

Hygiene in the city of Morelia, Mexico, during the Porfiriato regime

La higiene en la ciudad de Morelia, México, durante el régimen del porfiriato

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Abstract

This work was carried out with the objective of documenting the state of hygiene and the precepts that concern it, in the city of Morelia, Mexico during the Porfiriato period. In order to do that, documents of that time were consulted such as newspapers, government reports, laws and reforms of the Police Band decreed by the governments, concerning public and private hygiene.

Keywords: Hygiene. History of medicine. Morelia city. 19th century. Porfiriato.

Resumen

Este trabajo se realizó con el objetivo de documentar el estado de la higiene y los preceptos que a ella atañen en la ciudad de Morelia, México, durante el porfiriato. Para ello se consultaron documentos de la época, como periódicos, memorias de gobierno, leyes y reformas del Bando de Policía decretados por los gobiernos en turno en materia de higiene privada y pública.

Palabras clave: Higiene. Historia de la medicina. Morelia. Siglo XIX. Porfiriato.

Introduction

One of the most important medical contributions of the last third of the 19th century was the process that led to public and private hygiene transformation. In the time and space in which the subject of this research is delimited, the period when General Porfirio Díaz ruled Mexico as president or "Porfiriato", two theories of disease transmission are involved. At the beginning of the *Porfiriato*, the miasma theory of contagion was used as the explanation of disease transmission, and public health operated under its medical principles. During the second half of the 19th century, the world

experienced a paradigm shift regarding the origin of diseases. The discoveries that took place in the field of microbiology convincingly demonstrated the existence of beings that were invisible to the human eye, which were present in the environment and that had been present throughout the history of Humanity causing diseases, which had been explained in many ways. However, not all specialists in the study of the causes of disease accepted these ideas, which is why several debates emerged around this new theory¹. By the beginning of the 20th century, the germ theory had been practically accepted thanks to numerous medical publications.

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Another point to consider for the development of hygiene in Morelia during the *Porfiriato*, was the gradual recognition of it as a science, since hand in hand with European ideas, especially some French concepts, hygiene went beyond its philanthropic interests and acquired a scientific and political role that would predominate during the last decades of the 19th century².

This work was carried out with the purpose to document the state of hygiene and the precepts to it concerning in the city of Morelia, Mexico, during the *Porfiriato*.

Panorama of hygiene in Morelia during the *Porfiriato*

By 1877, hygiene of the city of Morelia was going through a serious administrative crisis. The lack of municipal funds was reflected in areas such as public lighting, cleaning of towns and cities, and drinking water supply. Public salubrity suffered from this state of neglect, and alarming mortality figures were documented in some settlements of the State, with apathy of Morelia's town and city councils with regard to salubrity measures implementation being common³.

As for the State's obligation, lack of resources or mismanagement thereof were the reasons why salubrity was so deficient. In March 1877, some cases of typhus and typhoid fever appeared in the city. Their number increased to the point that danger of an epidemic was envisaged in case the necessary measures were not taken. Massive felling of trees not only produced a lack of water due to the scarcity of rainfall, but also affected air quality. With the disappearance of forests, the population considered itself more unprotected, since it was believed that forests were the barriers that nature opposed to the extension and propagation of stale air which, carrying along the pestilential and epidemic miasmas, spread desolation and death³.

In the previous two paragraphs, we can observe the relationship there was with the miasma theory of disease. One of the main elements that stand out in the writings on salubrity and hygiene of those days was the air, the main carrier of putrid miasmas that traveled from their main infection foci to healthy organisms.

The clearing of trees and vegetation was not the only observation made to the city's salubrity; in addition to this, there were the poor conditions of the

aqueduct through which the water consumed to meet the needs of the city passed, as well as the defective construction of the cemeteries, which were surrounded by very small walls without complying with the hygiene regulations of those days, which made of them a potentially open space for miasmatic and virulent diseases³.

Within the infectious landscape described in the government reports, the swamps were also included. These were a constant concern during the last decades of the 19th century. They were formed to the north, west, and a little to the south of the city of Morelia during the rainy season. One of the main causes of their formation was the lack of attention given to the maintenance and periodic cleaning of the Rio Grande³.

Excessive felling of trees and the formation of swamps coexisted with other situations pointed out by the Salubrity Board in 1877, such as uncleanness of the population, open-air garbage dumps in various parts of the city, lack of water in public fountains and insufficient inspection of public establishments such as charcuteries, grocery stores, and meat outlets; pigsties were decomposition foci within the city³. These were some of the main hygiene problems salubrity exhibited in Morelia at the beginning of the *Porfiriato*, and the first in which work would be done to solve them and allow Morelians' hygiene to be improved.

Between 1878 and 1887, several news items were published in the Morelian press about improvements made in aspects related to health. In some issues of the Official Journal of the Government of the State of Michoacán de Ocampo, we found news and articles referring to the importance of forests for public health⁴, the prevention of diseases related to meat consumption⁵, water supply⁶, opening of bath houses⁷, the construction of the new cemetery⁸ and the drying-up of swamps in the city⁹.

Drying-up of swamps continued to be one of the main priorities for the city authorities. The works that would be carried out to permanently end with the formation of swamps included expansion of the channel and lifting of the Rio Grande margin, since over the years it had been modified by some individuals with the desire to widen their properties, and had narrowed the river causing for it to clog up with the rubble it drags, and ended up overflowing and giving rise to the dreaded foci of infection that were the swamps¹⁰.

To the arduous task of drying up the swamps, some other public salubrity provisions were added,

related to the cleaning and cleanliness of the city, establishment of the sewer system, improvements to the municipal cemetery, opening of bath houses, disinfection of wells and reforms that were made to the Police Proclamation.

In the issue of the Official Journal corresponding to April 17, 1887, the additions and reforms to the Police Proclamation in force in the Municipality were published:

“Art. 1. All houses, portals and public buildings, except for those of drapery, which are dirty or deteriorated, as well as the walls of the orchards, plots and gardens located on public promenades or facing busy streets, shall be *conveniently plastered and painted* on all their sides facing the public road, at the expense of their respective owners or possessors, within the non-extendable term of one month counting from the publication of these provisions, under the concept that infringement of this article will be punished with a fine of one to twenty-five pesos, without prejudice to the City Council ordering the property to be painted at the expense of the owner or possessor.

Art. 2. The provision referred to in the preceding article shall be mandatory every two years, with the months of October, November and December of the corresponding years being henceforth established for that purpose.

Art. 3. Article 38 of the Police Proclamation is amended, in the following terms ‘Every day, and at eight o’clock in the morning, all the streets of the city will be irrigated *with clean water* and swept, and the pipes cleaned; with every neighbor, without exception, having this obligation, in the areas of the front and sides of his property, even if there are no rooms nearby; with this obligation being extensive to those in charge of churches, hospitals, hospices, prisons, barracks, schools and public buildings; to the owners of unoccupied houses, to water carriers, with respect to squares and plazas where there are public fountains, and who are registered in them; and finally, to vendors, in the case of squares, markets or points where they are located before setting their stall or business premise. Offenders of this article shall be punished with a fine of not less than twenty-five cents and not exceeding twenty-five pesos, at the discretion of the officers in charge of the Police Commission, who are responsible for imposing it.’

Art. 4. It is forbidden to put on the street the garbage of inside the houses, since it must be reserved to be deposited in the cars as they pass by the respective street.

Art. 5. Pig slaughterhouses, frying pans and factories of any kind shall have on the outside a sign indicating the purpose they are intended for.

Art. 6. The stables and corrals of hotels, inns and barracks, must be kept in a perfect state of cleanliness, with free access to the police in order to ensure compliance with this provision.

Art. 7. The primary instruction commission shall watch that private schools are in convenient locations, attentive to the concurrence of students, and must report to the City Council everything that in its opinion is contrary to hygiene, in order for it to dictate the measures that are appropriate according to the circumstances of the case.

Art. 8. The *Cannabis Indica* plant known as Marijuana can only be sold in Pharmacies, and by means of a physician’s formula.

Art. 9. Corpses will not be deposited in temples for the celebration of religious acts or for any other reason, without prior permission of the President of the City Council, who may grant it without being accredited with certification by two doctors that the presence of the corpse in the church cannot cause any harm to those attending it.”¹¹

By the 1890s, the works for drying-up of swamps were still in process, but “compliance with the Police Proclamation had given good results, the house facades of Morelia were painted and cleaned, conferring the city an aspect of joy and contributing to the improvement of public hygiene”¹².

During the last decade of the *Porfiriato*, the sanitary state of the city of Morelia had improved in many aspects, and the fact that there were no epidemics represented a great work in this field. Hygiene and salubrity of Morelia were directly linked to cleanliness; it was clear that if there was a method for improving the sanitary conditions of the city, it would be by complying with the Police Proclamation, which focused mainly on cleaning and cleanliness¹³.

In the issue of the Official Journal of the State Government corresponding to July 25, 1895, we found the following news item, whereby we can realize how important cleanliness and cleaning of the streets were: “In the City Council of Mexico City, the following provision is currently discussed: Sweeping and watering will be done at early hours of the morning and between one and two in the afternoon, and for cleanliness to be more complete, the street will be then vigorously swept, the garbage will be collected, and it will be irrigated again, trying not to make puddles in order to avoid the mud that is usually generated.

Neighbors who fail to comply with this provision will be fined with five to fifty pesos.”¹⁴

In addition to cleanliness of the city, personal hygiene had also become important. In the 1880s, some bath houses had already been opened in the city, but this had not been a very effective method, since a large part of the population did not have the knowledge about the benefit of bathing: “there are people who are horrified of bath, neglecting the cleanliness of the skin by this means, and here are men who, while thoroughly addressing the cleaning of a horse or other domestic animal, forget about their own skin, considering highly efficient the bath they received with the water of baptism and do not wash their faces except on Sunday, since they are not satisfied with the simple ablution of the soaking of the beard when they shave”¹⁵.

One way to bring people closer to this bathing practice was through the press. Information was published on the importance of cleaning the body and about the benefits entailed by constantly developing this practice; one aspect that we find interesting is about the types of baths, those with cold water and those with hot water¹⁶.

In the last years of the 19th century, to improve salubrity of the city, studies began to be carried out in order to implement a good system of drinking water conduction and sewers, and a commission was therefore appointed to carry out said tasks¹⁷. By 1901, the salubrity police officers continued to act as the guardians of public hygiene and their main task continued to be to monitor sanitary regulations¹⁸.

Between 1878 and 1901, mortality from several infectious diseases increased in the city of Morelia, including cholera, smallpox, typhus, tuberculosis and malaria. The authorities in charge were forced to keep these diseases away by resorting to hygienic precepts and vaccines. This represented an arduous task for hygienists and for the government, since several obstacles hindered this work, including ignorance about the origin and transmission of diseases by many, insufficient knowledge about hygiene and its benefits, resistance of the population towards the implementation of vaccines, exhausting working hours and workers' poor nutrition, and the extremely poor hygienic conditions the great masses lived in¹⁹.

In 1891, the Sanitary Code of the Mexican United States was created, which in 1894 was reformed. In both versions, there was a chapter devoted to infectious and contagious diseases, including cholera, typhus, typhoid fever, measles and scarlet fever. In

1895, the Sanitary Code of the State of Michoacán was created, which was based on the Code of the Federation. The code addressed to Michoacán, like others, had a chapter devoted to infectious and contagious diseases, and developed topics such as isolation, disinfection, rules for funeral honors and for the care of sick people in crowded places; it also stated that vaccination was mandatory and that registration of women who practiced prostitution should be made¹.

Once the sanitary code was established and already in operation for the year 1896, public health of the State of Michoacán, and specifically of the capital city, painted a promising future, and a sanitary police force was established that would be responsible for the inspection of the practice of hygiene in the city. The aforementioned body was composed of four agents and they were in charge of taking care that garbage, understood as “filthy corruption”, did not poison the atmosphere and did not harm the health of the neighborhoods. The agents, who were under the direction of a group of scientists, also had the task of educating families about the application of the precepts of private and public hygiene, and about not consuming adulterated beverages and foods²⁰.

Conclusions

During the *Porfiriato*, measures were implemented in order to improve public and private hygiene in the city of Morelia. Priority was given to tasks such as the drying-up of swamps and cleanup of the city and the Rio Grande. There were reforms in the Police Proclamation that were efficacious thanks to a strict vigilance by this body of compliance with public hygiene measures. And the Sanitary Code of the State of Michoacán, based on the code of the Federation, was implemented, which regulated activities such as isolation, disinfection, the mandatory application of vaccines and registration of women who practiced prostitution.

Conflicts of interest

The authors declare that they have no conflicts of interest.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments have been performed on humans or animals for this research.

Confidentiality of data. The authors declare that no patient data appear in this article.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

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