A tribute to Bernardino Ramazzini (1633–1714) on the tercentenary of his death

Busy public health practitioners who do not have the time to keep up with the burgeoning specialist literature may find it easier to ignore history completely.

The result is an increasing distance between historians and practitioners, a situation that results in the impoverishment of a public health robbed of his historical perspective [1].

On 19 October 1936 the distinguished historian of medicine Henry E. Siegerist delivered the Wesley Carpenter Lecture at the New York Academy of Medicine, providing an overview of the observations of workers’ disorders throughout the centuries [2]. A substantial piece of his lecture was devoted to Ramazzini’s De Morbis Artificum Diatriba [3], whose first English edition appeared in 1705, just 5 years after the Latin princi- ceps edition published in Modena [4]. Historians claimed that the Diatriba ‘is to the history of occupational diseases what Vesalius’s book is to anatomy, Harvey’s to physiology, Morgagni’s to pathology’ [5]. His book represented a medical and social triumph and appointed Ramazzini as the father of occupational medicine [6]. On the occasion of the tercentenary of Ramazzini’s death, this article is a tribute to him and his vision of occupational health in the second half of the seventeenth century.

Ramazzini’s scientific and humanitarian thinking developed in the cultural, economic and social context of the Duchy of Modena, in northern Italy, in the seventeenth century. In Italy, as throughout Europe, this period was characterized by a deep recession affecting every aspect of life. Culture was in the service of the court, and the economy, mainly based on agriculture, was in crisis [7]. At that time, when the attention of doctors was devoted to the most wealthy patients, it was unexpected and unusual that a doctor devoted his attention to investigate workers’ health issues. Convinced that workers’ disorders had an important socioeconomic impact, he went to the workshops, talked to the workers, described workplaces, studied the conditions under which they worked, reviewed the existing literature, diagnosed health disorders and suggested measures for preventing risks and protecting health [8]. Through his observations, which highlighted the terrible and demeaning conditions many workers tolerated, he proved to be an enlightened nonconformist, who assessed the vulnerability of people in an anthropological framework embracing individuals, environment and social and economic status [7].

The authors who studied Ramazzini’s work emphasized the innovative approach for identifying workers’ health problems and valued the masterly clinical observations [9,10]. However, his insights on prevention were no less significant [11]. In fact, he anticipated different issues within the framework of public health: the methodological approach [8,12], the interest towards vulnerable groups [13], the concern towards disabling disorders [14], the need to cooperate with other doctors and with hygienists [15].

Presciently within the Diatriba is the vision of communication with workers, whose disorders are taken into account (Table 1). Sometimes with terms revealing the paternalistic attitude of physicians towards their patients, he anticipated the role of the modern health care professional when he recommended hygiene measures in workplaces, suggested reducing the duration of work, insisted on the use of individual protection measures, provided advice on moderation and encouraged adopting healthy behaviours. The Latin expressions he used can be appreciated in the classical translation by Wilmer Cave Wright [16].

Ramazzini’s view in limiting health risk is provided by the recommendation to starch makers to work in open places to limit exposure to dust (‘I always advise these workmen to carry on this sort of work in a sunny and, if possible, spacious place, not in confined quarters’) and to confectioners to wash and dry corncobs in order to reduce their dust and limit the possibility of inhaling it (‘Let me suggest a few precautions for these workers: first of all they should be careful to do … in a place that is open to the air so that such vapours may be more easily dissipated; it is a good plan to stop working for a few hours in order to breathe fresh air’).

Elsewhere, he recommended periodic interruption of hard-working activities (‘… they should be warned to spare themselves when they are doing this sort of work, to snatch some hours of the day from their toil …’), in activities requiring an intense effort of the eyes (‘… if they would now and again drop their work and turn their eyes elsewhere or snatch a respite of several hours from their task and rest their eyes by looking at a number of different things’) and in activities requiring standing (‘we must advise … to interrupt when they can that too pro- longed posture by sitting and walking about or exercising the body …’).

More generally, he recommended moderation in working as the best safeguard against diseases as in the case of weavers (‘Therefore in work so taxing moderation would be the best safeguard against these maladies, for
have advised such workers to fasten transparent bladders over the face, as do those whose work is polishing minium...’ (minium is Latin for lead) or to protect the ear from noise exposure (‘The men might stuff their ears with cotton so that the inner parts may receive less of a shock from the loud noise’).

In addition to recommendations aimed at preventing risk, he provided workers with more general advice aiming at promoting health. Focusing on the sedentary habits in learned men (‘...physically inactive in proportion to the activity of their minds and brains, suffer the drawbacks of a sedentary life’), he proved to be aware of the benefits of physical exercise (‘to repair the damage that a sedentary life may bring on, physical exercise will be beneficial, but in moderation …’) and often suggested physical exercise to other sedentary workers such as cobblers and tailors (‘They should be advised to take physical exercise, at any rate on holidays’).

His terminology, mostly aimed at advising workers about appropriate attitudes, is that of the clinician asking the patient to limit himself, to be moderate, and to avoid risks. This attitude is clear when he tried to persuade vintners to refrain from drinking (‘When I treat workmen of this class, whether they are kept in bed ... or I visit them in their workshops, I advise them to abstain from wine and still more from brandy ...’) or when he insisted on the need to modify working habits of tobacco workers. In some cases, the message is soft, as in the case of corpse bearer (‘Now the precautions to be suggested to them so that they may suffer as little as may be in the service of the dead should be the same as are usually taken in the event of plague’).

In other cases the message was more direct as when he warned blacksmiths (‘the men should be warned to turn away their eyes as much as possible and not to gaze at the iron while it bubbles and glows’) and stonemasons (‘...or I visit them in their workshops, I advise them to abstain from wine and still more from brandy ...’).

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could then flourish and new pioneers of occupational medicine emerge [18].

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### Microsite

Oxford University Press has assisted *Occupational Medicine* in developing a microsite as part of the journal’s digital strategy. Launched this month, the microsite is entitled *Occupational Medicine by Industry* and can be found at occupationalmedicinebyindustry.co.uk.

So what is a microsite? A microsite can be defined as a small group of pages acting as a subdivision of a larger online entity such as a website. It usually provides more in-depth content relating to the parent entity, with a separate uniform resource locator or URL.

Microsites are often used in marketing in order to develop branding for a particular product, to provide a keyword-rich environment for search engine optimization and/or to assist with analysis to assess the effectiveness of marketing campaigns [1]. The sites are usually designed to have a single purpose, with easier navigation than the parent website and with a strong call to action or message for the target audience [2].

As with all online marketing tools, design is extremely important. The Spark Report (http://thesparkreport.com) outlines the seven most important principles in developing a microsite. These include simplicity in design, intuitive and agile in navigation and content that has enough relevant information to meet the needs of the user without overwhelming them with unnecessary detail [3].

Well-designed microsites can be very useful resources for postgraduate education. Knowles’ work in adult education outlines six principles of adult learning, which include internal motivation or self-directed learning, goal and relevancy orientated and the ability to apply and integrate new knowledge to their usual practice [4]. Using microsites to present collections of material for

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