Historical Overview of Medical Liability. Four emblematic case studies

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Foreword

Paolo Zacchia (1584–1659), who is often called "the father of forensic medicine", published a 9-volume work entitled "Quaestiones Medico-Legales", in which he already dealt with medical malpractice liable to prosecution under the heading "De medicorum erroribus a lege punibilibus". On June 14 and 15, 2011, jurists and medico-legal experts from several European countries attended a consensus conference in Rome where Paolo Zacchia had worked as one of the outstanding founders of legal medicine. The topic of the conference, which took place under the patronage of the European Academy of Legal Medicine, was medical responsibility and liability, and the results of this meeting constitute an essential part of this monograph.

The Constitutio Criminalis Carolina is regarded as the first body of German criminal law (ratified in 1532 at the Diet in Regensburg) and as an early attempt to unify the legal system of the Holy Roman Empire. It already included a special provision concerning medical malpractice.

In the nineteenth century, forensic medicine became a special discipline at European Universities. Since then, medical responsibility and liability have been an integral part of medico-legal teaching and research. In practical forensic work, the assessment of real and alleged malpractice cases is one of the most challenging tasks of medico-legal experts.

Medical malpractice is defined as professional negligence of a health care provider who by act or omission causes injury or death due to an offence against accepted standards of treatment. Both these standards and the regulations concerning professional responsibility and compensations for harmed patients vary by country and jurisdiction.

Accountability for medical error can be assigned to individual physicians but also to a group of professionals cooperating in a complex health care system. In every malpractice claim, it has to be proved that the provider failed to observe the relevant standard of care resulting in an injury with consecutive damage in pecuniary or emotional respect. To be qualified as an expert in a medical malpractice case, the assessing person must have sufficient knowledge and experience regarding the specific issue. In many European countries, ascertainment and

Chapter 2
Historical Overview of Medical Liability

Maurizio Rippa Bonati and Fabio Zampieri

Abstract This chapter looks at the nature of medical responsibility through the examination of four emblematic "case studies" involving the experiences of the renowned Padovan physicians Gabriele Zerbi, Melchiorre Guilandino, Girolamo Mercuriale, Alessandro Knips Macoppe, and Gilberto Forti. The chapter's introduction provides a brief overview of the nature of the physician's role and responsibility from a historical point of view, especially with regard to the experience of Padova's first hospital and the development of the idea of medical responsibility through the works of the aforementioned physicians. Case I discusses the nature of the doctor–patient relationship as elaborated by Gabriele Zerbi in his *De cautelis medicorum*, one of the first works on medical deontology, as well as Zerbi's experience as physician to the Turkish Sultan. Case II concerns both the life of the physician Melchiorre Guilandino and the examination of his attempt, on behalf of the Venetian Council, to poison the Ambassador to the Turkish Sultan, thereby bringing into focus the difficulties concerning the role of the doctor in a specific political and diplomatic milieu. Case III focuses on the nature of political pressure on the physician and the issue of error in medical practice, through the examination of the events surrounding the outbreak of the plague of Venice in 1576 and Girolamo Mercuriale's role as medical advisor on the health care commission during that time. Case IV explores the aphorisms of Alessandro Knips Macoppe and the ideas of Gilberto Forti, highlighting the ambivalence of the physician who must care for and, in reputational terms, protect himself from his own patient. The conclusion of the chapter discusses the

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development of medical responsibility in the modern era and the difficulty of defining and monitoring the nature of medical responsibility as a branch of ethics.

Contents

2.1 Introduction

Medicine, whose noble task is men's health, has always been considered a superior—in some way sacred—activity, and thus often protected by a genuine immunity and, above all, impenetrability with regard to the judgment of the "non-medical".

Ladislao Münster, in an essay on the *De cautelis medicorum* of Gabriele Zerbi (1445–1505), which will be dealt with further on, wrote:

> [...] in the remotest times of Greek Medicine, the person of the physician, more than a common human being, is an infallible priest who interprets the will of a determined deity, and is far from being susceptible to the errors of a common mortal (Münster 1956, p. 60).

Even when, previously with Hippocrates, medicine had freed itself from religion in order to become a (secular) science, it maintained a certain aura of sacredness.

It is clear the doctors have always constituted a guild which pays close attention to its own preservation and self-defense, which is also—but not only—due to the delicacy of the profession, which is concerned with human lives, and its errors can have direct and dramatic repercussions on the life of men. Medicine has thus always been protected, explicitly or implicitly, from judgment regarding its work on the part of patients and society as whole. It is not by chance that the very concept of "medical liability" is only the product of contemporary reflection and that it was almost absent, at least in explicit form, in the past.

With regard to Padova, an example relating to its first Hospital, San Francesco Grande, active between the fifteenth and eighteenth centuries, could be particularly significant. Initially judged as one of the best European hospitals, in the course of

time it experienced a progressive institutional and—from what was reported in the press of the time—moral deterioration. Already at the beginning of the seventeenth century the financial situation aroused serious concerns (Ongaro 2007, p. 41). From this period various measures were followed, on the part the Hospital's managers, in order to rectify the situation, on the basis of detailed reports about the healthcare and economic management of the structure. Indeed, going over these reports, the treasurer appeared to be one of those most responsible for the infractions (Antonelli 1885, p. 45), while those responsible for the kitchen, the basement, the provisions and the cleaning—not to mention the nurses—also played a prominent role. What is extremely significant is the discovery of a failure in the midst of many accusations, namely that of the body of *physicians* in the healthcare structure.

As reported in a historic reconstruction of the nineteenth century, in the hospital it was noted that:

> [...] the abandonment of the sick to subordinates, extremely serious and at times fatal oversights and misunderstandings; very scarce linen and furnishings, unclean beds, fetid wards, careless, incapable or inhumane nurses, in short such disciplinary and moral disorder that even the custom of abandoning to the servants the garments of the poor, in lieu of other income, had been introduced, and it is horrifying to read that such a custom was prohibited, because the iniquitous greed of these servants has arrived at such a point that it is in fact permitted—to humanity's horror—to procure death without delay, instead of assisting health, in order to fill their coffers through the sale of the garments of the poor (ibid, pp. 47–48).

In the midst of this degradation, in which commerce was even done with corpses, it is only the doctors who remain unnamed, even if the responsibility could be imputed to them for their "abandonment of the sick to the subalterns". This is clear proof of how much strength and immunity the profession enjoyed, to such an extent that it seemed barely conceivable to attribute to them any responsibility in such a blatant case of "medical malpractice".

The art of healthcare is screened against the judgment of "others" on its work almost exclusively through the constant reference to its "scientific basis", according to the various meanings that this term has assumed over the course of time. Medicine, beyond basing its immunity on the morality of the task entrusted to it, namely that of curing and healing, has founded its privileged status upon "science", on the exclusivity and technicality of the knowledge on which its work has always been based. Ever since Galen, the father of Roman Medicine and the unavoidable reference point for all the medieval doctors until the dawn of the nineteenth century, the doctor's medical expertise was also a guarantee of his morality (Wear et al. 1993, p. 3) and, consequently, absence of responsibility in the case of an unsuccessful treatment or the aggravation of an infirmity.

It must be admitted that, if the concept of medical responsibility belongs only to medicine, jurisprudence and the most recent bioethical reflection, it is equally true that doctors have always questioned themselves on this issue—it is enough to think of the Hippocratic Oath—and have always been confronted with concrete cases in which the issue of their responsibility toward patients and the community was

clear. Moral philosophy, in addition, has had a predominant role in University courses of the "Arts", of which medicine formed a part, since the beginning of the University itself (*ibid*, p. 1). And it is not by chance that the same Hippocratic Oath became an authoritative and normative reference text, thanks to the activity of the Universities of the Renaissance (Nutton 1993).

In the oath, for example, a paragraph reads as follows.

> I will make use of dietary measures for the benefit of the patients according to my power and my judgement and I will abstain from harm and injustice.

In this passage we find perhaps the two most fundamental issues of the problem of medical liability. First of all, to maintain that the doctor must abstain from "harm" and "injustice" means that he can be responsible for them; it means that this profession is constantly exposed to the possibility, and the risk, of causing harm and injustice. The doctor, then, must found his practice on his own "judgment", in its turn based on a technical–scientific knowledge in some way unique, protecting him, and which has protected him, in fact, from criticisms directed against his work on the part of patients and "non-doctors".

Since the concept of medical liability only emerged some decades ago, a history of such problems in the healthcare field does not even exist. Certainly, histories of medical ethics do exist, but none of them focused so clearly on the issue examined here. As a consequence, in this essay, we will not confront the issue in a systematic way, reserving to future studies and research the task of presenting a complete history of medical liability, but will limit ourselves to analyzing some paradigmatic cases of the past in which doctors have discussed their responsibility or have put forward their reflections on the subject. These cases will be drawn primarily from the history of the Faculty of Medicine at the University of Padova, chosen from among those with the most paradigmatic value, reassured by the fact that Padova, for many centuries, was one of the most important and attractive centers of study in Europe, particularly, but not only, during the Renaissance.

We will analyze, first of all, the figure of Gabriele Zerbi, doctor of medicine and philosophy in Padova and Bologna, as well as renowned Medical Practitioner in Rome and Venice, as the author of one of the very first manuals of medical ethics, *De cautelis medicorum* (Zerbi 1495). In spite of the "caution" that Zerbi professed, the Veronese doctor was a victim of the wrath of the relatives of his famous patient, the Turkish Sultan: they eventually ordered his brutal execution.

As for concrete cases we will analyze the events connected to Melchiorre Guilandino (1520ca–1589) and Girolamo Mercuriale (1530–1606). The first was Prefect of the Botanical Garden of Padova from 1561 and Professor of Botany (*Simple Reading*) from 1567. In 1574 the Council of Ten, the government of Venice responsible for the security of the State, commissioned him to prepare a poison in order to eliminate a spy from Constantinople. The case is exemplary due to the fact that the doctor, as well as being equipped with the technical knowledge required for healing, can also make use of it in order to kill or cause suffering.

With regard to Mercuriale, we will analyze the famous medical consultation of the 9th of June 1576, provided together with his colleague Girolamo Capodivacca

(† 1589), requested by the Venetian Senate concerning the plague, which had been claiming victims since August of the previous year. The two doctors, on the basis of Hippocratic reasoning quite removed from reality, maintained that it was not a real epidemic. The Senate, accepting their opinion, delayed putting into practice the customary hygienic and prophylactic measures, which facilitated the outbreak of an epidemic that would kill more than fifty-thousand people. Finally, concerning the reflections on issues of responsibility, we will consider the collection of aphorisms and the so-called "rules of etiquette" for eighteenth and nineteenth century doctors, such as Giuseppe Pasta's (1750–1825) "Rules of Etiquette for Doctors" and Ferdinando Coletti's (1819–1881) "Rules of Etiquette for Doctors and Patients". We will refer, in particular, to the "Aphorisms" published by Alessandro Knips Macoppe (1662–1774), since they were widely available in the eighteenth century as well as the subsequent century, and inasmuch as they contain some original and, we believe, extremely important concepts.

2.2 Cases

2.2.1 Case I. The Doctor–Patient Relationship Between "Ethics" and "Cunning": Gabriele Zerbi

Gabriele Zerbi—or "Zerbus", "de Zerbi", "Zerbo", "Zerbis", "Gerbo", "Gerbi", and "Gerbus" according to the customary variability of surnames in former times—was born in Verona to a noble family. He probably studied medicine in Padova, where he was professor of philosophy from 1467 at just 22 years of age (Münster 1950, p. 69). In 1475 he moved to Bologna, where he remained until 1483 as professor of medicine and also, from 1480, as professor of philosophy (*ibid*, pp. 73–74). He subsequently moved to Rome, where he stayed until 1494. Finally, toward the end of 1504 or at the beginning of 1505, Zerbi departed with his son on the "fateful journey to Constantinople", which will be discussed in more detail later (*ibid*, p. 77).

Zerbi was also well known, in addition to the manual of medical deontology that will be the focus of our analysis, for the essay on geriatric pathologies, the *Gerontocomia* of 1489, and for his contributions to anatomy summarized in the *Liber anathomie corporis humani et singulorum membro rumillius* of 1502.

The *De cautelis medicorum* was not the first ever treatise of medical deontology, since, for example, some years before, also in Padova, Alessandro Benedetti (1450cc–1512) had published a collection of medical-deontological aphorisms, the *Collectiones medicinae* (Benedetti 1493; Ongaro 1981, p. 89). In addition, guides to the practice of medicine similar to that of Zerbi had also been circulating in manuscript form since the thirteenth century. Very famous, from the beginning of the fourteenth century, was a text with the same name—*De cautelis medicorum*—attributed to Arnaldo di Villanova (1240–1313) (Münster 1956, pp. 63–65; Linden 1999, pp. 31–34).

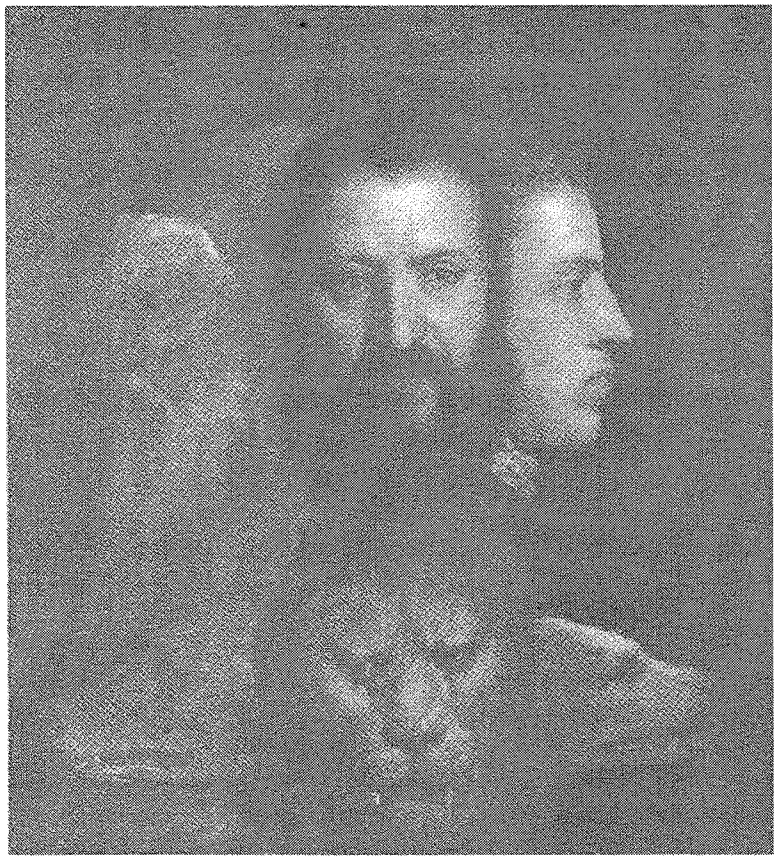

Fig. 2.1 Allegory of prudence. Oil on canvas, Titian, about 1565, The National Gallery, London

The caution of which these manuals were the mouthpiece roughly corresponded to the concept of "prudence". Returning to the analysis of David Linden, we remember that the medieval and renaissance allegories of Prudence depicted it with three faces. Since it also contained the faculty of memory, intelligence, and foresight, it was also, through each one of these, linked to the past, present, and future (Fig. 2.1). In the ancient world precisely this kind of knowledge was of the Muses, visionaries, and *medicine*, inasmuch as it "Declares the past, clarifies the present and predicts the future" (Linden 1999, p. 19).

Medical ethics, which has crossed centuries of medical history almost unscathed, is certainly the product of the union between Hippocratic and Catholic ethics. If the fundamental deontological precepts remained almost unaltered through time, the figure of the doctor was to change profoundly. One of the crucial moments was the late Middle Ages, in which it was increasingly asserted that the "medical class" was a social entity. In what came to take shape as "class consciousness", the duties of the physician were no longer the preserve of a single

individual, but were the expression of the entire guild to which he or she belonged. Becoming part of a specific social fabric and for the most part a citizen, the doctor took on roles involving new duties, such as caring for the sick in the event of an epidemic, treating the destitute, and performing other medicolegal tasks (*ibid*, p. 62). Consequently, for doctors the risk of being accused of not taking *responsibility*, or of being *responsible* for shortcomings in relation to their social and institutional duties increased. Their social position, usually quite privileged, also made them more vulnerable to jealousy, envy, and competition, which increased the risk of accusations and aggression.

So, the *De cautelis medicorum* is perhaps the first complete expression of an ethics founded on the awareness that the doctor belongs to a particular class, with its own rights and duties, and is in need of specific tools so that his preservation and prosperity are assured in a community constituted of other classes of potential competitors (Münster 1956, p. 61; French 1993). In this treatise, as will be briefly discussed below, one finds a very peculiar mixture, in addition to that between Hippocratic and Catholic precepts, of a certain amount of cynicism and astuteness, which the doctor must exercise in order to preserve himself; subtleties that render the text, among other things, extremely vivacious and alive.

All of this becomes somewhat evident from the Prologue, in which Zerbi explained what he meant by "caution" (we will use here the translation published by Clodomiro Manicini 1963).

> Caution is the avoidance, through diligent attention, of deception, i.e. fraud, infamy and dishonor, which happen to the doctor in the act of operating on the human body [...] like those called to fight, blocking with a raised arm and defending their face with their hands in between like a trench, so the doctor must always be intent in his soul and in his work with every type of caution against the strength and petulance of the malicious (Zerbi 1495; in Mancini 1963, p. 16).

The doctor, therefore, had to know how to defend himself against the "malicious": caution was the tool needed in order to avoid, essentially, being held *responsible* for errors or evil actions. In this sense, we believe that the concepts of caution and responsibility were, albeit implicitly, linked by a profound nexus.

The treatise is subdivided into five chapters, in addition to the Prologue. The first is concerned with what the physician's body and spirit must be like. The second describes how he must behave in conformity with Christian principles: to be, that is, pure of soul and even to advise the patients to purify their spirits, since illnesses are fought, above all, with the help of God. The third chapter regards the general behavior of the doctor, from everything that he should not do, to how he should walk and dress. The fourth concerns specific behavior with regard to patients, where the problem of responsibility emerges more clearly. The fifth deals with the behavior of the doctor in relation to his assistants and collaborators, those who assist the patient and the public (some authors believe that the latter subject constituted a separate chapter, but the issue is not relevant here).

As Robert French argued, Zerbi's rules were essentially fashioned by Zerbi to support and reinforce the guild of doctors to which he, as a doctor and university

graduate, belonged, in the fight against competing groups in the healthcare market. This is evidenced by the importance given by Zerbi to the preservation of the good *reputation* of the doctor (French 1993). Good *reputation*, in its diverse forms, constituted, after all, the fundamental defense against possible accusations of *responsibility* in case of death, damage, or the failure of the treatment. Reputation was guaranteed, mostly through *solidarity* among the members of the guild of physicians, and it is not by chance that Zerbi provides a series of suggestions along this line concerning "the behavior of the doctor towards other doctors charged with the same responsibility", such as that of never speaking badly of a colleague in public and, if he has committed an error, to correct him in secret (Zerbi 1495; in Mancini 1963, pp. 65–68). It is no coincidence, we believe, if this aspect was taken up again and explored in greater detail also in the first text in which the term "Medical ethics" was coined, namely the *Medical Ethics* published by Thomas Percival (1740–1804) in 1794 (Wear et al. 1993, p. 4).

The following phrase of Zerbi, regarding reputation, is paradigmatic.

> In fact, most patients are more confident in the doctor whose fame is great, and the confidence that the patient has in the doctor is worth, in terms of health restoration, even more than the doctor's actual capacity [...]. The acquisition of good fame, or its conservation, is complete if the doctor is equipped with good manners, conducting a praiseworthy life (Zerbi 1495; in Mancini 1963, p. 27).

Reputation, beyond style of life, was based on a good physical constitution, as revealed in the first chapter.

> As for those things regarding the body, it is a great benefit for the completion and perfection of the doctor that he be of a good complexion and temperament, approaching, as far as possible, the correct average in terms of physical constitution and stature [...] neither ugly nor deformed, so that he is not despised by all, but halfway between the two extremes, as virtue is (*ibid*, p. 24).

Good constitution, which would necessarily mean good health.

> Finally, the doctor must take care to monitor his own health, so that, if by any chance he happened to become ill, they do not say to him with derision: physician, heal thyself (*ibid*, p. 34).

The reputation of the doctor also had to be based on the observance of very strict Christian precepts, as highlighted in the second chapter (*ibid*, pp. 25–26), or reinforced by dressing in a dignified manner, decent and clean, as underlined in the third chapter.

> As for those bodily things, the doctor is clean and far from any dirt and must behave cleanly and honestly to the highest degree, be both elegant and adorned in dress, but in any case not occupy himself so much with cleanliness and clothing that he forgets the science (*ibid*, p. 34).

The reputation of the doctor, as underlined in the fifth chapter, also had to be defended even by his assistants and nurses, and for this the doctor had to know how to choose them, pay them, and treat them well, or know how to render their friends in the case that they were imposed (*ibid*, pp. 63–64).

To protect his reputation and defend his responsibility in case of damage or negligence, the doctor could use real "cunning" (Münster 1956, p. 69). One can find some stratagems suggested by Zerbi that are, at times, at the very limits of morality.

The doctor, for example, could use parables and proverbs:

> [...] doctors should not be ashamed to be called chatterers by jurists, since by other non-doctors, no matter how very literate, the subtle and difficult things of medicine are not understood if they cannot be spoken of as parables (Zerbi 1495; in Mancini 1963, p. 29).

Other cunning, when one was accompanied by relatives in visiting the patient, consisted of informing oneself of everything possible on the way and, having reached said patient, carefully observing the possible presence of some particular food or herb, so as to give the impression of having already guessed the characteristics of the illness at first sight (Münster 1956, p. 70):

> [...] the doctor, taken to visit a sick man, uses sound caution in going: he must, in fact, question his accompanier on the illness of the patient and on anything that has occurred in relation to his appetite, sleep, to the benefit of the stomach and the like. [...] He also uses another kind of caution, when he enters into the place where the patient resides, namely, looking around in case he sees fruits, herbs or some fomentation that has been prepared from which to make conjectures about the illness of the patient [...]. In this way the good doctor will be judged knowledgeable and the patient will confide in him eagerly, as an expert on his illness and the author of his salvation (Zerbi 1495; in Mancini 1963, pp. 40–41).

One interesting stratagem also consisted in measuring the pulse for a long time, even more than was necessary, in order to give the impression of being particularly scrupulous.

> It is also a good precaution to spend a long time over the touching, in order to be able to understand the pulse even with weak pressure and in addition to be thought more attentive, diligent and gracious by the patient and the bystanders (*ibid*, p. 42).

Delaying for as long as possible the prognosis, in order to have time to observe the evolution of the illness and in this way reduce the risk of error, but, above all, to always remain vague in providing it, so as to avoid being accused, in retrospect, of having committed an error, is an essential precaution.

> If good signs prevail one declares health, but in the opposite case, death: nevertheless, in declaring his opinion the doctor will always be ambiguous (*ibid*, p. 47).

Such advice concerning ambiguity, it seems to us, is somewhat unscrupulous and is certainly difficult to align with Christian principles, especially since Zerbi insisted on this point, arguing that the doctor should always remain indeterminate, even if pressed to give a clearer response. Consistent with this was the advice never to put a prescription in writing so as to avoid being accused in case of damage to the patient (*ibid*, p. 70).

Along the same line of moral unscrupulousness is the precaution, as preached by Zerbi, of presenting as *serious* a *doubtful* prognosis, both to avoid being held

responsible, in the event of a fatal outcome, for such inevitability and in order to earn greater esteem in the event of the termination of the evil.

It is worth quoting the entire passage:

> [...] and if the illness will not be of the number that are completely good, nor mortal, but, as they say, suspicious, which makes the doctor hesitate in his judgment, it is safer and, as they say, more praiseworthy, to consider the illness dangerous and worsen the case; in fact to announce the danger of approaching death in the patient, even if this illness, among those that are suspicious, is weak, mild or phlegmatic, depending upon a small amount of non-malignant substance; so that if the patient, by his own error or those who assist him, or due to extrinsic causes, takes a turn for the worse, the doctor will be lawfully excused for this. Neither will he be suspected by friends and relatives of the patient. In addition the doctor will be excused, and everybody will say that from the beginning he had seen and judged correctly. If instead the patient is saved, the common people will say that it was precisely the doctor who cured him and who gave the patient his health back, and the doctor will obtain greater praise and a larger prize. And, to say it briefly, the doctor must exaggerate the suspicious illnesses and, inversely, cast doubt upon the mild ones (*ibid*, p. 49).

The doctor, essentially, must know how to *dissemble* in order to preserve his honor, and this is also the case in many other circumstances. For example:

> [...] at every visit the doctor tries to do something new, ordering or exchanging or subtracting or adding, so that it does not seem that he has visited the patient in vain (*ibid*, p. 53).

In some way, almost paradoxically, Zerbi advised the doctor... not to use medicine, i.e., drugs. This, in the final analysis, precisely in order to avoid responsibility for damage to the patient:

Nevertheless, if the use of medicine becomes necessary, the doctor uses the blandest and the most suitable by nature. Thus, he will use the medicine based on diet rather than on real medicine [...] (*ibid*, p. 53).

Other cunning, at the limits of morality, in order to avoid being held responsible for negligence or error, consisted, according to Zerbi, in blaming the patient or the circumstances in the event of failure of the "solutive" drugs, if it were essential to use them.

> It is well that the doctor, if there is no effect after having given the solutive drug, blames those who are assisting the patient, or the bad regimen of the patient, or because he has slept, or because he has not slept, or because he did not sleep after taking the drug, or because he has been exposed to the air or the wind, or because he was irate, or for other such things (*ibid*, p. 56).

These last recommendations are all found in the fourth chapter (with the exception of the one about not writing prescriptions), which, dealing with "On the behavior of the physician toward the patients and especially the sick", is perhaps the most important in relation to the concept of responsibility. Highly moral precepts, derived above all from Catholic ethics, are mixed in this chapter, in a highly emblematic way, with strategies and tricks, discussed above, which seem anything but moral. It was a mixture that led French to ask himself, with an amusing turn of phrase, how ethical this medical ethics was (French 1993, p. 72).

In this chapter Zerbi also advises dealing only with the sick, and not with other things in their house, and not to praise them in order to obtain approval (Zerbi 1495; in Mancini 1963, pp. 35–36); never to postpone a visit to the day after, since the doctor must not be sparing of his gift, that of curing, given to him by God (*ibid*, p. 37); never to prescribe a drug hurriedly and to visit for the love of God, more than for the reward (*ibid*, p. 37); to continually assist the patient in the event of acute illness, since conditions can change quickly (*ibid*, p. 37).

The doctor who postponed a visit, or who did not sufficiently assist a patient, in effect, could have been held responsible for negligence; while in the case of an incorrect drug, which resulted in an even worse evil, the responsibility could be even more direct. And, with regard to drugs, this is the chapter in which Zerbi returned to the famous Hippocratic prohibition on preparing poisons or causing miscarriages (*ibid*, pp. 57–58). Concerning that last point, Zerbi advised the doctor always to give bland drugs to pregnant women, and to give them in the presence of family members, in order not to be suspected, in the case of sudden miscarriage, of having caused it on purpose (*ibid*, p. 57).

Other recommendations were that the doctor always nurse the hope of the patient, also because "[...] the complexion of the body is always connected and subjected to the state of the soul" (*ibid*, p. 39), but did not take on "ancient and malign" illnesses left by others and did not promise, in these cases, recovery. That before visiting the patient, he rested for a moment, and let the patient rest, in order not to risk that tiredness and emotion might alter his judgment (*ibid*, p. 41) and that, once rested, he examined first of all the face (*ibid*, p. 42); that he interrogated with great care and attention not only the patient, but also the relatives and friends, in order not to be tricked by the patient and that, for the same reason, he did not fear to ask him anything, even intimate, that could be useful for understanding the disease (*ibid*, p. 44); that, in any case, he never uttered in front of the patient himself that he should "distrust his health", so as not to influence his spirit (*ibid*, p. 49); that, in the case of certain death, the doctor announced it to him with "simulated sadness" (*ibid*, p. 50).

An interesting passage is the one in which Zerbi advises the doctor to sample, smell, taste, and measure the things that had to be administered to the patient, according to his directions, through diet.

> In this way the doctor will be judged more accurate and will avoid the blemish of negligence and inadvertence. Nevertheless, the doctor observes the measure of these things, in a way that his honor will be saved, by not performing the task of women and of those who assist the patient, because in such a way he would demean himself (*ibid*, pp. 52–53).

Zerbi advised that the doctor, finally, not deliberately prolong the duration of the illness with the prospect of gain. To this purely moral concept, nevertheless, was added a more utilitarian one, still aimed at the preservation of the reputation of both the individual practitioner as well as the entire guild.

> When illnesses are prolonged they do not leave the doctor immune from infamy, especially among the common people (*ibid*, p. 58).

That the doctor was paid, and paid well, remained, in any case, an indispensible necessity, motivated by the fact that the patients and the relatives, in order not to waste the money disbursed, could not but be diligent in following the doctor's instructions:

> [...] medicine bought at a dear price is wont to benefit many, but if it is given for free it is not useful (*ibid*, p. 58).

With this last quotation we can symbolically close our analysis of *De cautelis*.

It might be interesting, however, to briefly relate the tragic end of the Veronese doctor, as narrated by his contemporary, the humanist Pierio Valeriano (1477–1558). As mentioned in the *Introduction*, Zerbi was called, on the basis of his fame, which evidently extended beyond the borders of the place in which he worked, to treat the Turkish Sultan, who was suffering from a serious form of dysentery. Here is the passage of Valeriano.

> In the meanwhile it happened that one of the first visitors to the Sultan, who was unwell with incurable dysentery, addressed himself to the well-known Andrea Gritti, now our Doge, so that there be sent as soon as possible a talented Italian doctor, assuring him great rewards in proportion to his merit, as well as the voyage and the importance of the treatment. Zerbi assumed the task and, already brooding over an immense fortune in his head, set off for Constantinople, taking with him his young son. The Ottoman Minister thus cured and happily restored to health, he [Zerbi] was generously remunerated with gold, garments, gems, silver vases of fine china and many other rich ornaments, so that, if he had brought them home, he could have contended, in terms of wealth, with any European ruler. In fact, the cure proceeded with the greatest success and the Vizier himself confessed to owing both his life and health to the valor of Zerbi; the which, because he had received the salutary advice to maintain his health from then on, honorably took his leave. Zerbi, loading various beasts of burden for his precious furniture, came to a castle at the border of Turkey, where he had to linger for some days, waiting -under the guarantee of the Law of Nations—for an opportune encounter with a Christian ship that would take him to Dalmatia. In that brief time it happened that the Sultan, neglecting Zerbi's advice, and by nature disposed to excessive incontinence, returned to his old ways and become even sicker than before, which in a few days led him to the grave. His children, gathering together, in order to get back the precious gifts their father had given to Zerbi, spread the word that the doctor had poisoned him. They then sent some emissaries to lead them to him. In fact, they found Zerbi and imprisoned him together with his son and, taking charge of his effects, brought them both back; and, impudently slandering the father, they tortured him, making use of a new and barbarous technique, by firstly placing the youth between two tables and sawing him in half in front of his father's eyes, on whom they then inflicted the same atrocious torture (Valeriano in Mancini 1963, pp. 6–7).

We do not know what really happened, although the version presented here does not leave room for many interpretations, and we also hope that further studies may shed light on the reasons for such a horrible ordeal, but what is surprising, almost shocking, is that the Veronese physician was the victim of his patient even though he, Zerbi, should have been an expert at knowing how to protect himself against such events.

2.2.2 *Case II. Melchiorre Guilandino and the Strange Cure*

One of the constants of medical ethics is the prohibition of *harm*, especially if actively practiced with actions that are damaging to health and with the administration of toxic substances. The Hippocratic Oath prescribed the absolute prohibition on preparing poisons, and the prohibition was reiterated many times, even in the earlier cited *De cautelis medicorum*by Zerbi: "[...] do not prepare [the physician] or administer any potion apt to cause death or miscarriage" (Zerbi 1495 in Mancini 1963, p. 38).

> Observe the commands of Hippocrates in his Oath. The doctor does not administer a deadly poison to anyone, even if requested, and does not recommend it to anybody, nor prescribe it, nor talk of it; and he does not give, nor advise, to pregnant women, potions in order to kill the fetus, in fact he promptly denies it, nor says to anyone what it is, and accuses and reproves the inquirer. If the reprimand does not have effect, it is necessary to rise against such people with a harsh face (*ibid*, p. 57).

But as for all human activities, even those regulated by apparently rigid and unalterable rules, there can be exceptions. It was precisely Zerbi, among other things, who foresaw the possibility that the doctor might also be forced to prescribe, if not actual poisons, at least very strong and potentially dangerous drugs (a border, that existing between a drug and a poison, which has always been perilously fragile). In such a case he advised being present at their preparation and, above all, that the prescription never be in written form, in order that the doctor not be accused of anything (*ibid*, p. 70).

In this section we will look at the interesting and very significant events that involved Melchiorre Guilandino and the Republic of Venice in relation, in fact, to the preparation of a deadly poison. The biography of Guilandino is as rich in science and culture as it is in academic and personal disputes, journeys, and love; which makes it an exemplary case of the "spirit of the age" of the Renaissance, a combination of "soul" and "flesh", "earth" and "sky" at the same time.

Melchiorre Guilandino, the italianized name of Melchior Wield, was born in Königsberg around 1520, apparently the illegitimate son of a priest, even if this hypothesis is based on the accusations of Pietro Andrea Mattioli (1501–1578), the renowned botanist with whom Guilandino had been engaged in a bitter dispute (Ferrari 1959). A precocious genius, he set off for Italy in order to study: he graduated in Bologna in 1555 (Trevisan 1995, p. 59). In Rome he became the protégé of the Venetian ambassador Marino Cavalli (1500–1573) (De Toni 1923, p. 73), an influential diplomat who, between 1550 and 1558, also took on an important position in the Administration of Venetian culture in general and, in particular, the University of Padova, being included among the "*Studiorum Reformatores*" (Olivieri 1979; Preto 1989–1990). Cavalli presented Guilandino to Gabriele Falloppia (1523–1562), at that time professor of anatomy at the "*Studium Patavinum*", who welcomed him into his home (Favaro 1928, pp. 122–123). A very strong friendship arose between the two of them, based on coexistence and sharing, which some, in retrospect, saw as evidence of one of the first homosexual

"unmarried couples" of the Renaissance (an idea made public by a journalist who dared to do what the historians would not: Visentin 2007), perhaps in this also driven by the Mattioli's accusations who, in an extremely bitter letter to Fallopia, defined Guilandino as a "whore". In any case, when Falloppia died prematurely, it seems that Guilandino had these heartfelt words inscribed on his grave (even if the attribution of the verses is not certain, seeing as the grave no longer exists: Favaro, 1928, pp. 158–159; Visentin 2007).

> In questa tomba non verrai sepolto solo
> con te viene sepolta anche la nostra casa
> (In this grave you will not be buried alone
> with you will also be buried our home).

We do not know the real origin of the bitterness between Guilandino and Mattioli, which had so much weight in the personal life of the Prussian botanist. Besides academic disputes owing to the interpretation of certain passages of classical authors on the subject of botany (Ferrari 1959), it seems that Mattioli was rather hostile toward foreigners, enough to write in a letter:

> [...] what good these treacherous barbarians have they learn from Italy, where they arrive as beasts and leave as men (Mattioli in Ferrari 1959, p. 40; Trevisan 1995, p. 59).

Mattioli was also a close friend of Falloppia, and was perhaps somewhat jealous of the very close friendship that had arisen between the great anatomist and Guilandino. It even seems that Guilandino had found a letter of Mattioli addressed to Falloppia, in which Mattioli advised him to kill Guilandino with poison, without this unusual and violent counsel arousing any reaction in the recipient (Favaro 1928, p. 128). This demonstrates how the use of this "method" at the time—and not only—was quite common, and how deeply medicine was involved in its use, as medicine was among the main repositories of knowledge for producing different types of poisons.

It is certain, in any case, that Guilandino published a pamphlet denouncing, in strong words, the errors in the works of Mattioli, who wrote a terrible letter to Falloppia in which he defined Guilandino as:

> [...] that sad wretch of a priest and a whore (does he think that I do not know about his dirty genealogy?) (Visentin 2007).

Falloppia did not respond to the accusations Mattioli, who continued to slander the two friends by claiming, as already mentioned, that they were homosexuals (Favaro 1928, p. 128), until Falloppia was forced to advise Guilandino to leave Italy, officially for a study trip to collect new species of plants in the East, but, in reality, more likely in order to avoid the possibility that the Inquisition might have become interested in their case.

Guilandino, after some years of peregrination, was captured by Algerian pirates and, in addition to his liberty, also lost all of the scientific material that he had collected, but he was not abandoned by his friend Falloppia, who hurriedly collected 200 gold crowns and departed, even though he was by then seriously ill

(suffering from a rather advanced stage of syphilis), and managed to rescue his friend (Favaro 1928, pp. 131–132; Preto 1989–1990, p. 233; Trevisan 1995, p. 60).

Upon returning to Padova, the disputes with Mattioli were settled (Ferrari 1959, pp. 411–412). Guilandino, always supported by his Pygmalion friend, was appointed Prefect of the Botanical Garden of Padova in 1561 and under his guidance the Garden became famous throughout Europe (Gola 1947, pp. 13–14).

Now, the adventurous life of the Prussian botanist was enriched by an event that is usually not reported by biographers, but which we find very important, almost emblematic, in relation to the subject being dealt with here and which has been reconstructed by Paolo Preto (whose reconstruction we make reference to: Preto 1989–1990).

The antecedent involves the sending of a certain Mustafà dai Cordoani to Venice, a Cordovan leather craftsman, then ambassador to the Turkish Sultan, first in October of 1574 and then in June 1576, in order to officially request the restitution of some escaped slaves (Pedani 1994, p. 194). The "Baili", that is, the Venetian ambassadors in Constantinople, nevertheless considered him a spy of Pasha Mehemet, charged with plotting against the Republic or the Papal State.

After some deliberation, the Venetian "Council of Ten" (Fig. 2.2), magistrates responsible for the defense of the city, decreed that Mustafà should be poisoned and for this appealed to the offices of Guilandino. Here is how Preto summarizes the events, drawing on quotations from the documents found in the State Archives of Venice.

> Finally, on October 16th [1574], having made their usual statement that "looking for the good service of Christianity and particularly of our Republic, the life of the disowned Mustafà will be taken from him, hardened spy of Turkey, who at present is located in this city", the Council deliberated that "it can be done secretly, by poisoning Mustafa at a predetermined time, either in this city, or outside in the army" and summoned "our faithful Marchi ò Vilandrino [Melchiorre Guilandino], who awaits at the horticultural garden in Padova.": the sage of the mainland Sigismondo Cavalli, charged with conducting him to Venice, will explain to him that, due to a fire in the Ducal Palace, the "recipes for poison" have gone missing and therefore will ask him to prepare two or three of them "and also make such compositions to be kept in storage", in the certainty "that for the intelligence that he has of these things, he will make this composition that will undoubtedly have the effect for which it is composed, and that he will faithfully keep everything very secret" (Preto 1989–1990, p. 234).

So, in front of the *categorical desires* of the Council of Ten there was no Hippocratic Oath that could withstand. Sigismondo Cavalli (1530–1579), in addition, was the son of Marino, the old protector of Guilandino who had introduced him to the friendship of Falloppia: it could also have been, therefore, a personal debt of gratitude. The fact remains that Guilandino went to Venice, provided the poison recipes—contradicting, in this, also the "caution" professed by Zerbi, according to which the doctor must never leave a trace of prescriptions for dangerous drugs, much less, therefore, for poisons expressly created in order to kill—and the Council commissioned Vincenzo Degli Alessandrini (whose dates of birth and death are both unknown), the former Venetian ambassador to Persia, to administer the poision to Mustafà.

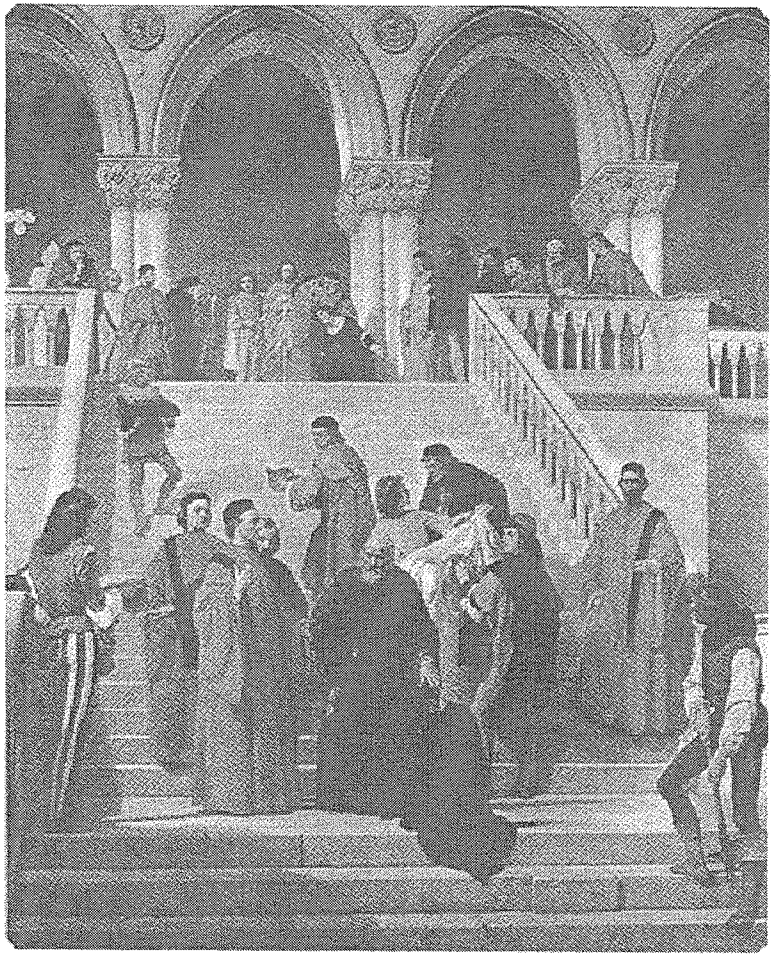

Fig. 2.2 "The Council of Ten" (in *red gown* with *black sash*) while witnessing the beheading of Doge Marin Faliero (1285–1355). Oil on canvas, Francisco Hayez, 1867, Pinacoteca di Brera, Milan

The ambassador, therefore, administered the poison twice, on the 10th and the 19th of October 1574, but "unfortunately" it did not have any effect. On the 20th of October, in fact, the Council wrote to the Governor of Constantinople, informing him of the imminent arrival of Mustafà in the Ottoman city, and asking him to attempt to render him less hostile to Venice and, at the same time, discredit him in front of the Pasha (*ibid*, p. 235).

Nevertheless, the Council of the Ten did not give up. They requested the counsel of another doctor, a certain "Comasco" "who—as Preto reports—has at other times confidently provided this counsel on similar occasions" (*ibid*): which proves, again, how this service of the doctors, with regard to poisons, was

customary. The poison, in any case, did not arrive in time and the attempts to kill the spy during his return voyage to Constantinople came to nothing.

On June 1576, as already mentioned, Mustafà was again in Venice. This time his journey was fatal. A certain Captain Trec, evidently disdaining the subtleties of poisons, strangled him. The assassination, at that time, was given a fortuitous, if tragic, cover: the plague was spreading—the same epidemic that we will look at in the following section. The epidemic might perhaps have acted, however, in place of the assassins, or at the least would have made the action more maskable. Indeed, on the 18th of August, a letter was sent to the Governor of Constantinople informing him of the death of Mustafà, found lying dead in the street from the plague, (*ibid*, p. 236). Preto concludes thus:

> [...] the noose of the expert Captain Trec worked better than the "water" of the renowned Guilandino (*ibid*, p. 236).

A brief comment is necessary. We do not know whether Guilandino deliberately chose to prepare a poison that was not completely effective. This would have been a very wise and shrewd "caution", but there is no evidence of any kind in its favor. Regardless of this particular fact, however, we can maintain that the case of the Prussian botanist clearly demonstrates how much medicine can become involved in the political and diplomatic plots of its milieu, thanks not only to its technical knowledge concerning the preparation of poisons, but also, more generally, concerning the structure and functions of the human body. Emblematic, for example, is the case of physicians who participated in the bloody interrogations of the Inquisition, to which we intend to devote more extensive research. This means that medical ethics has found itself confronted with extreme cases from its very beginning, and this, perhaps, has favored the emergence of a pragmatic ethics and mentality, which is indeed typical of medicine. A mentality able to hold certain principles as inviolable, but also aware that the shifting world of reality can also require, at times, their violation.

2.2.3 Case III. A Healthcare Commission and Reason of State: Even Luminaries Make Mistakes

Girolamo Mercuriale, born in Forlì on the 30th of September 1530, studied medicine in Padova and obtained a doctorate in medicine and philosophy on the 17th of April 1555 at the Venice "*Medicorum Physicorum Collegium*", the only Institution, besides the *Studium Patavinum*, that had the power, in the Veneto, to confer degrees in medicine (Ongaro and Forin 2008, p. 31; Ongaro 2009, p. 620). While continuing to liaise with the *Studium Patavinum*, after his graduation he settled in Forlì, where he practiced medicine and deepened his study of Greek. In Padova, particularly, he was the student of Vittore Trincavella (1476–1568), the student and friend of Gabriele Falloppia (1523–1562), while his acquaintance with Guilandino (Ferrari 1959) provided a polemical background.

In 1561 Mercuriale was sent to Pius IV in Rome as a member of a diplomatic mission and remained there until 1569 as a pupil of Cardinal Alessandro Farnese (1520–1589) (Ongaro 2009, p. 620). In Farnese's house, Mercuriale was able to study important documents and ancient books, fundamental sources for his renowned work *De arte gymnastica* (*ibid*, p. 621; Palmer 2008, p. 51). Thanks to the support of the Cardinal, on the 6th of October 1569 Mercuriale was called to the full professorship of Practical Medicine, where he remained for 18 years, from 1569 to 1587 (Ongaro and Forin 2008, p. 32). During this period Mercuriale published most of his works, consolidated his fame as a Medical Practitioner to such an extent that he was called upon to consult the Emperor Massimiliano II in Vienna. In 1587 Mercuriale accepted the proposal, on the part of the "*Bolognum Studium*", of a chair in Theoretical Medicine, with the highest salary ever conferred to one of its Professors, the sum of 1220 gold crowns a year. In 1592 he moved to the University of Pisa, attracted by an even richer contract, offered by the Grand Duke of Tuscany, Fernando I de' Medici, also becoming the latter's family doctor (Ongaro 2009, p. 623). In 1606 Mercuriale finally retired to Forlì, his city of birth, but not before attempting to return to Padova in 1599, following the death of Alessandro Massaria (1510cc–1598), who held the chair of Practical Medicine. The University of Padova, however, did not accept this, for various reasons that one can only conjecture about: his advanced age, the memory of his abandonment of the University in 1587, his huge demands concerning money and, what is more, the memory of his error during the terrible plague of Venice from 1575 to 1576, which we well look at subsequently (Ongaro and Forin 2008, p. 50).

Mercuriale represented a typical genius of the Renaissance period, an age in which the innovatory dawn of the experimental approach to nature went hand in hand with the rediscovery and cult of the classical world. An eclectic age, one could define it (Rippa Bonati and Zampieri 2010, p. 74), in which various explanatory approaches, which to our eyes might even seem opposed, coexisted, and almost interpenetrated each other, such as the magical-hermetic tradition, experimental practice, and empirical observation (Piaia 2008, p. 5). Mercuriale, as well as being a great doctor, was also an antiquarian and a scholar of the classical world. Besides the extremely numerous citations of the classic *De arte gymnastica* and the function that this text had in the rediscovery of ancient hygiene, let's remember that Mercuriale published interesting philological works (Ongaro 1964–1965; Nutton 2008) and was the editor of the works of Galen and Hippocrates (Fortuna 2008; Jouanna 2008). This combination of the empirical practice of medicine and the cult of the classical authors is very much at work in the events at the heart of this section, which saw Mercuriale involved in the handling of the terrible pestilence that struck Venice between 1575 and 1576 (for an analytical reconstruction of the event see: Rodenwalt 1953), and is well summarized by Zitelli and Palmer.

> The events of 1576 reveal the ambivalence of medical science in the Sixteenth Century. On one side, it gave new prominence to experience and observation, as Padova demonstrated with its anatomical research and the establishment of the Botanical Garden. On the other side, the humanist movement, of which Mercuriale was an exponent with important editions of Hippocrates and Galen to his credit, promoted a profound reverence for the authority of the classics (Zitelli and Palmer 1979, p. 27).

From May of 1575 a plague epidemic had spread from Trento, more specifically following the Fair of Saint Giovanni, an occasion in which many merchants from various Italian and foreign cities were gathered together. The reports of the time even provide a date and a specific event for the introduction of the plague to Venice: the 25th of June 1575, following the entry of a mountain dweller of Trentino into the city on the lagoon, his subsequent death from the plague and the contagion of the family that had hosted him (Preto 1978, pp. 13–14).

In Venice, therefore, between the 1st of August, 1575, and the end of February 1576, there were 3696 deaths (Palmer 2008, p. 52). During the following winter mortality remained at a fairly low level, but at the beginning of June 1576 the death rate rose sharply enough to trigger alarm in the city administration.

Thus, on the 7th of June, the Venetian Government called a team of professors from Padova for a consultation on the spreading sickness. Mercuriale found himself at the head of this group of professors—a kind of healthcare *task force*—that also included Girolamo Capodivacca, Mariano Stefanelli and Niccolò Corte (secondary chairs in Practical Medicine in first and second place), and Bernardino Paterno, a professor of Theoretical Medicine (Palmer 2008, p. 53).

We can argue that Mercuriale, even before visiting the city, had the preconceived idea that there was no plague epidemic, based on his classical theoretical knowledge and the few elements that had been provided concerning the epidemic in progress. As early as May 1576, in fact, Mercuriale had written to the Venetian doctor Niccolò Comasco († 1578):

> [...] if we want to pay attention to the documents of the ancient doctors and the history of past plagues, we are forced to say that the plague is necessarily a disease of the people, in which many become sick and where many of the sick die. Very few are those who grow sick apart from the poor folk, those badly nourished and governed. I would certainly never call it the plague (Mercuriale in Palmer 2008, p. 53; Rippa Bonati and Zampieri 2010, p. 76).

The simple fact that the pestilence in Venice, during that period, was still not seen as an epidemic, had led Mercuriale to this incautious underestimation of its virulence. An underestimation supported by the Hippocratic distinction between specific illnesses, endemic, and epidemic, according to which the first struck individuals and essentially depended upon the lifestyle of the patient; the second were typical of a single populace and broadly depended on diet or the particular place in which that populace lived; and the third struck entire areas and different populations (Rippa Bonati and Zampieri 2010, p. 74). Still on the basis of the Hippocratic conception, the plague could not be depicted as an epidemic disease, because it depended upon the "corruption" of the air of a given zone (Palmer 2008, pp. 53–54).

On the afternoon of June the 10th a renowned debate was held in the *Sala del Maggior Consiglio* in the Ducal Palace of Venice between the Padovan doctors, the Venetian doctors and the governors (Fig. 2.3). Niccolò Comasco, the same one with whom Mercuriale had corresponded a short time before, opened the debate by

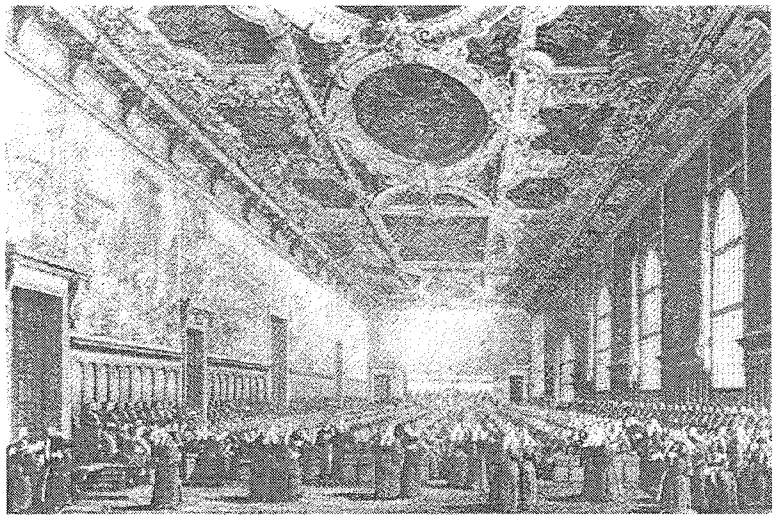

Fig. 2.3 The "Sala del Maggior Consiglio" in the Palazzo Ducale in Venice, from an engraving by Giovanni Battista Brustolon (1712–1796) based on the painting by Canaletto (1697–1768)

arguing that the disease in question should be considered a genuine plague and was followed by a certain Ludovico Boccalini who argued, almost as if it was a dialectical dispute, the diametrically opposite thesis, on the basis of the same arguments proposed by Mercuriale in the letter to Comasco. According to Boccanili one had to speak instead of a "malign fever", perhaps caused by contaminated water (*ibid*, p. 55). After other speeches, it was the turn of the Padovan professors, three of whom did not give a categorical verdict, but tended toward the "denialist" stance. Stefanelli was inclined to deny the presence of a genuine plague; Paterno and Corte argued that it was not a plague, but the beginning of one or a disease that could become the plague.

Mercuriale and Capodivacca, however, strongly denied that it was the plague. The Doge and other functionaries of state present at the discussion were easily convinced by them, and so neglected to take the restrictive measures provided in the case of an epidemic. The conviction demonstrated by the two Padovan Professors was important, and they were so certain that it was not a genuine plague that they had even offered to personally treat some of the sick.

Nonetheless, there also had to have been more strictly political reasons at work. As Preto rightly pointed out:

> [...] commercial city par excellence, linked by intense economic ties with the Islamic East, but also with the nations of Continental Europe, always its indispensable hinterland for traffic of every kind, Venice knows that it cannot allow, except at the expense of extremely high economic, social and political costs, an excessive interval of inactivity and isolation, from which competitors and rivals could derive unexpected and lasting advantages (Preto 1978, p. 30).

We have chosen, in such a way, to mention the "reason of state" in the title of this section: to decide that there was an absence of genuine pestilence, in fact, resulted in an apparent advantage for the economy and affairs of state that would otherwise be blocked altogether.

Fig. 2.4 Image of a doctor visiting the a plague victim in "Fasciculo de Medicine" (1494) where we see the doctor holding a sponge in front of his nose and mouth, in order to protect himself from the "corrupt" air coming from the patient

After spending some days in Padova, Mercuriale and Capodivacca returned to Venice, where they were welcomed with great enthusiasm, almost as divinities, for the very fact that their work had brought significant hope to the city. Every morning they left with their assistants in five gondolas, together with two Jesuits for possible confessions; every house that they visited was aired and fumigated with essences and perfumes, and the two doctors did not disdain to touch the sick, nor employed any of those typical precautions against the plague, such as the use of a sponge soaked in vinegar or other substances for the protection of the nose and mouth (Fig. 2.4).

The *Provveditori alla Sanità* of Venice, that is, the Venetian public health officials who, on the contrary, claimed that it was a genuine plague and were in favor of implementing the important measures of isolation and quarantine of the city and the afflicted, were astonished by such behavior, also because they held precisely that course of action could turn out to be decisive in spreading the epidemic (*ibid*, p. 57). The *Provveditori* of Padova were also profoundly opposed and feared that Mercuriale and Capodivacca would even spread the disease to the mainland. Delegates of both magistracies tried to dissuade the Venetian Senate from its support of the ideas of the two professors in Padua, but were not heeded.

Finally, it was the ever-increasing mortality rate that led to the spontaneous resolution of the dispute. At the beginning of July the two professors were ordered to stay in quarantine in Venice and were viewed by the majority of the nobles, administration, and population of the city as being the main cause of the epidemic. Eight years after the event the Scribe of the Venetian Magistracy of Health, Cornelius Morello, wrote as follows.

> This caused the evil to grow and spread quickly through the city, both for what they practiced in each area, as I have said, and also because they had said that there was no plague in Venice, the populace, believing this to be the case, persuaded by the authority of these excellent men and from having seen them practice so freely, did not want to obey the orders and provisions created by the Healthcare Office, which caused a lot of scandal, confusion and disorder, which was perhaps the main cause of such high mortality and ruin (Palmer 2008, p. 61).

In this case, there is no doubt about the fact that Mercuriale and Capodivacca were at the time held fully *responsible* for a serious error of judgment, which had led to almost incalculable economic and human damage, given that more than 50,000 Venetians died in the dissemination of plague.

The two doctors, therefore, protested against the imposed quarantine in a petition addressed to the Doge. In this they argued that it was God himself who had inspired them, leading them to risk their own lives in visiting the sick, and they asked to be able to return to Padova in exchange for the preparation of a detailed report on the epidemic. It is interesting to note that the two doctors defended themselves against the accusations of responsibility by recalling the divine origin of their actions, which, as such, could not be accused of any evil. In the compendium of a chronicler of the time, moreover, a certain Francesco Molino (1546–1596), this divine inspiration assumed the opposite sense: God had blinded the judgment of the two doctors, inspiring the wrong diagnosis, in order to punish

the Venetian populace which, due to excessive wealth, had become impious (Preto 1978, pp. 73–74). Also in this case, however, Mercuriale and Capodivacca evaded responsibility.

In their subsequent written report the two doctors recognized for the first time, albeit in an implicit way, that the disease could be traced back to the plague, in that they describe it as "pestilential fever":

> From all of these incidents one can easily grasp the real nature of these evils to be pestilential fevers, and also in a certain sense one can call it plague, but not precisely, being that the genuine plague emerges, according to the teachings of Hippocrates, Galen and Avicenna, from a pestiferous and poisoned air [...] so that, inevitably, many of every kind grow sick and many among the infirm die and it is fitting to say that until now it is not a genuine plague in Venice, because one sees that the air is in no way poisonous [...] (Palmer 2008, p. 62).

Mercuriale and Capodivacca also advised that the poor of the city, as most at risk, be moved to the mainland, that the houses and the streets be cleaned and purified with aromatic fires, and that those who felt sick be isolated. With this the doctors hoped to rehabilitate their reputations and to earn a decorous return to Padua from Venice. The Venetian Senate released the two professors without any mention of their error of judgment, but rather with appreciation for their charity and readiness to serve the Venetian people (*ibid*).

After claiming tens of thousands of victims in Padua and Venice, the epidemic began to subside during the winter of 1576, until it disappeared altogether. Significantly, the Venetian Senate, as early as September 1576, when the epidemic was only showing some faint signs of decline, ordered its ambassadors to Constantinople to announce the end of the plague. On the 8th of the following November, as reported in the study of Paul Preto, the Senate deliberated that:

> [...] one can say that the pestilence has altogether ceased so that every day people arrive here from all parts of the world and the traffic and commerce of every nation is returning to the former and usual ways (taken from: Preto 1978, p. 33).

The desire of the Venetian administration to declare the end of the plague was as great as its determination to deny its onset in the previous year; a situation that was decisive, therefore, for the favorable acceptance of the theories of Mercuriale and Capodivacca.

Mercuriale, finally, prepared a series of lectures on the plague that were held in Padova with his students in January of 1577, lectures that, transcribed by the city doctor Girolamo Zacco, were published in the same year with the title *De pestilentia* (Mercuriale 1577) and in which Mercuriale, in addition to flaunting a very large erudition and a certain openness to the latest theories, developed arguments that could have been an implicit defense of his position in the Venetian affair (Nutton 2006).

Thus, *De pestilentia*, after a vivid description of the pathology and the accompanying symptoms, proposed a chronology on the basis of which Mercuriale attempted to exonerate himself: indeed, according to the doctor, the disease had only become a genuine plague starting from July 1576, that is, *after* his

intervention. Therefore, the hypothesis remained that before that period it was, rather, a "pestilential fever". Mercuriale went as far as to maintain that any disease, becoming an epidemic, could be defined as a plague: "[...] pestis non est unus morbus determinatus, sed quicumque morbus potest esse pestis [...]" (Mercuriale 1577, p. 10).

It is also worth noting that Mercuriale espoused the contagionist theories of Girolamo Fracastoro (1476/8–1553), who had been a student in Padova and a lecturer in Logic in 1502 (Ongaro 2006, p. 43) and who had published in 1546 the *De contagione et contagiosis morbis*, in which he developed the revolutionary idea that contagious diseases did not communicate with each other through a corruption in the air, but through "seeds" that were transmitted from one body to another; "seeds" which were regarded as inanimate particles, not living agents (Fracastoro 1546; Rippa Bonati and Zampieri 2010, p. 75).

Mercuriale spoke explicitly of "pestis semina", following Fracastro (Fracastoro 1546, p. 45; Palmer 2008, p. 64), but performed, at the same time, one of the most complete and structured syntheses between the of Hippocratic-Galenic perspectives and that of Fracastoro: the plague was a disease caused by corruption of the air, according to classical teaching, but it could also spread by contagion, according to the modern theory.

By means of this text Mercuriale was able to completely revive his own reputation, so as to be able to continue, as we saw at the beginning of the paragraph, his extraordinary scientific and academic career.

It was very important, therefore, that Mercuriale's defense against the accusations of responsibility for error of judgment be exercised, from the first report issued with Capodivacca to the Venetian Senate, along two main axes.

First of all, the moral-religious argument, as we could call it, is based on the fact that the two doctors did not spare themselves in visiting the sick, which, after all, was a guarantee of the fact that they had acted in good faith. Whether, in the event of the plague, the doctor had to remain to help those afflicted or preserve his own health by escaping from the epidemic was an ethical question widely debated in this period and until the pestilences of the following century, also because the issue remained ambiguous on the same basis of Hippocratic and Galenic texts and their relationship with Catholic ethics (Grell 1993). The actions of Mercuriale and Capodivacca, in any case, were ethically unassailable and, at least from this point of view, the two doctors were safe from any kind of accusation.

Second, and perhaps even more importantly, there was what we could define as the argument of *authority*, based on the fact that the theories of Hippocrates, Galen, and Avicenna could not but lead to the judgment of those diseases as pestilential fevers and not as expressions of a genuine plague epidemic. Mercuriale, in a certain sense, was not content to be held innocent on the basis of his good faith, but wanted his behavior to be recognized as having been, in substance, dictated by a correct interpretation of scientific knowledge, which, evidently, remained the only means by which he could feel completely vindicated.

In any case, we must underline the difficulty, both for us and for Mercuriale's contemporaries, of judging his behavior, because such a judgment cannot remain

insensitive to the consideration of what happened *afterwards*. It therefore concerns an a posteriori judgment that, as such, risks not being altogether objective. This fact constitutes a sort of universal education; so many are the circumstances that determine any behavior, especially in the case of a complex behavior such as that of the medical act, that judging whether responsibility exists or not is extremely delicate and difficult.

2.2.4 *Case IV. The Cynical Doctor: Alessandro Knips Macoppe*

As briefly explained in the first section of this text, the period between the fourteenth and sixteenth century saw the first major flowering of "rules of etiquette for physicians", perhaps to coincide with the profound methodological transformation of medicine that, during these centuries, laid the foundations in order for it to become an experimental science, and certainly after the progressive fusion of Hippocratic ethics with the new Christian-based deontology. The period between the eighteenth and the early nineteenth century is the one that saw a second flowering of such a scientific-literary kind.

In order to understand the reasons for this rebirth the claims of a Paduan doctor of the late eighteenth century, a certain Girolamo Forti (1740–1796), could prove useful. It is a phase in which medicine became a scientific and objective public profession—thus just as objectively capable of being judged—in contrast to the previous dogmatisms and sectarianism.

Forti claimed that medicine, in that period, after having abandoned theoretical sophisms and the obscurity of Latin, which, in fact, rendered it incomprehensible to almost the totality of the population, now had to face the opposite problem, namely, that the even the most ignorant could judge it.

> Now this reduction of the art of medicine to common intelligence the vulgar expressions that we make use of, the few simple remedies that are in use, bring the clinical exercise not only to the eyes, but also to the judgment of the people, which frankly decides on both the nature of the disease, the medical tools to be used and the conduct of the doctors, who do not only have to face the difficulties of their profession, but also the gossip of the ignorant, being much more annoyed with the anxious care of the relatives and friends of the patient, who, thinking themselves intelligent enough, take advantage of their rights in order to deceive with doubts or with inopportune suggestions about the treatment plan believed by them to be the conduct most praiseworthy (Fioravanti 1793 in Rinaldi 2000–2001, pp. 155–156).

Immediately after, Forti reiterated the necessity of the doctor to defend himself in the face of "sinister" cases, claiming that, if the fatal outcome had been predicted, it did not mean that he could be responsible.

> [Doctors] [...] do not allow themselves to be disturbed by slander, nor seduced by inopportune proposals, and explain their concept clearly to those people of good criteria [...] they follow with a certain step the road that they have decided upon, triumphing

> modestly from the good outcome of their work, and giving an account of sinister events to those who can judge of them, who must, however, suppose that these were both foreseen and expected (*ibid*, p. 156).

It is precisely due to this pressure from the public, we believe, that the so-called rules of etiquette for physicians flourished, among which can also be counted the Aphorisms of Alexander Knips Macoppe, which will be discussed in this section. These rules of etiquette were in fact handed down by doctors, with a view to refining their behavior so that they would be irreproachable, both from the point of view of morality and professional responsibility. Again, it is not by chance that this is precisely the period in which we see, for the first time, the appearance of the very concept of "medical ethics", made popular by the famous booklet published for the first time in 1794 and reissued in 1803 by the previously cited British doctor, Thomas Percival (Percival 1803).

Knipps Macoppe was born in Padova from a family whose paternal line (of the surname Knips) originated from Cologne and whose maternal line (of the surname Macop, Italianized into Macoppe) probably had Flemish origins (for a complete biography and corresponding bio-bibliographical references: Ongaro 2002, 2004). Graduating in Medicine and Philosophy in 1681, he practiced the profession in Venice with great success, so much that he became the personal doctor of Prince Alessandro Farnese, who he followed on his travels. When Farnese died in 1689, Macoppe, after various peregrinations, settled in Montpellier until 1693. Returning to Italy, he was entrusted with the Chair of Pharmacy and Medicine in 1703 and in 1716 obtained the second place Professorship of Theoretical Medicine, inaugurating the course with a lecture bearing the important title: *Pro empirica secta adversus theoriam medicam*. Finally, in 1727, he was moved to Full Professorship of Practical Medicine.

The lecture of 1716 was written by Macoppe in clear opposition, as the title itself suggests, to that given by Domenico Guglielmini (1655–1710) in 1702: *Pro theoria medica adversus empiricam sectam*. In this way, Macoppe involved himself in the polemic between rational medicine and empirical medicine that had raged in Italy and Europe between the seventeenth and eighteenth centuries, beginning from the dispute in Bologna between Marcello Malpighi (1628–1694) and Giovanni Girolamo Sbaraglia (1641–1710), in which the first argued for the necessity of anatomy and experimental reasoning (based on mechanistic models) in understanding the mechanisms of disease and in treatment, while the second, supported by the natural philosophy of John Locke (1632–1704) and the clinical approach of Thomas Sydenham (1624–1689), argued, on the contrary, that anatomy was not at all necessary, neither for the understanding nor for the treatment of illnesses. To be an empirical doctor also meant, at least in part, being a traditionalist, a scholar of the ancients and, particularly, of the teachings of Hippocrates, while being a rational doctor also meant being "neoteric", that is, a follower of the most recent theories and findings, in particular the Cartesian idea, according to which the human body was a machine, and the idea that such a

theoretical–experimental model would permit a new understanding of the body and illness deeper than before.

Macoppe, therefore, in favor of the "empirical sect", sided with a medicine based on observation, experience, and a therapeutic approach that tended to be simple and not very aggressive, which was also confirmed in the aphorisms whose deontological meaning we are going to discuss. Nonetheless, in this text, Macoppe also showed a certain openness to "neoteric" theories. In aphorism XI, for example, the Padovan doctor claimed that what was essential in medicine was its therapeutic effectiveness, regardless of the modernity or antiquity of the theories utilized.

> With language now bowing to the ancient and now to the modern, it is necessary that you are able to describe and understand the physiopathology of the disease [...] The reason being that, whatever the level of our knowledge, it must be directed towards the final aim of restoring health (Knips Macoppe 1823, p. 53).

Also significant in this regard is Aphorism LXX, in which Macoppe argued for the necessity of constant practice in hospitals, which was in line with the empirical medicine which took the form, indeed, of a "pure" clinical medicine, but also of the practice of autopsies, which was a factor supported instead by rational medicine.

> To establish the reputation of the physician it is necessary that he has had long practical experience in public hospitals. It is also necessary for the common people to know that his hands have been frequently covered in blood, as much as from human cadavers during autopsies, as from animals during studies of comparative anatomy (*ibid*, pp. 172–173).

Finally, an aphorism that ultimately reveals Macoppe's predilection for the "ancients".

> Do not pass yourself off as a modern physician–chemist. Even if the moderns and the chemists possess many excellent things, nevertheless these teachings are hateful to the ignorant and cunning: rather, show yourself as an adherent, in practice, of the ancients, and in theory, of the moderns, and that you know how to choose the best of both. In this way the opinion won't spread that you are an anatomist of men and vegetables, or are too devoted to comparative anatomy, because the mob is convinced that all of the genius of the physician is barely enough for his art, and that, being distracted by these extraneous studies, he does not think about the needs of his patients (*ibid*, pp. 219–220).

Arriving at a systematic analysis of this collection of aphorisms, we note, above all, that the text circulated among doctors in manuscript form for many years until, at the request of Giambattista Pratolongo (1745–1810), professor of botany and natural history in Genova, (1745–1810), a correspondent of LazzaroSpallanzani (1729–1799), the text was edited and published by Floriano Caldani (1772–1836) in 1795 (Knips Macoppe 1795) (Fig. 2.5). The text then had an enormous success and wide circulation, enough for it to be reissued and translated many times.

As reported by Giuseppe Ongaro:

> [...] the aphorisms, which profess to be a behavioral code for the young doctor, with the aim of obtaining for him a successful career in accordance with the principles of medical ethics, in reality present themselves, in the judgment of T. Berti, as "a complex mixture of

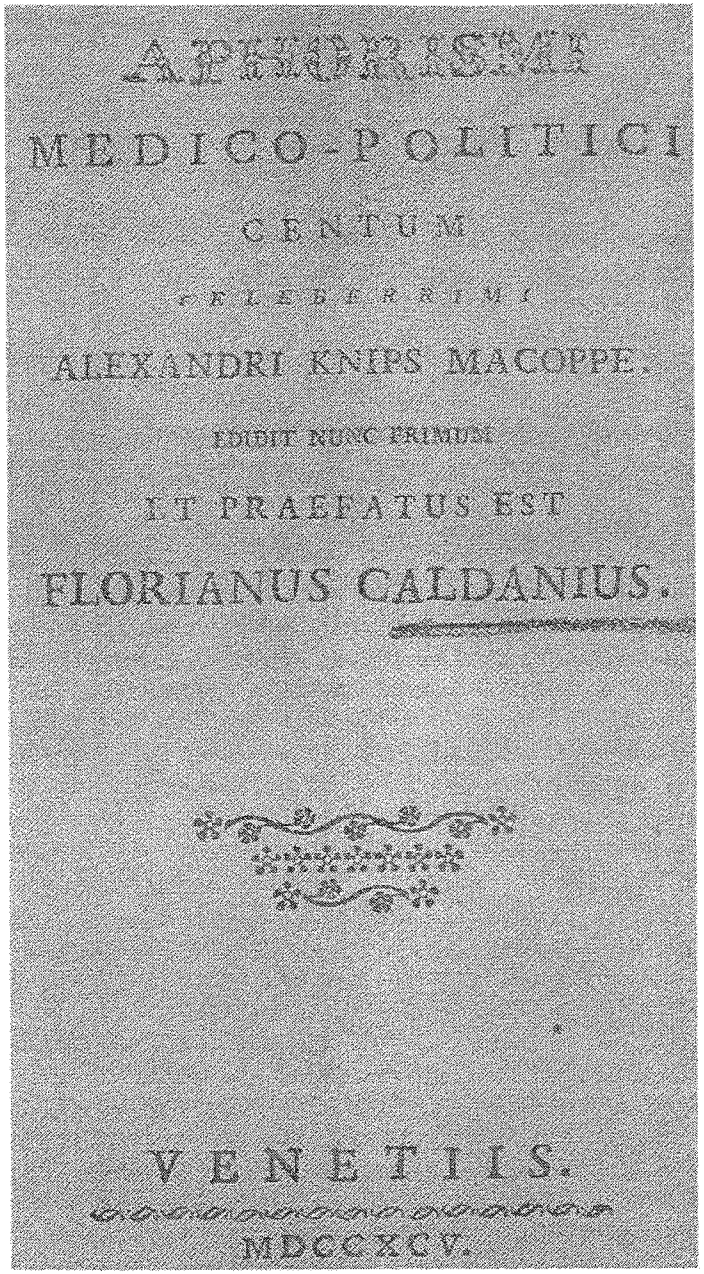
APHORISMI
MEDICO-POLITICI
CENTUM
CELEBERRIMI
ALEXANDRI KNIPS MACOPPE.
EDIDIT NUNC PRIMUM
ET PRAEFATUS EST
FLORIANUS CALDANIUS.
VENETIIS.
MDCCXCV.

Fig. 2.5 Title page of the first printed edition of the aphorisms of Knips Macoppe

> wisdom, cunning and unscrupulousness to the point of cynicism", which could explain the extraordinary success it enjoyed [...] (Ongaro 2004, p. 751; Berti 1990).

In fact, one can encounter an essential ambivalence in this text, which is precisely related to the nature and objective of the rules contained therein; a quality, as in the work of Zerbi, which takes the form of a genuine ambiguity. It is an ambivalence clearly revealed, for example, in the *Preface* of one of the Italian translators of the work, the Milanese doctor Iganazio Lomeni († 1838) (the translation we have used for our analysis) in which the following passage is found:

> Herein, selecting dogmas of the purest Catholicism and the lessons of an illuminated experience, as well as deep knowledge of the human heart, and the relationships that exist between doctors, and between these and the sick, the bystanders and the public, the lines of prudent conduct to which those who profess the art of health must follow, in order to reach honorable and constant fame, have been drawn. Macoppe deserves to be called the Macchiavelli of Medicine; but a wise, sober, honest Macchiavelli, who is religious without offending reason, always guiding his pupil towards the formation of a frank heart, but without arrogance in his awareness of himself and in the rectitude of the aims of his work (Lomeni 1826, pp. 7–8).

We see, therefore, that the translator noted the simultaneous presence of two apparently conflicting elements: the observance of Catholic morality, founded, as is well known, on indisputable and strict imperatives, and, at the same time, rationality and "illuminated experience", i.e. factors, on the contrary, at the base of a flexible and circumstantial morality. An ambivalence is also noted in the intrinsic purpose of the work, directed, at the same time, toward the development of an ethics of the absolute good and a series of rules of "conduct" based on "prudence", aimed at ensuring not so much the good, but the "honored and constant fame" of the physician and, in certain cases, ensuring him the means by which to avoid *responsibility* in the event of error and culpability. Macoppe's text, beyond being full of rules aimed at safeguarding doctors—which we will discuss shortly—also contained, in effect, authentically moral precepts, such as not to prescribe costly, ineffective drugs, but instead to donate drugs and treat the poor, and to do so in private, without ostentation (*ibid*, pp. 112, 160); such as being simple, not proud (*ibid*, p. 133); giving assistance to he/she who had also been an enemy (*ibid*, p. 154); the absolute prohibition of poisoning anybody (*ibid*, pp. 151–152) or being greedy (*ibid*, p. 234); and, finally, the maintenance of professional secrecy (*ibid*, pp. 188–189, 214).

The parallel with Zerbi, here, is fitting and immediate, and, in our opinion, uncovers the very roots of medical ethics, which has been constantly torn, from the very beginning, between absolute ethical principles and the necessity to preserve the honorability of the profession, a fundamental condition, in its turn, so that the doctor may have the possibility of putting ethical principles themselves into practice.

Even more importantly, the translator defined Knips Macoppe as a Macchiavelli, thus highlighting the unscrupulousness of the principles developed by the Paduan doctor, by means of a comparison with a political theorist, Macchiavelli,

for whom the end of an action justified the means that were adopted in order to carry it through.

The purpose of the work was made clear by Macoppe himself in his introduction, which was directed at an ideal pupil, considered as the main interlocutor at whom the aphorisms were aimed.

After having revealed the secrets of medicine, Macoppe writes that:

> [...] it is necessary for me to explain the secrets of those who practice the medical art, not so much with the object of revealing to you their caution, but to make clear to you the insidious guile and cunning of some, which is not easily perceived by the common gaze (*ibid*, p. 19).

It was therefore about showing to the young both the adroitness and cunning of doctors, where the first quality was, evidently, a force for good, while the second was evil. The fact is that, in the text, it is not always clear where the border lies between the two qualities. The following passage is also very interesting.

> Learn these political canons with the same diligent assiduity with which you learn those of Hippocratic Medicine.
>
> They are inextricably linked to one another, for unto the same commendable aim are they directed, that is, the salvation of the sick, your glory, your advantage. [...] Fulfill your duty towards others, but sometimes think also of yourself. Restoring the sick to health and saving your own honor are both exemplary aims in the exercise of medicine (*ibid*, p. 21).

The fundamental ambivalence is completely revealed here: medical ethics are an instrument for both the salvation of the sick and for the glory and advantage of the doctor. The two things, at bottom, seemed inextricably linked: how could a doctor help others if he was not able to help himself? His ruin, in fact, would inevitably lead to the ruin of his patients.

Basically, the parallels with the work of Zerbi are clear and numerous and confirm the intrinsic continuity between Macoppe's treatise and the late-Medieval and Renaissance rules of etiquette for physicians. The themes of professional solidarity and the importance of good reputation are certainly the main ones and are constantly reiterated. Macoppe also made use of religious sentiment to develop a sense of pride and belonging among the members of the guild of doctors, in particular with the first aphorisms of the treatise. As Macoppe maintained in the first aphorism (*ibid*, p. 23), medical knowledge had God himself at its source and was inspired by him. As a consequence of this:

> [...] understand from this—he writes, always addressing himself to a pupil—how eminent your ability is, and how much respect you owe to God and sacred things (*ibid*, p. 26).

Solidarity among colleagues, vital for the preservation of the guild, was assured, for example, with the ban, already found in Zerbi, on arguing in front of a sick person (*ibid*, p. 157) and, more generally, of avoiding "medical quarrels" (*ibid*, p. 50), but also, eventually, with the advice not to criticize new theories or drugs that one was not yet acquainted with (*ibid*, pp. 74–76), to welcome foreign doctors who came to practice in one's own city in a friendly manner (*ibid*, p. 81)

and, finally, to always quote the authors whose theories one had utilized (*ibid*, p. 122).

Aphorism XXXVII, in which Macoppe advises never to judge the work of other doctors negatively, is very interesting, also with regard to the issue of *responsibility*. The passage is as follows:

> [...] called in for a consultation, in order to judge the work of other doctors, do not immediately, with treacherous politics, detract from what has already been carried out [...] since your detraction would certainly damage your colleagues, without giving the slightest advantage to the patient. [...] When the outcome is fatal, accuse the fierceness of the sickness, not the work of the doctor (*ibid*, pp. 103–104).

The final sentence, we think, speaks for itself.

Finally Macoppe, very attentive to the formation of his pupils, advised one not be reluctant to commend and give credit to younger colleagues (*ibid*, p. 70) and went so far as to suggest praising their achievements and concealing their errors.

> Learn to admire, without envy, the treatment that your rival, the assiduous youth, strives to perform, by praising his good conduct and concealing with strict silence the things that go wrong (*ibid*, p. 77).

For the youth (and not only), in his turn, it could be important to be able to demonstrate that he has a great teacher (*ibid*, pp. 174–175), while for the teacher it should be rule of thumb to acquire "new doctors who follow his practice" (*ibid*, p. 198).

The aphorisms dedicated to the creation, preservation, or consolidation of the good reputation of the physician are also very fine. Macoppe advised his ideal interlocutor, that is, the young student physician, to adjust his "countenance" to the trend of the illness, by showing himself happy when recovery was certain and sad when everything suggested the worst (*ibid*, p. 58); he also advised visiting the patient only when necessary, even without being called, but no on account when it was useless, even to increase the expectation of the patient, so that he was even more delighted at the sight of visiting the physician (*ibid*, p. 60): finally, he advised never to treat incurable illnesses (*ibid*, p. 143).

From the exterior point of view, it was a good rule not to have a beard or long whiskers (*ibid*, p. 90), not to show off bags full of money or diplomas (*ibid*, p. 93), not to walk too quickly or in a cheerful manner (*ibid*, p. 95), not to go too often to the theatre (*ibid*, p. 96), not to boast of one's prizes or successes (*ibid*, p. 97), not to dress in clothes that are too costly, or wear a wig and makeup (*ibid*, pp. 111, 156–157), not to get drunk or carry weapons (*ibid*, p. 114), not to compose verses, above all if vulgar or satirical (*ibid*, p. 186), not to live in homes that are too lavish (*ibid*, p. 195), not to be too taciturn or too talkative (*ibid*, p. 208), not to stipulate payments in advance (*ibid*, p. 209), and, finally, not to wear too much perfume:

> Do not saturate your clothes with musk or amber perfume, or any other similar odor harmful to many women, especially in cloisters, as well as some men: instead of gratitude, you will give off such a terrible smell that you will instead seem like a spruce and lascivious youngster, rather than an authoritative man; and also because, in truth, these perfumes can give rise to head pains, anxieties, dizziness, spasmodic convulsions, or other

similar disturbances. You will be one who causes sickness, not a doctor. Your behavior, not your clothes, must give off an aura of gentleness (*ibid*, p. 210).

For a good reputation, Macoppe also advised that the doctor made powerful friends in the city where he lived and demonstrated his capacity in public affairs (*ibid*, pp. 140, 197). Entirely novel, compared to Zerbi, was the mention of the utility of frequenting hospitals and autopsies, as already noted in the discussion on the conflict between empirical and rational medicine. It is interesting that this necessity was not supported with reasons of scientific knowledge, but of social usefulness.

In order to conclude, we have found, among Macoppe's aphorisms, ruses that are clearly beyond any possible ethical or moral justification; aphorisms that are, not by chance, extremely important, also with regard to the issue of the doctor's professional responsibility.

Aphorism IX, for example, is among the most interesting. We believe that it is worth quoting it in full.

> Always use equivocal words when predicting the future. Knowledge of the future is the inevitable punishment which only the relatives and acquaintances of the sick inflict upon us, who from the beginning want to know for sure the outcome of the disease. [...] They are almost unwilling to see us doctors as men; rather, they would like us to be semi-gods or oracles. [...] With clipped sayings, obscure and ambiguous predictions you will keep their souls in doubt, mitigate their ardent longings, and you will set foolishness out to pasture. Your predictions must be so subtle that you always have a rationale to support them. [...] There are some two-faced doctors who for the same grave illness predict to someone the recovery of the patient and to another his death. In any case, they have testimony ready that they have not failed in their prognosis, artfully dissimulating the incorrect opinion, or pretending that it was a joke. Others predict a happy outcome, also maintaining the contrary hypothesis, based on the fact that the acuteness of the illness complicates its prognosis: others, on the contrary, see black everywhere, without excluding the hope of a return to health, trusting in the validity of their remedies: thus, if the patient dies, the guilt is attributed to the illness, not to the doctor, since he had predicted it from the very first moment; if, on the contrary, he returns to health, he will praise his savior to the heavens. [...] Following these tracks they never lose their balance: you must not aspire to similar conceit, however; instead you must remember that your honor is bound to the fulfillment of your predictions: where you are not able to heal, do not spare any effort so that you may overcome the fallibility of human prognostics [...] (*ibid*, pp. 39–41).

Here, Macoppe was not afraid to explicitly declare the necessity, for doctors, to be equivocal to the point of lying, predicting restoration of health for some and for others the opposite outcome. It echoes, without doubt, Zerbi's rules of etiquette, in those passages in which the Renaissance author advised doctors to keep their prognosis "ambiguous" (Zerbi 1495; in Mancini 1963, p. 47) and in which he advised the doctor to exaggerate the gravity of an uncertain disease, so that he would be excused in the event of a fatal outcome or greatly praised in the event of recovery (*ibid*, p. 49). Macoppe showed how he considered ambiguity and deception to be necessary reactions to the excessive expectations of the patient and those nearest to him. Very importantly, Macoppe counseled his ideal interlocutor not to exaggerate, but to always remember that the doctor had to concentrate all of

his efforts on making an exact prognosis, attempting, in this way, to overcome the "fallibility" of predictions. In any case, it is clear that this cunning does in fact protect the doctor from assuming heavy *responsibilities* in case of error.

XIV is another interesting aphorism.

> If an unfortunate event follows on from the imprudent or erroneous use of a particular remedy, and somebody calls into question your competence, reject the accusation with a harsh and dignified face, quickly making use of subterfuges and stratagems to aid you, so that trust is maintained in your work and your medicines. Since the die has already been cast, there is nothing left to do but conceal the mistake [...] (Macoppe 1826, p. 63).

In order to divert attention, Macoppe continued, one could invoke particular environmental conditions, or specific failures and errors in the conduct of the patient, the assistants, the servants, or the apothecary. It was therefore clear that the doctor could commit an error and be completely responsible for such an error, but it was just as clear that any means, even immoral, were legitimate in order to avoid acknowledging responsibility. This, in its turn, was justified on the basis of the necessity that the doctor must never, for any reason, lose his patient's trust, which might be conceived as an aim in some way justifiable, almost noble: it was in fact clear that the effectiveness of the cure itself depended a lot on the patient's trust of the doctor, as also emphasized by Zerbi.

Along the same lines is the advice, in the event of a worsening of the disease in an important patient, to join with another physician, in order to diminish the probability that one or the other, or both, will be held responsible for any harm.

> At the worsening of the illness, from which a highly regarded person, your wife, her brother or father die, ask another doctor to perform a joint consultation with you, because if patients of that kind end up in the graveyard, the public and the relatives of the deceased, in designating the cause, sometimes swing between very different and even contrary and always regrettable opinions about the treatment (*ibid*, p. 164).

This is cunning that reveals how much solidarity and collaboration between doctors was an instrumental element in the safety and defense of each one of them.

Just as unscrupulous is aphorism LXXXVIII, which we believe is worth quoting extensively.

> If death takes one of your patients, it is good to proceed with the sectioning of the cadaver. [...] However, in case the results of the section would disprove your predictions, in speaking of it with doctors, weigh your words carefully: make the others believe that you have for a long time calculated the cause of death from the discrepancy of the humors, or even in an alteration of the ethereal, nervous and electrical fluids, which you did not mention, since these are above common intelligence, and that could not therefore be found in an examination of the body. On the other hand, there are almost always in the viscera chance formations of bruises formed by an irregular slowing of the bloodstream that only slightly preceded and accompanied death; there are almost always lumps of various shapes and in some cavities there are often found partial collections of yellowish lymph, which are all things which could help to cover your error: if not elsewhere, in the heart there are almost always found clusters of fibers wrapped in whitish bundles that are capable of representing a fictitious, untreatable polyp (*ibid*, pp. 199–200).

The passage, we believe, speaks for itself. We will only add that the sense of an aforementioned aphorism seems here to be fully revealed, that is, the one regarding the necessity for the doctor to show that he knows both the "ancients" and the "moderns". The different theories, in the final analysis, did not function as a way to better understand and treat the illness, but rather as a way to protect and conserve the doctor and medicine itself.

To conclude, it is interesting that Macoppe advised the doctor not to perform medicolegal assessments, in order to avoid bringing upon himself the desire for revenge:

If it so happens that the criminal magistrate calls you to give a judgment in a case of real or supposed poisoning, by means of an autopsy on the body of a deceased, avoid if you can do this odious task, for the most part useless or only damaging. Even if the truth of foul play is confirmed upon examination of the body, the deceased will not return to life: think, rather, that because of this verification, while you are creating enemies and claiming homicide, somebody could decide to take their revenge upon you (ivi, p. 150).

We believe that history, in this case, has vindicated the Padovan physician, at least from the point of view of the phenomenal rise of forensic medicine, in the second half of the nineteenth century (Crestani et al. 1992), which has become a fundamental element of the majority of modern democratic legal systems.

2.3 Conclusion

Our historical survey, as illustrated by the title itself, does not purport to be exhaustive, also because the subject, which concerns the history and evolution of the concept of the professional responsibility of the doctor, is practically unknown and would require the kind of systematic research that is not possible in an essay of limited breadth such as this.

However, we believe that the *case studies* offered here have made it possible to isolate some of the basic elements which have characterized the history of the issue.

First of all, professional liability is an issue that has re-emerged, at least in modern times, whenever medicine has met with a transformation of its theoretical models and, consequently, of its work, as well as whenever the social role of the doctor has undergone major changes. These changes have also led to a consequent transformation of the criteria by which the proper execution of healthcare precepts and, at the same time, possible errors and failures, are judged. It is probable—but this is a question for professional legal doctors to answer—that the issue of responsibility is today so relevant for the very same reasons.

These changes, second, have also brought about a necessary rethink of the strategies through which doctors defend and preserve themselves. As in any other professional guild, medicine also strives, and has always strived, to defend it own members. Considering the delicacy of its task—the restoration of health—and its

object of study, namely the diseased man, doctors have been particularly sensitive to the elaboration of rules of conduct that allowed them to avoid being the object of unjust accusations on the part of the public, or other guilds that they are in competition with. It is important to emphasize, regardless of the actual use that doctors have made of these precepts, the uncertainty of the results in the medical treatment of diseases, which are often independent of the doctor's actions.

Finally, let's remember that, due to its very position, medicine has always been involved, in spite of itself, in actions that could lead to serious accusations against the doctors who were compelled to perform them, such as the poisonings ordered by the secret service (Guilandino), or the failure to take the correct position in case of disease epidemics (Mercuriale), or, more generally, the role of doctors in any type of state process or religious inquisition.

These rules of conduct, in addition, have also, by their very nature, lent themselves to other less neutral or edifying uses from the moral point of view, namely the ability to preserve the doctor even in the face of objective responsibility in case of professional errors and omissions.

This has been the source of a fundamental ambiguity which, as seen in both Macoppe and Zerbi, has not only characterized the history of the concept of responsibility, but also that of medical ethics as a whole. An ambiguity also due to a possible moral justification, or moralization, of this kind of deception and falsehood, based on the idea that medicine, even where it is mistaken, must preserve itself, otherwise the requisite trust in its practice would be lost.

The number and the complexity of these elements render the problem of medical responsibility difficult to resolve, both from the historiographic point of view and from the point of view of the daily practice of legal medicine. It is right to remember, in addition, that ethics itself, by its very nature, is not a precise instrument, but the expression of common sense that is not reducible to mere rational rules. We hope that our text has provided some useful indications for a preliminary historical framework of the issue, a framework that, once brought to fruition, can only have useful consequences, also for the development of contemporary debate.

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