he practiced Physick. (OED, a 1672, *A. Wood*, *Life* 3 May anno 1661)

In the following period, Late Modern English, there are at least 18 examples (out of 48 records) used in negative sense: *treacle-conner, quackster, wizard, butcher, urine, urine-caster, crocus, Sangrado, sangrador, urine-doctor, water doctor, croaker, squirt, urine inspector, crocus-pitcher, knight of the pisspot, corpse provider, cow-killer*. Most of these terms are again allusions to the practice of uroscopy or serve as "antiquack" labels. Within this group we can find examples that are identified by dictionaries as slang terms chiefly used in American English: *crocus* and related *crocus-pitcher* or *croaker*. They were often found in military, criminal or ethnic minorities slang, e.g.:

(18) ***Crocus*** or *Crocus Metallorum*, a nickname for the surgeons of the army and navy. (OED, 1785, *F. Grose, Classical Dictionary of Vulgar Tongue*)
(19) One of Mr. Leland's most amusing interviews is with **'crocus-pitcher'** – which is gypsy – slang for a street peddler of quack medicines. (GDS, 1882, Lit. World 13 177)
(20) One man who had put his name for the 'butcher' or ***croaker***, would suddenly find that he had three ounces of bread less to receive. (OED, 1889, A. *Barrère* and *C. G Leland Dictionary of Slang vol. I. 281/1)*

As for the PDE lexical items, they are references to medical practitioners (i) whose malpractice leads to patient's death, e.g. *bone-juggler, cross-bones, dr Death, 007*, (ii) who prescribe medications, often for illegal purposes, e.g. *pill-shooter, stir croaker, right croaker, feel-good, dr Feelgood*, or (iii) are perceived as incompetent and unskilled, e.g. *prick-farrier, vet, Ford*.

## 4. Conclusions

Healing, stemming from the natural need to alleviate pain and cure illnesses, has always been an important part of our culture and civilization. Alongside the development of knowledge regarding the functioning of a human being as a physical and psychological being and advances in life sciences, the image of the 'one who heals' has also undergone significant changes. The lexical material (149 items) discussed in the present paper shows how this image has been evolving and altering in the history of English. As observed in section 3.5 medical practitioners have been seen in both neutral and negative light. On the one hand, we have a person providing relief from suffering and preventing it (e.g. *doctor*, *doctress*, *examiner*, *healer*, *health provider*, *leech*, *physician*), and on the other, a harmful ignorant with many weaknesses such as dishonesty or greed, and who does more harm than good (e.g. *butcher*, *charlatan*, *cross-bones*, *dogleech*, *dr Death*, *mortherer*, *mountebank*, *quack*). The negative attitudes towards medical practitioners have resulted, among other things, from the changing expectations and experience of their patients. Also, physicians who followed the latest developments in medical science criticised heavily the ones relying on older therapeutic practices or healing without having any medical qualifications, which resulted in such references as *amethodist*, *clyster*, *experimentator*, *idiote*, *knight of the pisspot*, *medicaster*, *pisspot*, *unlǣce, waterologer*. Figure 2 reveals that a significant rise in negative labels for medical practitioners took place in Early Modern English, resulting from, for instance, the increase in the number of medical practitioners who depended on practical experience rather than formal academic training. Thus, the modern image of the doctor is an outcome of a centuries-old process of opinion-making, largely based on the formed stereotype and assumed standards.

English speakers employed various word-formation processes to reflect their evolving perceptions of medical practitioners. As shown in Figure 1 compounds are the major source of new references to medical practitioners (44%), followed by simplex terms (22%), derivatives (20%) and other formations (14%). The strong inclination to use compounds may be accounted for by Partridge's (1933: 16) observation that "compounds [...] have qualities that cannot – to the same high degree, at least - belong to single words". In other words, compounds are not only more expressive and efficient, but they also help speakers to condense complex ideas through concise expressions. The analyzed material demonstrates also that the earliest examples relied on compounding or derivation, whilst the most recent ones also incorporate combinations such as shortenings or numeronyms. The latter examples allow us to claim that present-day medical lexicon often draws on word-formation patterns commonly used in the creation of slang terms (cf. also Kleparski and Mosior 2020, Widawski 2011) .

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