

MEDICINE, SCIENCE, AND THE NEW WAYS OF THINKING IN THE IBERIAN WORLD DURING THE AGE OF ENLIGHTENMENT

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Striking attempts were made in Iberia and Ibero-America during the eighteenth and early nineteenth centuries to understand human life in a different way and to improve living conditions for ordinary people. Governments and intellectuals, lay and ecclesiastical, in the two colonial powers, Spain and Portugal, actively took part in these endeavours, which also extended to their overseas territories, notably in the Americas. Similarly, Ibero-American scholars developed their own expressions of the Enlightenment, sometimes independently and other times in concert with colonial officials. Sooner or later, the new ideas would advance from the scientific sphere into the very different spheres of economic policy and political organization. This, in turn, raised the question of the linkage between Enlightenment and Revolution. While this latter is not the subject of the present discussion, it is important to understand that decades of armed conflict, economic dislocation, and political instability between the 1810s and 1870s halted and even reversed the developments which had begun during the eighteenth century. They would be resumed in the last decades of the nineteenth century. This helps to explain why it took until the 1890s and 1900s to resolve the problem of the cause of two of the most harmful of tropical diseases: malaria and yellow fever.[1,2].

Key-words: *Iberian world, medicine, science, enlightenment, independence.*

МЕДИЦИНА, НАУКА, НОВЫЕ СПОСОБЫ МЫШЛЕНИЯ В ПИРЕНЕЙСКОМ МИРЕ В ЭПОХУ ПРОСВЕЩЕНИЯ

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В Иберии и Иbero-Америке в восемнадцатом и начале девятнадцатого века были сделаны исключительные попытки понять сущность человека и улучшить условия жизни для простых людей. Правительства и интеллектуалы, светские и церковные, двух колониальных держав, Испании и Португалии, принимали активное участие в этих усилиях, которое также распространялось и на их заморские территории, в частности в Америке. Аналогично, иbero-американские ученые разработали свои собственные проявления просветления, иногда самостоятельно, а иногда совместно с колониальными чиновниками. Рано или поздно новые идеи из научной сферы появлялись в разных сферах экономической и политической организации. Это, в свою очередь, подняло вопрос о связи между просвещением и революцией. В то время как эта последняя не является предметом настоящего обсуждения, важно понять, что десятилетия вооруженного конфликта, экономических неурядиц и политической нестабильности между 1810-х и 1870-х годах могли приостановить и даже обратить вспять изменения, которые начались в восемнадцатом веке. Они будут возобновлены в последние десятилетия девятнадцатого века. Это помогает объяснить, почему лишь в 1890-х и 1900-х годов в этих странах подошли к решению

проблем искоренения двух наиболее опасных тропических болезней: малярии и желтой лихорадки [1,2].

Ключевые слова: *Пиренейский мир, медицина, наука, просвещение, независимость.*

Heavy population loss, as a result of the European arrival in the Americas at the end of the fifteenth century and through the sixteenth century, really forms the starting point of medical history of Latin America in the modern era. The literature on this topic continues to grow. While overall figures are disputed, the scale of loss is not. Furthermore, the connection between disease and depopulation had clearly been established. [3,4]. By the later seventeenth century, however, population levels have begun to recover, putting renewed pressure on available resources and water supplies. Despite the impact of undernourishment, famine, and epidemic diseases, their recurrence does not appear to have reversed the upward trend of population growth. This has been demonstrated in the case of the Mexican epidemics of 1737, 1779, and 1801-2, and the subsistence crises of 1779-80, 1785-87, and 1809-11.[5].

Spanish America had universities as well as colleges and seminaries. The University of Mexico City dated from 1553, and, given the evident population loss through disease, it had a Chair of Medicine from 1578. European approaches to medicine derived from Galen and Hippocrates, and to some extent, Avicenna, predominated, despite indigenous American practices. A second Chair was established in 1598, a sign of the importance attached to the subject in this Spanish colony, followed by Chairs in Healing and Pharmacy, and Anatomy and Surgery, in 1621, and Astrology and Mathematics in 1637. As in Europe, medicine followed the theory of the four humours.[6].

The Scientific Revolution of the seventeenth century took time to penetrate Spain, Portugal, and their American dominions. Attachment to Scholastic methods of thinking, rooted in Aristotle, remained widespread. The new scientific thought aroused growing criticism of Classical and Scriptural authority, in favour of the experimental method and the observation of natural phenomena. In many respects, the scientific revolution from Galileo and Copernicus, through William Harvey's identification of the circulation of the blood in 1632, to Isaac Newton's laws of gravity represented the *real* revolution more than the Renaissance or Reformation, both of which looked back to an idealised Classical or Scriptural past. As Anthony Pagden has stated, "The Scientific

Revolution...as a true 'revolution' in the modern sense of the term...This was a radical, decisive, and irreparable break...[which] severed scientific inquiry forever from any reliance upon any prior condition, belief, custom, or authoritative text." [7].

On these foundations, the Natural Sciences and the Applied Sciences, such as Medicine, Chemistry, and Pharmacy, made considerable advances during the following century. They constituted an essential ingredient of the European Enlightenment. Newton's contribution to the scientific understanding of the universe remained supreme, formulated as it was in the aftermath of Francis Bacon and parallel to the ideas of John Locke. Roy Porter argues that 'The Enlightenment secured the triumph of a radical new rendering of the very constitution of Nature. After 1660, the Aristotelian metaphysics of elements, humours, substances, qualities and final causes, so long dominant in the universities...were finally superseded by models of Nature viewed as matter in motion, governed by laws capable of mathematical expression. This enthronement of the mechanical philosophy, the key paradigm switch of the 'scientific revolution,' in turn sanctioned the new assertion of man's rights over Nature so salient to enlightened thought. [8].

In Spain, which had become a cultural backwater of Europe in the later seventeenth century, a small group of intellectuals, described as *novatores*, focussed on the new methods of observation and experimentation. They sought to reform the practice of medicine and the university and college curricula. Their influence could be seen during the 1690s in Madrid, Barcelona, Zaragoza and Seville. One of their leading figures, Diego Mateo Zapata, built up a rich library of the works of the early sixteenth-century Spanish humanists, such as the Valencian, Luis Vives, who had been in the advance guard of European intellectual developments at the time Spain had first risen to greatness. He added to them works by Descartes, Bacon, Hobbes, Boyle, and Gassendi. The Inquisition, however, began to take an interest in him in 1721-25, fearful of the new ideas. Although he was acquitted of the charge of heresy, he was still banned from Madrid for ten years and half of his property was confiscated. In 1745, nevertheless, we find him, unrepentant, launching an attack on the Aristotelianism, which predominated in the Spanish universities and colleges. Among the *novatores*, José Lucas Casalete, held the Chair of Medicine at the University of

Zaragoza. Juan de Cabriada, who practised medicine in Madrid, complained in 1687 that Spain was always the last country in Europe to receive information concerning experimental methods in Physics and Chemistry developed elsewhere. [9].

In the Portuguese Monarchy, extensive overseas voyages and life in territories in tropical lands made attention to medical services imperative. Merchants and maritime personnel were exposed to tropical diseases different from the which afflicted inhabitants of the European continent. Both the Portuguese and Spanish drew from indigenous sources in Asia, the Americas and Africa methods of treatment and remedy for them. This indigenous contribution modifies the idea that Europe provided the sole source of medical knowledge. Garcia de Orta's *Colloquium of Drugs and Remedies from India*, which appeared in manuscript in Portuguese in 1563 and in print in Antwerp four years later, became the first work to systematise knowledge and application of remedial plants. The Jesuits in both empires played a significant role in disseminating knowledge and use of medicinal plants. Most notable was the adoption of the *cinchona* bark as a remedy for the fevers, which centuries later would be known as malaria. It was highly likely that this knowledge came originally from the Indian communities of the Loja region of what is now southern Ecuador. [10].

Portuguese Brazil also became a source of medical knowledge. José Rodrigues Abreu, a physician who had graduated from the University of Coimbra, accompanied as a young man in his twenties the new provincial governor to the gold-mining area of Minas Gerais early in the eighteenth century. He not only produced a valuable study of the mining zone but also published in stages between 1733 and 1752 a four-volume study of medical practice during his eight-year stay in Brazil from 1705 to 1713. On his return to Portugal, he was appointed Chief Physician of the Armed Forces in 1714 and became the king's doctor. Approaching his seventies, Abreu was elected a member of the Oporto Medical Academy in 1750. Abreu's career should be viewed within the general European context of attention to medical practice, the adoption of revised remedies, and the movement away from the traditional approached to medicine derived from Galen. Furthermore, he did not work in isolation. On the contrary, Abreu formed part of a reforming group at the centre of which was the powerful

Cardinal João da Mota, who from 1736 acted as the king's principal adviser. [11].

University reform in Portugal, focussing on the Universities of Coimbra and Évora from the 1770s, accompanied attention in Lisbon to the development of the sciences, badly neglected until that time. The political predominance of the Marquês de Pombal between 1750 and 1777 provided a powerful impulse to reform in Portugal, because Pombal identified the new ideas with the interests of the Portuguese imperial state. [12]. The Lusitanian Enlightenment ran parallel to the Hispanic, but was not identical to it. The nature and interests of the two Iberian Empires were different, since they had been formed in distinct geographical regions and operated in distinct international contexts. Nevertheless, their governments closely watched one another, while at the same time drawing what they believed would be useful to them from the examples of other European states, notably France, the Italian states, and Great Britain. Domenico Vandelli, Professor of Chemistry at the University of Padua in northern Italy, joined the University of Coimbra in 1764, with the intention of developing the teaching and study of Natural History. He had led scientific expeditions in Italy and corresponded with the Swedish botanist, Linnaeus. Vandelli influenced an entire generation of Portuguese and Brazilian thinkers. The foundation of the Royal Academy of Sciences in Lisbon in 1779 and the creation of a botanical gardens in the grounds of the Royal Palace of the Ajuda were designed to promote the new scientific learning in the Lusitanian world. Scientific expeditions to Brazil, Angola and Mozambique not only mapped Portuguese-claimed territory but also identified and collected plants, especially those which could be used in medical treatment.[13].

The Spanish American Enlightenment focussed principally on the discovery and dissemination

of knowledge of the natural world and the improvement of medical science and techniques. There were many scientific expeditions organised from Europe, starting with the French Academy's sponsorship of the Scientific Expedition of 1735-44 to Quito. The two Spanish naval officers and scientists, Jorge Juan and Antonio de Ulloa, took part in this expedition and produced a critical report in 1749 on conditions in the Spanish Empire, which the imperial government immediately suppressed. Ulloa, for his part, identified platinum as a distinct metal in 1735

and later, in 1757, established the Royal Astronomical Observatory in Madrid. [14]. Perhaps the most famous of these expeditions was the one led by the Italian Captain Alejandro Malaspina in 1789-1794, which explored the western coast of the Americas and across the Pacific Ocean as far as the Philippines, New Guinea, Australia and New Zealand. This epoch-making voyage provided valuable new material but political comments by Malaspina concerning the government in Spain led to his arrest upon return, the confiscation of his papers, and the scattering of the information collected. Malaspina remained in prison until 1803 and then lived out the remaining seven years of his life near Genoa. [15].

Ignorance and indifference, however, continued to be the obstacles against which the small group of reformers and innovators continuously struggled. They were the bugbear of the Quito medical practitioner, Eugenio Espejo (1747-95), whose father appears to have worked in the city's Hospital de la Misericordia. The son took his medical degree in 1769 and began practising three years later. His focus was hygiene, which he considered to be deplorable. He blamed the ignorance of the dominant social groups in Quito, and repeatedly ran into trouble with the authorities. Espejo advocated inoculation as a preventive during the smallpox outbreak of 1785, pointing to the need at the same time for sanitation. Controversial in his day, he was arrested three times – in 1783, 1787 and 1795. He was banished to New Granada (present-day Colombia) after the second arrest, and there he met two young men – Antonio Nariño and Francisco Zea – who in the early 1810s would become leading figures in the attempt to overthrow Spanish colonial rule. Even so, Espejo was friendly with the principal noble family of Quito, the Montúfars, and with such graduates of the University of St. Thomas Aquinas as Dr. Manuel Rodríguez Quiroga, who would all play leading roles in the attempt to secure home rule for Quito in 1810-12. [16].

In both the Spanish and Portuguese worlds, the advancement of science and promotion of medical knowledge usually depended upon state support and the patronage of powerful noblemen and members of the senior clergy. Even so, individual initiatives could lead to important developments. The most notable instance was the foundation of the Economic Societies in the Hispanic world. The first of these resulted from the initiative of a group of noblemen in the Basque Provinces, interested in

promoting the application of new scientific knowledge and techniques to the development of their lands and commerce. Understandably, education was a priority for the dissemination of such knowledge, a priority which the government of Charles III (1759-88) shared. The *Sociedad de Amigos del País* was founded in the Basque Provinces in 1765, a response to the general recognition of Spanish backwardness in relation to the rest of Western Europe and the local phenomenon of rising prices of agricultural commodities. Reforming groups in other Spanish and Spanish American cities followed the Basque initiative during the 1770s and 1780s, and usually received full royal support.

Key government ministers, such as Campomanes and Jovellanos were associated with these Societies, particularly the Economic Society of Oviedo, the capital of their home province of Asturias. The Societies became the agencies through which the ideas of the French Physiocrats, Adam Smith, and Condillac passed into Spain. Even so, discussion in the Economic Societies often ranged beyond the ideas which ministers were prepared to support. Under Pablo de Olavide's influence, the Economic Society of Seville, founded in 1776, reflected the more radical ideas discussed in Olavide's circle. [17, 18, 19, 20, 21].

In Spain's principal American dependency, the Viceroyalty of New Spain [Mexico], the establishment of such economic Societies proved to be uneven. It took until 1822, after the collapse of Spanish rule, for one to be established in Mexico City. In Guadalajara, local Basque merchants affiliated to the Basque Society in the 1770s. However, attempts to establish a Society in the port of Veracruz, the main outlet to Europe, failed in 1784. Nevertheless, in the second of the older viceroyalties, Peru, a *Sociedad de los Amigos del País* was successfully formed in Lima in 1790 on the Basque model by two of the city's leading intellectuals, José Baquíjano and Hipólito Unanue (1755-1833), the latter an outstanding promotor of medical reform. It had the specific backing of the Viceroy, Francisco Gil de Taboada y Lemos (1790-95). Magistrates, lawyers, university professors, city councillors, merchants, and intellectuals formed the bulk of the 35 members. While promotion of the natural characteristic of Peru and the development of the country's resources remained priorities for the Society, politics was carefully avoided. Its journal, 'Mercurio Peruano,' disseminated scientific knowledge of the country. [22, 23]. In Quito, Espejo became the secretary

of the Patriotic Society established with official approval in 1789, which included Montúfar, who was the Marqués de Selva Alegre, and other noblemen. Two years later, the President of the Audiencia of Quito, with the support of Bishop, Dr. José Pérez Calama, who previously has been one of the enlightened clerics of the Mexican province of Michoacán, sponsored the formation of a *Sociedad Económica de los Amigos del País*, on the Spanish model. [24]. Parallel effort to improve the university curriculum and stimulate economic development took place in the Kingdom of Guatemala, the large Central-American territory which ran from the borders of southern Mexico to the Isthmus of Panama. [25].

Undoubtedly, the two most celebrated Europeans to travel in the Americas and write down their scientific findings were Baron Alexander von Humboldt, younger brother of the Prussian philosopher, William von Humboldt, and his French companion, the botanist, Aimé Bonpland. The two first met in Paris in 1798, united by enthusiasm for an expedition to South America. Although they did not form part of any official expedition, Charles IV granted them license to travel to America for that purpose. The request came five years after the arrest of Malaspina, an indication of the contradictory nature of Spanish policy in that period and perhaps of Humboldt's powers of persuasion. The two explorers began in Venezuela in 1799, venturing into the interior to explore the tributaries of the Orinoco. Although the subject of British North American Independence in 1783 was very much in the air in Caracas, Humboldt and Bonpland were careful to say nothing in public on the subject. From Cuba, New Granada, Quito and Peru, Humboldt arrived in New Spain in 1803. Filled with admiration for the prospect wealth of Spanish America, Humboldt's writing spread a misleading idea of how might be developed. He could not have been entirely unaware of the simmering discontent beneath the surface of Spanish rule. [26, 27].

The disruption and violence of the armed conflicts between 1810 and 1826 over the question of independence from Spain, followed by further conflicts over the internal structure of the newly independent states, held back further application of the ideas and practices associated with the Enlightenment. Economic readjustment, fiscal breakdown, and political failures characterised the decades following Independence. Not really until after 1870 were the principal Latin American states able to

renew previous efforts to improve sanitation and medical practices.

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PECULIARITIES OF CLINICAL-PSYCHOLOGICAL COUNSELING

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The article is devoted to consideration of the characteristics and problems of the study of clinical-psychological and socio-psychological counseling as one of the key technologies of psychosocial work, including problem definition and development of a unified concept of clinical-psychological counseling, relationships with clinical-psychological, socio-psychological and age-psychological counseling. Discusses the main challenges and intentions of clinical-psychological counseling as a sphere of understanding relations, cooperation and help. Within social work it acts as an important component of counseling people who are in difficult situations in life. These situations, being often intolerable and incompatible with «normal life» and the normal (ordinary) forms of understanding ourselves and the world, led to the aggravation of already existing or occurrence of new psychosomatic and mental disorders («resomatization» and «psychotization»). Clinical and psychological counselling, therefore, is addressed to transordinary experiences of life and to the transordinary forms of understanding. These forms of thinking appear in the form of transordinary, atypical behavior and «abnormal» behavior, and the deformation of man's relationship with itself and the world. In the transordinary situations, peoples are often faced with traumatic experiences. In the transordinary situation they are experiences the traumas and collision with a deadly dangerous disease or with death, with loss of loved ones, home and property, with the experience of captivity and prison, forced migration or loss of a job, etc. The Task of man to transform the experience so that it served the development, not degradation, including in the form of resomatization and diseases, disintegration of personality and its psychotization.

Keywords: clinical-psychological counseling (clinical counseling), socio-psychological counseling (social counseling), edology, understanding.

ОСОБЕННОСТИ КЛИНИКО-ПСИХОЛОГИЧЕСКОГО КОНСУЛЬТИРОВАНИЯ

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Статья посвящена рассмотрению особенностей и проблем исследования клинико-психологического и социально-психологического консультирования как важных направлений психосоциальной работы. Рассматриваются проблемы определения и разработки единой концепции клинико-психологического консультирования, в том числе в контексте взаимоотношений клинико-психологического, социально-психологического и возрастно-психологического консультирования. Рассматриваются основные проблемы и тенденции развития клинико-психологического консультирования как вида межличностных отношений, одной из главных задач которых взаимопонимание, как отношений помощи и сотрудничества.

Отмечается, что в рамках медицинской помощи клинико-психологическое консультирование является, по сути, смысловым аналогом психотерапии. В рамках социальной работы оно выступает как важный компонент консультирования людей, попавших в трудные жизненные ситуации. Эти ситуации, будучи невыносимыми и подчас несовместимыми с «нормальной жизнью» и нормальными (ординарными) формами осмысления себя и мира, привели к