

11. La legge francese e belga sono specificatamente contro il *doping*, quella argentina è una legge per l'incremento e lo sviluppo dello sport che prevede pene (da un mese a tre anni di detenzione) a chi somministra o usa sostanze *doping*.
12. Seguita dal Decreto del Ministro della Sanità 5 luglio 1975 (*Elenchi delle sostanze capaci di modificare le energie naturali degli atleti, nonché le modalità di prelievo dei liquidi biologici ed i relativi metodi di analisi*) e dal D.M. 28 febbraio 1983 dello stesso Dicastero (*Norme per la tutela sanitaria dell'attività sportiva non agonistica*), nonché dal D.M. 3 maggio 1991 che ha limitato l'utilizzo di alcune specialità, quali steroidi anabolizzanti, ormone somatotropo ed eritropoietina, che ha sostituito nel tempo l'autoemotrasfusione.

La corrispondenza va indirizzata a B.R. D'Este, Via G. Gozzi, 49, 30172 Ve/Mestre.

## HEALTH CARE IN THE RENAISSANCE

DONATELLA LIPPI  
Istituto di Storia della Medicina  
Università di Bologna\*

### SUMMARY

*Health care undergoes a deep transformation between XIVth and XVIth century; in the states of Central and Northern Italy very advanced health practices and magistratures are established, to face recurring pandemics of Black Death. In the same time, charitable institutions of medioeval tradition lose the role of generic assistance, to assume treatment of infirm, with an ever-growing specialization. Author examines particularly the situation in Tuscany and in Florence, considering the evolution of health care in the Renaissance.*

Speaking about health problems during the Renaissance in Florence involves the evaluation of those innovating components which have deeply characterized this period: it is therefore necessary to refer to former times, in order to point out its relation with the age we intend to examine.

I am therefore going to consider the problem of hospitals and health measures, together with the role of physicians and nurses.

First of all, I want to underline the semantic development of the word *hospitale*: during the Middle Age, it denoted many different charitable institutions, which provided for the cure of

Parole chiave/Key words: Health care - Renaissance

\* Special Lecture, which has been given during the last session of the sixth European Conference on Clinical Oncology and Cancer Nursing, Florence, 27-31 October 1991.

the sick, giving hospitality to pilgrims, helping poors and foundlings as well: *xenodochia, nosocomia, bephotrophia, ptocotrophia et alia aedificia, quae vulgo hospitalia appellantur*<sup>1</sup>.

It is very important to mention a passage from the Institution's act of the Hospital of Santo Spirito in Sassia, in Rome, signed by the Pope Innocent IIIrd in 1204: *Haec enim pascit esaurientes, sitientes potat, colligit hospites, nudos vestit et non solum infirmos visitat, sed eorum in se infirmitates assumens infirmantium curam agit, in carcere positus subvenit, et quibus in vivis in infirmitate communicat, participat in sepultura defunctis*<sup>2</sup>.

Here, the most common works of mercy are mentioned: as a matter of fact, the teaching of the Gospel had pressed for a charitable activity towards fellowmen, which showed itself in the works of mercy of christian tradition.

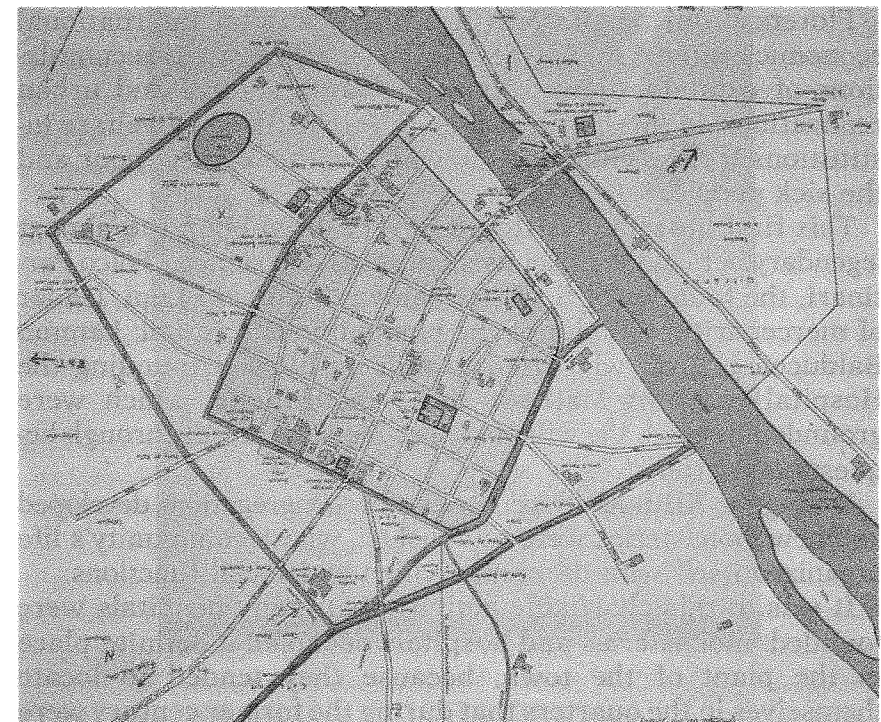
Late in Quattrocento, hospitals were almost exclusively entrusted to ecclesiastics: sickness was considered *via perfectionis* and invaluable blessing *sub specie aeternitatis*<sup>3</sup>; this ideology of health derived from the general therapeutical impotence: there were no public health services with permanent offices and sanitary measures were entrusted, in Florence, to the Magistracy of the *8 di Guardia*, who usually attended to the public order<sup>4</sup>.

During the Republic, there were determinate rules to practice sanitary professions and great attention was devoted to the sanitation of the soil and built-up-areas, as we read in some rubrics of the Statutes; important dispositions regarded the control of provisions, measures against infectious diseases and mortuary police<sup>5</sup>.

The authorities could also intervene to supervise and protect charitable activity, as Statutes considered this right, too.

The distribution of hospitals was therefore bound to the great lines of communication and above all to the routes followed by pilgrims, when, starting from the XIth century, great masses of believers went on pilgrimage to the most important sanctuaries.

If we consider the geography of hospitals, we can follow their development from the XIth century, to point out the meaning of their location in the town area (Fig. 1).



In this period, two hospitals are a derivation of the Cathedral (S. John. The Evangelist) and of the greatest monastic institution (Badia); the others are placed in correspondence with the different ways of approach to the town through the main lines of communication.

On the other side of the Old Bridge, in the *platea in capite pontis*, where the roads coming from the south joined, there was the Hospital of Saint Miniato; from the quarter of Saint

Lawrence, where the homonymous hospital was situated, started the road to Faenza and the Po Valley; Pinti Hospital was on the eastern directrix of the countryside, in the quarter of Saint Peter the Greater.

Florence, during the XIIIth century was an international economic center, a thickly peopled town, where great accumulations of capitals allowed imposing architectural and urban realizations; in this context, charity was realized in welfare institutions for the children, the widows, the old, the poor and the sick people.

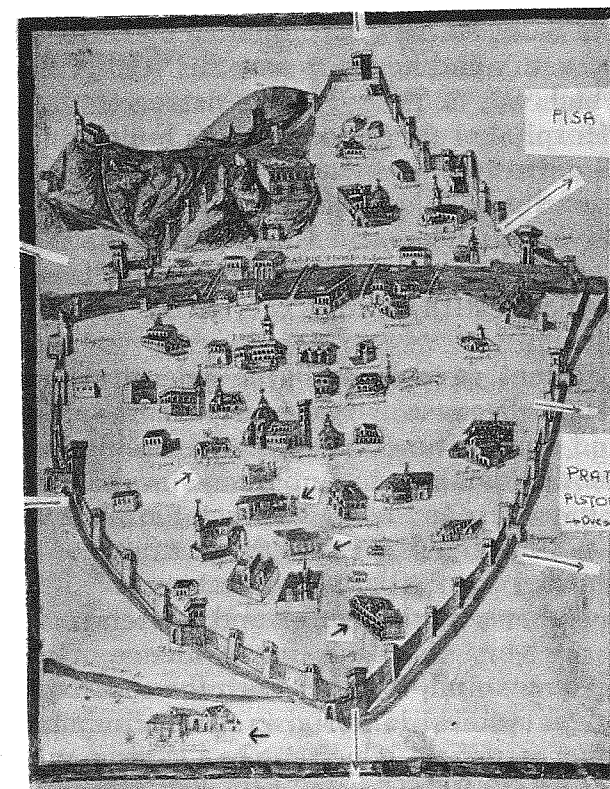
This first hospital assistance is very often bound to almost legendary personalities: let us mention as an example, Folco Portinari, the founder of S. Maria Nuova; Bonifacio Lupi, leader of mercenaries, founder of the homonymous hospital; Lemmo Balducci, usurer, who tried to redeem himself founding the Hospital of Saint Mathew: these institutions, which were grounded through the will of singles, became larger through bequests and grants<sup>6</sup>.

During the XIIth-XIVth centuries, new congregations developed and new monasteries were established, where community's life organized itself with different civilian and social functions.

It was to this charitable activity that many hospitals were founded: monasteries and hospitals occupied a definite place in the plant of the town, because they tended to locate themselves in the quarters that during the former century were outside the town, along the main roads of the outskirts.

Giovanni Villani, in his *Cronica* reports that in Florence there were *trenta spedali con più di mille letta ad allogare i poveri e infermi*, but only some of them have left historical memory or architectural traces.

If we examine the map of Pietro del Massaio of the XVth century, we can point out the location of these welfare centres, to confirm their presence along the main town roads, in the direction of the gates, following, as point of referment, the highroads which are mentioned in the Statute of the Captain of People of 1322/25 (Fig. 2).



In this map, only most important hospitals are showed: Santa Maria Nuova, Innocents, Saint Mathews, Bonifazio and, outside the gate, Saint Gaul.

Preferential routes were again Saint Gaul street, which continued the ancient tracing of the *cardo maximus* and, beyond Arno, Romana street, where the traffic from the south concentrated: Santa Maria Nuova was founded by Folco Portinari in 1288 and became progressively larger, growing into the main hospital in Florence, which has been always in activity up to today, without solution of continuity.

Hospital of Saint Mathew was founded by Lemmo Balducci: he practiced usury and hoped to save his soul grounding this hospital, which was dedicated to the patron of the Exchange Guild; the Hospital of the Innocents was built up for account of the Silk Guild in 1419 for foundlings; the Hospital of Bonifazio became larger through the acquisition of the premises of other hospitals, as very often happened during the Renaissance, growing into a real Fabric, with its Tenement and here Vincenzo Chiarugi, in the XVIIIth century, carried out his reform in the cure of madmen.

It is very difficult to reconstruct the structural characters of these hospitals, because istitutionals events, alterations to premises and to their function, subsequent enlargements have modified their original aspect and many hospitals which were outside the gate were pulled down when Florence was besieged in 1529, not to offer shelter to the enemy.

The presence of open galleries is a recurrent feature of main hospitals, together with the church and a determinate symbol, which now are very often the only evidence of the ancient presence of an hospital, together with the toponymy.

Architectural studies do not give satisfactory information about the inner structure, which can be reconstructed through ancient sources: the Buonsignori map shows the cross shaped plan of Santa Maria Nuova which was very common in ancient hospitals, because it allowed that only one person, from the centre of the cross, watched in the same time the four wards.

Another original structure in Santa Maria Nuova is the Cloister of Surgery, but it is necessary to reach the XVIIIth century to know exactly the detailed use of every room.

After the great epidemy of Black Death, which spread and ranged all over Europe in 1348 and determined the necessity of isolating contagious people, different kinds of hospitals originated: at the beginning of modern times, moreover, new clinical pictures appeared: syphilis, hyperpyrexia (*sudor anglicus*), scurvy, flu (*febris catarrhalis*), whooping cough (*tussis canica*), petechial typhus (*febris lenticularis*), thyphus abdominalis (*febris mucosa*)<sup>7</sup>.

These new diseases, together with the origin of the medical specialities, contributed to the development of hospitals or sections of hospitals, which were directed to the cure of groups of similar pathologies, as cutaneous diseases or metal illnesses.

During the modern age, leper hospitals tend to disappear, because of leprosy's recession: it is important to remind that lazarettos were for a long time the only *specialized* hospital structures, as they directed to isolate patients by the fear of infection.

The mechanism of contagion was an unresolved problem (Fracastoro published his work *De contagione et contagiosis morbis* in 1546): observation and intuition suggested that it was necessary to separate the infected people, prohibiting the movement of persons from contaminated areas: for this reason, the Government undertakes many interventions of sanitary policy, as the use of *bollette di sanità*, a sort of health's passports, which were added to the foundation of lazarettos, quarantine, health-board and the orders to report death and cases of contagion.

The staff of magistracy, which dealt with health problems, was composed by employeers, not by physicians and it is interesting to underline that physicians did not play a significant role in this forming of a sanitary consciousness and in the activity of public health, where, later, they will be protagonist.

Physicians were now behind the scenes, in the Studia, looking for their proper identity, to get emancipated from monks, barbers, quacks.

Key figures in this period are Superintendents, Commissaries, Health-Officers.

As the hospital and the patient had changed, the character of the physicians gets a new function; the monk-physicians gives way for the laic one, with a definite professional hierarchy, whose task is to cure patients.

The presence of physicians is always more solid: following the Book of Montaperti of 1260, there were in Florence, three *medici vulneratorum* and one *medicus ad curandum infirmos feбри* and the name of a physician occurs in the institutions act

of Santa Maria Nuova, but in 1339, Florence has 60 physicians, confirming the secularization process of the sanitary world: the physician becomes a central figure in hospital life, together with other members of the staff.

Let us proceed to examine now the organization of the hospital staff itself. When Santa Maria Nuova was founded in 1286, tradition tells that the housekeeper of family Portinari, Monna Tessa, left her service, in order to assist patients in the new hospital; tradition wants that Monna Tessa founded and organized the *Oblate*, women who lived in the hospital, offering, as their name says, their work and their life to the sick<sup>8</sup>.

This very suggestive story has very probably its foundation, as the presence of the tomb and the altar of Monna Tessa seems to confirm.

The first *Spedaligo* of Santa Maria Nuova, the priest Benedetto di Ridolfo da Monte Bonello founded a residence for these women, which was enlarged later through a cloister. *Oblate* wore a long, grey dress and had very severe rules, but they were laic and remained laic up to 1932, when they were recognized as religious congregation.

We can desume their roles from many sources as the *Cronica* of Villani, the writings of Landino, archives' data, the Statutes, the information which had been sent to King Henry the VIIIth in 1524 and to King Ferdinand in 1546.

In an arbitration of 1345, *Oblate* are mentioned too: many noble women joined this charitable institutions.

They had to sew, to darn, to mend hospital's linen and they were very charged with the supervision of the works in the kitchen: among *Oblati* and *Oblate* there were the *Infirmarius* and the *Infirmaria*, who received the patients, wrote their generalities, let them wash and gave them the proper dress, accompanying them into the ward.

*Infirmarius* made the first diagnosis as he had to judge what kind of disease the patient was suffering from: *febricitantes*, *ulcerosos*, *vulneratos*; together with the physician, who was call-

ed *adstans*, he wrote the report which had to be controlled by many physicians.

After the visit of the physician, *infirmarius* was charged with the task of fetching remedies in the *unguentarium*. These duties were strictly divided between *infirmarius* and *infirmaria*, who were responsible for the male and the female departments.

We can therefore conclude that *Oblate* and *Oblati* had a very active role in the life of the Hospital and not only as far as simple works were concerned, but also from a medical point of view.

As a matter of fact, they gained a good knowledge of medicine and surgery: it is enough to say that Cosimo I in 1557 regretted that *Oblati*, even if they had promised to live serving the sick, interrupted their task, in order to practice the profession of chemist or surgeon, whose rudiments they had learnt in the hospital.

On the contrary, *Oblate* kept alive their ancient traditions, organizing themselves and gaining the feature of the proper original model of nurses, with a determinate ethical and professional code, which is in part actual today, too.



D. Lippi

#### BIBLIOGRAPHY

1. STOPANI R., *Ospedali e xenodochi a Firenze e lungo le vie maestre del suburbio fiorentino nei secoli XIII e XIV*, in AA.VV., *Storia della solidarietà a Firenze*, Firenze, 1985, pp. 5-22; PARK K., *Doctors and medicine in Early Renaissance Florence*, Princeton University Press, Princeton 1985.
2. *Liber Regulae S.Spiritus*, a cura di A.F. La Cava, Milano 1947.
3. GRMEK M.D., *Le médecin au service de l'Hopital médiéval en Europe occidentale*, in: *History and Philosophy of the Life Sciences*, 4, 1, 1982, pp. 25-63; NASO I., *Medici e strutture sanitarie nella società tardo medievale*, Milano 1982.
4. CARABELLESE E., *La peste del 1348 e le condizioni della sanità pubblica in Toscana*, Rocca S. Casciano, 1897; CORSINI A., *La "moria" del 1461 in Toscana e l'istituzione dei primi lazzaretti in Firenze e in Pisa*, Firenze 1911; IDEM *Legislazione sanitaria e misure d'igiene sotto la repubblica fiorentina*, Firenze 1913; IDEM, *L'assistenza ospitaliera e le antiche Corporazioni di Arti e mestieri*, in *Atti del V Congresso Naz. Med. Lavoro*, Firenze 11-14 giugno 1922, pp.1-15; CIPOLLA C.M., *Public health and the medical profession in the Renaissance*, Cambridge University Press, Cambridge 1973.
5. COSMACINI G., *Storia della medicina della Sanità in Italia*, Laterza Roma-Bari 1987.
6. ANDREUCCI O., *Della carità ospitaliera in Toscana*, Firenze 1864; PASSERINI L., *Storia degli stabilimenti di beneficenza e istruzione elementare gratuita della città di Firenze*, Firenze 1853.
7. BERNABEO R.A. *L'arte della Medicina*, Esculapio Bologna 1986, pp. 122-123.
8. CALZOLARI C.C., *VII Centenario dell' Ospedale di S. Maria Nuova. Lo spirito di un servizio Secolare*, Barberino di M.llo 1988, with the complete bibliography about this subject. PINTO G., *Il personale, le balie e i salariati dell'Ospedale di S. Gallo di Firenze negli anni 1395-1406*, in *Ricerche Storiche*, 4, 1974, pp.113-168. See also PASSERINI L., op.cit.

La corrispondenza va inviata a D. Lippi, Via Incontri, 17, 50139 Firenze

#### Articoli/Articles

### LE NUOVE VIE DELLA SCIENZA E L'UMANITÀ DI GALVANI

VINCENZO SCARINCI  
Dipartimento di Farmacologia  
Università degli Studi di Bologna

#### SUMMARY

#### NEW FRONTIERS OF SCIENCE AND HUMANITY OF GALVANI

*The paper consists of two parts: the first one deals with the Scientific work and the Academic activity of Galvani; in the second one the Author refers of the less known aspect of the great Scientist's personality: his humanity.*

*The lively debate rose between Galvani and Volta is mentioned and discussed.*

*Galvani refused to take an oath to the Constitution of Cisalpine Republic, demonstrating high moral rectitude. His refusal cost him the loss of the University Chair and his salary, falling into poverty. He married his Master's daughter, Domenico Galeazzi, who consoled his bitterness. Unfortunately, he also missed his wife, grieving over it.*

*The Secretary of the Institute of Bologna announced his death in a public session in 1798, arousing the universal consternation.*

Non lieve è il mio compito di rievocare la figura del sommo Scienziato, che con la sua prima osservazione dell'elettricità in moto e con la dimostrazione di una elettricità animale, schiuse nuove vie alla Scienza. Lo splendore dei meriti scientifici, nelle sue grandi linee, sono più o meno noti, meno note forse sono l'umiltà e l'umanità del Galvani.

Parole chiave/Key words: Intrinsic animal electricity - Voltaic pile