Special Session

Work-relatedness of health problems: a Blind Spot in curative care?
Ramazzini revisited: Have doctors learnt the lesson?

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Culture and society in XVII century Italy

Tommaso Campanella
Galileo Galilei
Giordano Bruno
Guercino
Pierluigi da Palestrina
Claudio Monteverdi
Giorgio Vasari

University of Modena and Reggio Emilia
Modena, Italy
Biological Advances in XVII century

Herman Boerhaave
“dissection of human bodies”

Francesco Redi
“every living thing comes from an egg”

Antoine van Leeuwenhoek
“observation of blood circulating in capillaries”

William Harvey
“circulation of blood”
Health problems in the XVII century

It was rather odd for clinicians of that time to devote themselves to the investigation of the relation between health and work.

In fact, the majority of population faced health problems much more basic than work-related ones and doctors’ attention was attracted mainly by the richest people illnesses.
Ramazzini’s interest in workers’ health

At the beginning
- His attention was drawn to workers in foundries and tanneries during his student years

The idea for the treatise
- It came when his attention was attracted by the speed with which a sewage worker emptied the sewer at Ramazzini’s house
- The man answered that too long a stay in such place would cause blindness
- Ramazzini found that sewage workers showed severe redding of the eyes and that many of them became blind
DE MORBIS ARTIFICIUM
BERNARDINI RAMAZZINI
IN PATAVINO GYMNASIO
PRACTICÆ MEDICINÆ PROFESSORIS
PRIMARI

DIATRIA
MUTINÆ OLIM EDITA:
Nunc accedit supplementum ejusdem
argumenti,

AC DISSERTATIO
DE
SACRARUM VIRGINUM
VALETUDINE TUENDA.

PATAVII. M.DCC.XIII.
Per Jo. Baptistem Conzatum.
SUPER. PERM. AC PRIVIL.
“When you come to a patient’s house, you should ask him...what occupation does he follow?”

[Diseases of Workers. The Latin text of 1713 revised with translation and notes by Wilmer Cave Wright. Chicago: The University of Chicago Press, 1940, p. 13]
“When you come to a patient’s house, you should ask him...what sort of pain he has, what caused them, how many days he has been ill...” So says Hippocrates in his work *De Affectionibus*
“Accordingly I have tried to unearth in the shops of craftsmen, for these shops are schools whence one can depart with more precise knowledge...and, which is the main thing, to suggest medical precautions for the prevention and treatment of such diseases as usually affect the workers”
## Syllabus of occupations in the *de Morbis Artificum Diatriba*

<table>
<thead>
<tr>
<th>Apothecaries</th>
<th>Farmers</th>
<th>Painters</th>
<th>Stone-cutters</th>
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<tbody>
<tr>
<td>Athletes</td>
<td>Fishermen</td>
<td>Plasterers and Lime-workers</td>
<td>Sulphur-workers</td>
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<td>Bakers and Millers</td>
<td>Fullers</td>
<td>Porters</td>
<td>Tanners</td>
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<tr>
<td>Bathmen</td>
<td>Gilders</td>
<td>Potters</td>
<td>The Learned</td>
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<tr>
<td>Blacksmiths</td>
<td>Glass-makers</td>
<td>Printers</td>
<td>Tinsmiths</td>
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<td>Brick-makers</td>
<td>Healers by inunction</td>
<td>Razor and Lancet Grinders</td>
<td>Tobacco-workers</td>
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<td>Carpenters</td>
<td>Hemp Flax, and Silk-workers</td>
<td>Runners</td>
<td>Vintners</td>
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<tr>
<td>Cheese-makers</td>
<td>Horsemens</td>
<td>Sailors and Rowers</td>
<td>Voice-trainers and Singers</td>
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<tr>
<td>Chemists</td>
<td>Hunters</td>
<td>Salt-workers</td>
<td>Weavers</td>
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<tr>
<td>Cleaners of cesspits</td>
<td>Laundresses</td>
<td>Sedentary workers</td>
<td>Well-diggers</td>
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<td>Confectioners</td>
<td>Lutestring-makers</td>
<td>Soap-makers</td>
<td>Workers on minutes objects</td>
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<td>Coppersmiths</td>
<td>Midwives</td>
<td>Soldiers</td>
<td>Workers who stand</td>
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<td>Corn-sifters and Measurers</td>
<td>Miners</td>
<td>Starch-makers</td>
<td>Writers and Notaries</td>
</tr>
<tr>
<td>Corpse-workers</td>
<td>Nurses</td>
<td>Oilmen</td>
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</tbody>
</table>
The relationship between occupations and diseases

Chemicals agents

- Dangerous materials chemicals such as mineral dusts for miners and stonecutters, vegetable particles for tobacco and carding workers and vapours for vintners and confectioners, could be inhaled or penetrate the skin

- Disorders were classified according to the agent

From: Franco G. Ramazzini’s and workers’ health. Lancet 1999

The relationship between occupations and diseases

Physical agents

- Excess noise affecting coppersmiths
- Other physical agents (heat, cold, humidity) as potential causes of illnesses for people such as glassworkers, bakers, brickmakers and laundresses

From: Franco G. Ramazzini's and workers' health. Lancet 1999
The relationship between occupations and diseases

Impossibility to ascribe all workers’ diseases to chemicals or physical agents

Common diseases caused by

• maintenance of prolonged stationary postures or unnatural postures (workers who stand, sedentary workers, grooms, scribes, weavers)
• activities requiring heavy muscular effort (porters, woodworkers)
“...it is much better to prevent than to cure, and so much easier to foresee future harm and avoid it rather than have to get rid of it after having fallen prey”.

Atque hæc quidem ad Therapœjam, modo paucæ quædam documenta pro hu-
jus maxæ prælectionis coronide, in pro-
philaxeos gratiam lubet proponere,quan-
do longe præstantius est præservare, quam
curare, lucti satius est tempæstatem præ-
videre, ac illam effugere, quam ab ipla
evadere.
Would Ramazzini’s colleagues appreciate the topic?

He knew his colleagues would not appreciate this new approach, because it required to abandon habits of cleanliness and refinements.

"...I hesitate and wonder whether I shall bring bile to the noses of the doctors... if I invite them to come to the latrines"
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