Fever and Dysentery in Acts 28:8 and Ancient Medicine

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This article explores ancient views about the character of fever and dysentery, as well as both natural and supernatural treatments sometimes prescribed for them. This information affords us greater sensitivity to how Luke’s earliest audiences would have conceived the severity of this ailment and hence appreciated the healing reported here.

Key Words: Acts 28:8, Acts, healing, medical, medicine, sickness, fever, dysentery, doctor, Hippocrates

One could examine Acts 28:8 from a variety of important and complementary angles, such as literary, historical, or medical. My particular interest in this article, however, is to demonstrate how mention of the ailment would sound in an ancient medical setting. Recognizing this will help us to hear the ailment of Publius’s father more sympathetically and to appreciate the dramatic character of the healing more fully, that is, in a manner closer to how Luke’s ideal audience would likely have heard the passage. Although I will open with a brief mention of modern suggestions about the nature of the ailments, my purpose here is not to diagnose these ailments in modern medical terms but to examine how an audience familiar with ancient medical conceptions would have heard Luke’s brief mention of them.

To pursue this objective, I draw on ancient medical texts. Admittedly, most of Luke’s audience would not have technical expertise in the Hippocratic corpus; but fevers and dysentery were pervasive ailments, and

1. Various writers’ ideas are preserved under Hippocrates’ name. Although I cite the works under their purported authors’ names for the sake of consistency (because degree of
ancient medical sources offer us the fullest available window into the sorts of ideas about them that circulated in antiquity. However accurate or inaccurate their empirical diagnoses, ancient medical reports also provide the most thorough extant observations available from antiquity. This approach may be of special interest to those who, like myself, believe Luke the physician to be a particularly likely candidate for the first-person companion of Paul in this part of Acts.2

FEVER AND DYSENTERY

After briefly noting some possibilities in more modern medical terms of what may have afflicted Publius’s father, I will turn to ancient observations and speculations regarding fevers and dysentery.

The Ailments in Modern Terms

In modern terms, some suggest plausibly that the fever depicted here was a kind traditionally associated with Malta and known as “Malta fever.” In 1887, scientists discovered its cause, a microorganism called *Micrococcus melitensis*, found in the milk of goats on the island. The recurrent and intestinal character of the ailment fits this description.3 Untreated, it usually lasts about four months, but it could last two or three years.4

Nevertheless, Barrett’s caution is prudent: this proposal is plausible and may be accurate, but it is not completely certain because “there are other causes of fever.”5 Ancients associated a range of maladies with “fever,” and the heart of Luke’s ideal audience, which was almost certainly not located on Malta, would have conceived of Luke’s description in much more general terms than an illness particular to the island.

Even if we could be certain that today’s Malta fever existed in the first century and that Publius’s father had this ailment, typical ancient observ-


ers would have likely classified it simply as “fever,” as Luke does. The more general kind of recurrent fever with which Luke’s audience would be most familiar would likely correspond, in today’s terms, to malaria.

Fever, most commonly malaria (but sometimes typhoid), was widespread in Mediterranean antiquity. In fact, of diseases appearing in ancient medical literature, malaria and tuberculosis appear to be the most common. Malaria includes a variety of febrile diseases spread by the anopheles mosquito; but though malaria was known to be more common in swampy areas, people did not yet understand the connection.

**Fever**

Of greater concern for our purposes is the way that Luke’s audience would have conceived of fever and dysentery. In the Septuagint and extant first-century Christian sources, only Luke (and only in this passage) employs the plural form of πυρετος, “fevers.” The plural appears this way for a single person frequently and appears notably in medical writers. Presumably, Luke means that the father’s fevers were intermittent, coming and going, as fevers often did (and as malaria commonly does in its earlier stages).

Luke’s contemporaries were widely familiar with intermittent fevers. One form of intermittent fever is nocturnal malaria, which appears to leave its mark in ancient sources. Thus, one medical source writes of a person suffering from fever on and off for 52 days, delirious and unable to


11. With, e.g., Lake and Cadbury, Translation and Commentary, 343. Sallares, “Disease,” speaks of malarial fevers recurring “every two or three days.” No one would assume that one who had recovered from fever only a few days before had necessarily been cured (Dio Chrysostom, Or. 34.17), so presumably it is the immediacy of the father’s healing here that publicizes it as a cure rather than a more usual, temporary recovery. For continuous fever, see, e.g., Hippocrates, Epidemics 2.2.6; 5.1, 16.
sleep at night but sleeping the rest of the time.12 Others had their worst fever attacks at midday.13 In a winter fever (the season depicted in Acts 28), the fever would usually abate if the patient lost consciousness, but it might afterward return dangerously.14

Fever could be seasonal, and ancient writers often distinguished four types.15 “Quartan” fevers, though milder than some others, were the longest, but said not to last more than a year.16 Although said usually to strike men between the ages of 25 and 45 (Publius’s father is surely older), it would come most often in autumn and persist only if accompanied by another sickness.17 In quartan fever’s early stages, one lacked an appetite but later regained it; the sufferer produced white mucous and sometimes a noisy stomach and bloody stool. After this sort of fever ended one remained weak and light-headed.18 Quartan fever could produce a coma.19

Another category of fever mentioned by ancient physicians was “semi-tertian”,20 still another sort involved “summer fevers.” In the latter, on the seventh through the ninth days, rough bite-like (yet not itchy) bumps appeared on the skin; sometimes the person became comatose, or at least remained sleepy throughout the summer. This form of fever was rarely fatal, but no treatment was effective.21 “Tertian” fevers were accompanied by nightmares, hemorrhages, and sometimes delirium.22 The night preceding an attack was usually more difficult than the night afterward.23

Whereas fevers proved fatal to some, others survived; thus, some fevers proved milder than others.24 In the most dangerous cases, a person would die on the fourth day or earlier.25 The assault of some fevers was said to decrease at the fourth day, but the second bout would run till the

12. Ibid., 7.2. My wife and son, who are from Congo, both experienced frequent nocturnal malarial attacks in Central Africa.
13. Idem, Diseases 2.40 (recommending withholding medicine till the ninth day, after the patient had finished being “cleaned out”).
14. Sallares, “Disease,” suggests that malaria was most common in summer and fall; but fall was transitioning into winter here (Acts 27:9). For the fever’s return, see Hippocrates, Regimen in Acute Diseases 24.
15. See idem, Nature of Man 15.1–40. Sallares, “Disease,” notes three types: (1) falciparum, the most harmful; (2) vivax, the most common; and (3) quartan.
16. See Hippocrates, Epidemics 1.24; also, idem, Nature of Man 15.22–40, on quartans. For their maximum length, see idem, Epidemics 6.6.11. On quartan fever (τεταρτακικός), see further idem, Epidemics 4.13, 6.6.5.
17. Idem, Nature of Man 15.22–40. Four-day fevers (quadrini) did not start in the winter (Pliny, Nat. 7.50.170).
20. Ibid., 5.89; 7.43, 95, 96.
21. Ibid., 2.3.1. Idem, Affections 14, prescribed drink and gruel for violent summer fevers, with recovery expected on the seventh or ninth day.
23. Ibid., 6.2.10.
25. Ibid., 20.4–5.
seventh day; the third till the eleventh; and so on, up to 20 days. They could also last longer, through 60 days.

Ancient medical writers described “fever” in various ways. Some writing in the Hippocratic tradition depicted fevers as coming in various colors, each of which felt different to those touching the afflicted. The various speculations about causes and cures suggest just how uncontrol-

able these maladies were. It was thought that excess wine or exhaustion could produce winter fever, but that this could become other diseases. As one might guess from the etymology of fever (πυρετός), many connected it at least figuratively with an internal fire (πῦρ). Thus, fever may be “kin-
dled” and glands “inflamed”; a sick person burns with a heavenly fire. Some opined that excess phlegm produced the fever by swelling tissues; one could supposedly treat this problem by warming the body for three or four days (so that sweat would relieve the fever), not cooling the person until the fourth day. Among the more unusual reports, some opined that quartan fever was incompatible with epilepsy and cured it! Views concerning fevers varied, but clearly some proved quite dangerous.

**Dysentery**

As in Acts 28:8, Hippocratic writings sometimes mention fever and dys-
entery together. In one recorded case, a patient had dysentery, fever, and bloody stool, with pain in the belly growing from the 30th to the 40th day; but the patient eventually recovered. Often this combination of symp-
toms occurred during the hot summer, when dysentery was most com-

mon. Summer fevers (see the brief discussion above) could be linked with diarrhea; in summer, drinking water often sickened those living near marshes with dysentery, diarrhea, and quartan fever. Dysentery and

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26. Ibid., 20.5–18.
27. Ibid., 20.19–22.
31. Hippocrates, *Places in Man* 27. Idem, *Diseases* 1.23, views the heating of bile or phlegm as the cause of fever. In heating the body, one should not, however, heat the head, lest one add to the fever and produce delirium (ibid., 33).
32. Idem, *Epidemics* 6.6.5. See the occasional beneficial effects of dysentery that Hippo-
crats assumed, p. 398 below.
33. Ibid., 2.6.26; 7.3; Hobart, *Medical Language*, 52; see especially Weissenrieder, *Images*, 342 (who notes connections with this illness in ancient medical texts, especially Luke’s depiction of the father’s age, the season, and the climate, 343–44). For dysentery accompanying other symptoms, see also Hippocrates, *Prorrhetic* 1.143; idem, *Epidemics* 1.17.5–13.
35. Hippocrates, *Epidemics* 1.15.16–18.
36. For summer fevers and diarrhea, see ibid., 7.39. Fevers made digestion worse (Galen, *Natural Faculties* 2.8.119); thin excretions from the bowels often accompanied dysentery (Hippo-
crates, *Epidemics* 1.17.1–4). For summer illness associated with drinking water, see idem, *Airs,*
fever were most common in summer after a particularly rainy spring. But the father of wealthy Publius would probably not live near a marsh, and the weather reported in Acts 28 is now cold (cf. Acts 27:9, 20; 28:2). It is possible that the symptoms have continued since the summer, or that one ailment has weakened his body so that it has succumbed to another.

Dysentery was painful, and sometimes led to death. One writer describes dysentery as accompanied by pain and colic, ulcerated intestines, the passing of phlegm and bloody stools; “The disease is long, painful, and usually mortal.” As in the instance above, some did recover from dysentery, others, however fared less happily. Thus, one recorded patient swelled up, experienced diarrhea, and died. Hippocrates reportedly claimed that one would die from dysentery if the bile was black, but usually not if it was yellow. Despite the relative silence of ancient physicians about childhood sickness, a modern specialist concludes that “enteric diseases such as infantile viral diarrhoea and amoebic dysentery probably accounted for most of the high infant mortality observed in cemeteries.” Presumably, dysentery also proved difficult for older persons, as Publius’s father probably is (in view of Publius’s rank, Acts 28:7).

Nevertheless, Hippocratic writers supposed that dysentery sometimes had beneficial effects. Thus, for example, painless dysentery with fever could help relieve intestinal blockage; fevers might be finally “cured” by diarrhea and dysentery that ended the sickness; and fever might be rare when the bowels were loose. Likewise, another text concludes that dysentery could cure some diseases by passing them off in the stools. But ancient physicians also recognized that dysentery normally weakened rather than helped the patient.

Waters, Places 7.27–29. (On climate conditions for dysentery, cf. also ibid., 3.24.) Ancients also recognized that malaria prevailed especially in swampy regions (Heraclitus, Homeric Problems 11.5; Touwaide, “Malaria,” 195).

38. So painful was dysentery that later rabbis assigned it atoning efficacy, forgiving all of the sufferer’s sins (Hilary Le Cornu and Joseph Shulam, A Commentary on the Jewish Roots of Acts [2 vols.; Jerusalem: Nitivyah Bible Instruction Ministry, 2003], 1486, citing b. ‘Erub. 41b). Josephus attributes the affliction of Ashdod partly to dysentery (Ant. 6.3). For dysentery leading to death, see Hippocrates, Prorrhetic 2.22.
39. Ibid., Affections 23, LCL 5:43 (noting that one should treat it by cleaning the head and providing medicine to clean out bile; doing so while the patient remained strong was his or her only hope).
40. E.g., idem, Epidemics 4.38, 41; 7.3. In one unusual account, a woman had dysentery and bloody stool until she gave birth, then became healthy (ibid., 5.90, 7.99).
41. Ibid., 5.30.
42. Galen Natural Faculties 2.9.131. See also sources cited by Weissenrieder, Images, 341.
43. Sallares, “Disease.”
46. After dysentery ended, the patient would have “an abscess or some swelling” (idem, Regimen in Acute Diseases 35, LCL 6:301).
PROPOSED TREATMENTS IN ANTIQUITY

Although some proposed treatments make sense (such as preventing excessive dehydration), many others will not strike modern readers as helpful. We survey first some ancient proposed treatments for fever, then briefly some proposed for dysentery, and finally some recorded attempts to secure recovery by appealing to superhuman agents.

Treatments for Fever

Although the medical treatment some have supposed in 28:9 is unlikely there and no one proposes that treatment in v. 8, it is helpful to consider the sorts of treatments that Publius, a wealthy man (28:7), might have secured previously for his father.

Treatments of malaria focused on symptoms, especially the fever itself and the spleen.\(^{47}\) Many physicians treated winter fever with water and perhaps juices but significantly reduced food.\(^{48}\) Sponging a fevered person to cool him or her was also a useful treatment; in urgent cases, this therapy could take precedence even over observing the Sabbath.\(^{49}\)

Other proposed treatments varied widely. Celsus lists many different Greek medical opinions concerning how to treat fever and suggests “trying them all (De Medicina 3.14).”\(^{50}\) Ancients proposed various treatments of fever’s attendant chills, such as agaric mixed with hot water or (in the case of tertian fevers) siderite (a mineral) with oil.\(^{51}\) Other alleged cures included

1. Deer flesh\(^{52}\)
2. A wolf’s salted right eye used as an amulet (recommended by Magi)\(^{53}\)
3. cat feces with a horned owl’s claw used as an amulet (also recommended by the Magi for quartans)\(^{54}\)
4. a substance that cures tertians and quartans and also cures the bite of rabid dogs\(^{55}\)

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52. Ibid., 28.66.228 (in a larger list in 28.66.228–29).
53. Ibid., 28.66.228. Pliny reports with healthy cynicism cures such as these proposed by Magi (ibid., 28.66.229); he notes that they specify the necessary details of the cures so precisely that no one can obtain the necessary ingredients (29.12.53)! According to the Magi, mixing the head and tail of a dragon with lion’s forehead hair and other substances makes one invulnerable (29.20.68).
54. Ibid., 28.66.228 (the amulet must be worn for seven of the fever’s periods, to prevent relapse).
55. Ibid., 28.23.82.
5. one writer suggests that sexual intercourse cures quartan fever, so long as menstruation is beginning.

Naturally, some prescriptions appeal to substances so scarce as to be barely falsifiable; even the more readily acquired proposed cures were probably never empirically verified but at best were attempted once and deemed cures if the person recovered.

_Treatments for Dysentery_

From a modern perspective, treatments for dysentery are not much more encouraging than those for fever, though some of these treatments may have been observed to prevent diarrhea and consequent dehydration. Various folk cures for dysentery existed:

1. navew seed with some warm water
2. holly leaves, which are also helpful for cholera and menstruation; when mixed with wine, they prevent diarrhea
3. a tree fruit
4. veal broth
5. mallow (also useful against epilepsy); cultivated sorrel; beeswax mixed with gruel; juice from pounded vine leaves; and a decoction of white myrtle in wine

One supposed cure proposed for dysentery that Paul and Luke certainly would have rejected was unbridled sexual activity. Traditional magical cures also existed.

_Paranormal Healing_

Elsewhere, Pliny notes that medicines afford little help against quartans; thus, he notes some remedies proposed by magicians, starting with recommended amulets. Some who recovered also undoubtedly claimed superhuman causes for their cures; Lucian complains that, given all the

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56. Ibid., 28.23.83.
57. Ibid., 28.58.202–10, deals with cures for the bowels in general.
58. Ibid., 20.11.21.
60. Ibid., 24.79.129.
61. Ibid., 28.58.204.
63. Ibid., 20.86.234.
64. Ibid., 22.55.116.
65. Ibid., 23.3.3. So also omphacium, from vines (23.4.7), and ground grape stones (23.9.13).
66. Ibid., 23.81.162.
67. Πορνεία, Hippocrates, Epidemics 7.122.
68. Pliny Nat. 30.19.55–58.
69. Ibid., 30.30.98. For traditional magical cures for quartan fevers, see ibid., 30.30.98–104.
idiots in circulation, it would not be surprising if some claimed healing through a revelation of the deceased charlatan Peregrinus.70

Although ancient writers describe miracle workers who healed by means of prayer,71 they also report other specifically religious remedies. Old Romans worshiped Febris, goddess of Fever (to reduce her malevolence); three temples to Fever continued to exist in Paul’s day in Rome.72 (By contrast, Pliny regarded the temple to Febris as base superstition.73) Apparently the sick used charms that touched their bodies, which they afterward deposited in her sanctuaries.74 People used incantations against fever and fever demons; because erotic magic was thought to cause “burning,” fever might also originate from these sources.75 Third-century A.D. Jewish astrological magic apparently attributed to the demon Lix Tetrax affliction with day-and-a-half fevers, which could be cured by invoking particular names or thwarted by the name of the archangel Azael.76 Later hero cults also offered healings in answers to prayer, including for “quartan fever.”77

Here, by contrast, without sacrifices or charms, the true God provides healings through his agent, just as he has provided healings elsewhere in Acts.78 Although not the focus of our article, that is of course the focus of Luke’s observations.

70. Peregr. 28.
72. Valerius Maximus, *Memorable Deeds and Sayings*, 2.5.6 (noting that people brought remedies to these shrines, which they then applied to the afflicted). Cf. also Fritz Graf, “Healing gods,” *OCD* 670. In the second and third centuries A.D., people with malaria also invoked “Tertiana or Quartana (*CIL* 7.99, 12.3129); in Cicero’s day they were not yet deified (*Nat. d.* 3.24)” (ibid.; see also Nutton, “Fever,” 410); on personified Febris, see also Brigitte Schaffner, “Febris,” *BNP* 5:376–77.
73. *Nat.* 2.5.15–16, esp. p. 16.
76. *Lix Tetrax* is a name associated in part with a “four-seasoned year” (*OTP* 1:969 n. 7.e.), but the demon is associated especially with summer and fires (*T. Sol.* 8:5). For invoking names to cure fevers, see *T. Sol.* 8:6. For the archangel Azael, see *T. Sol.* 8:7. I am grateful to one of the anonymous reviewers of this article for bringing the *T. Sol.* reference to my attention.
78. Although most of my African informants have suffered malaria and used medicine, there are reports of some instant and permanent healings from severe forms of malaria (e.g., Sandy Thomas, *Beyond Jungle Walls: Bringing Hope to the Forgotten Congo* [Springfield, MO: 21st Century Press, 2005], 84: on a popular level but by a reliable informant known to me).
CONCLUSION

I have sought to offer a sense of how ancient physicians and (presumably) some other ancient observers perceived “fever” (here probably an intermittent fever) and “dysentery.” Ancient medicine lacked adequate means to prevent or cure these ailments, and even many treatments of the symptoms were inadequate. These ailments were often dangerous and sometimes fatal. People sometimes sought recovery from such ailments by attempting to appease or derive cures from deities. This information may provide us greater empathy for Publius’s father and greater appreciation for the miraculous cure that Luke reports. It may also provide us increased appreciation for Luke’s portrayal of healing signs demonstrating both the power and the benevolence of Paul’s God.