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Public Health, the Native Medical Service, and the Colonial Administration in French West Africa, 1900-1944

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Public Health, the Native Medical Service, and the Colonial Administration in French West Africa, 1900-1944

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Public Health, the Native Medical Service, and the Colonial Administration in French West Africa, 1900-1914

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From 1900 to 1944, public health was a pillar of the French colonial project in French West Africa. African medical workers became the backbone of the Native Medical Service, which sought to "grow the race" (*faire du noir*) and popularize French cultural ideals while improving the general health of the African population and combating epidemic diseases. Through successive yellow fever and plague epidemics, the Medical Service honed a set of health measures that it utilized in epidemic outbreaks. These health measures remained largely unchanged throughout the period. The political environment and the reactions of African residents, especially residents of the Four Communes, to these anti-epidemic measures did change though. Intermittent popular resistance to health measures, along with persistent personnel shortages, budget constraints, the sparsely settled population, and the vast land area of West Africa conspired to make the goals of the Native Medical Service difficult to achieve.

An examination of the internal profile (personnel numbers, job descriptions, evaluations, organization and organizational changes, and policies) of the Native Medical Service from 1900 - 1944 demonstrates some of the aspects of how the ideology of French colonialism was at odds with itself and with colonial realities. The Native Medical Service was an arm of the colonial government in areas where it was weak, such as spreading French civilization and appreciation for French culture. Despite being used to compensate for some of the government's shortcomings, the Native Medical Service experienced disjunctions between its goals and the means to achieve them that hindered its effectiveness.

The ideological core of French colonialism was built around the Civilizing Mission, development (*la mise en valeur*), and the myth of the indissolubility of Greater France. The widespread French belief in African inferiority and that the benefits of French imperial rule to the subject peoples outweighed the drawbacks both worked against the success of French goals in West Africa to spread their civilization, foster economic and human development, and form a lasting addition to France *Outre-Mer*.

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Introduction

From 1900 to 1944, public health was a pillar of the colonial project in French West Africa. African medical workers became the backbone of the Native Medical Service, which sought to "grow the race" (*faire du noir*) and popularize French cultural ideals while improving the general health of the African population and combating epidemic diseases. Through successive yellow fever and plague epidemics, the Medical Service honed a set of health measures that it utilized during epidemic outbreaks. These health measures remained largely unchanged throughout the period. The political environment and the reactions of African residents to these anti-epidemic measures did change, however.

The dissertation investigates the relationship between medicine, public health, and the colonial administration in French West Africa in the first half of the 20th century. Challenging studies of public health that examine it as a simple extension of European colonialism, this project demonstrates the frequent inefficacy of medical measures and reveals contradictions within the ideology of French colonialism. By charting the history of the Native Medical Service in French West Africa, the project demonstrates that French administrators drew upon the Native Medical Service to shore up weaknesses, especially in spreading French civilization and culture, but were often unable to achieve their goals. Although the French colonial government and the Native Medical Service did not achieve their stated goals, their public health activities had important effects in French West Africa. This study of the Service from its creation in 1905 through 1944 places special emphasis on the yellow fever outbreak of 1900 and the plague outbreaks of

1914, 1929, and 1944 allowing it to show the development of responses to epidemic diseases and the effects that both diseases and their treatment had on the African population. The dissertation also includes a profile of the premier institution of medical education for the African medical workers, the Dakar Medical School. Focusing on the epidemics and the Dakar Medical School supports the argument for the importance of public health to the colonial project, and for the crucial role of the African medical workers in the Native Medical Service.

This study represents a microcosm of the vital point that without public health the whole structure of French colonialism in West Africa would collapse. The French valued their colonies for the people they contained far more than for the landmass itself. They needed their African subjects to be as healthy as possible and for the African population to increase, for people to live longer, and for more children to survive infancy. The Native Medical Service led the efforts to obtain those outcomes, upon which the success of the colonial enterprise rested.

The ideological core of French colonialism was built around the Civilizing Mission, development (*la mise en valeur*), and the myth of the indissolubility of Greater France.[1] In contrast to the earlier colonial mission consisting of France's duty as a Catholic country to spread Christianity, the conquest of Africa was predicated upon the "Civilizing Mission."[2] The civilizing mission and the concept of *la mise en valeur* are intertwined. In effect, *la mise en valeur* was the civilizing mission transformed to

[1] The key works for these issues are Alice Conklin, *A Mission to Civilize: The Republican Idea of Empire in France and West Africa, 1895-1930* (Stanford, CA: Stanford University Press, 1997), D. Bruce Marshall, *The French Colonial Myth and Constitution-Making in the Fourth Republic* (New Haven,

encompass the new expressions of colonial development that emerged in the interwar period. The civilizing mission, as formulated by its adherents, was a general exhortation to uplift colonial subjects by infusing their lives with supposedly superior cultural values of personal hygiene and respect for scientific progress.

With the ideals of economic and human development that made up *la mise en valeur*, the mission to better the lives of colonial subjects continued, but the aspects of colonial domination that were explicitly beneficial to France came forward more clearly as well. Economic development, in this formulation, meant involvement in a cash economy, supplying raw materials useful to French industries, and serving as markets for French goods. Although these elements of economic development are most clearly tailored to benefit France, French colonialists at the time argued that they represented beneficial economic progress for West Africa as well. The hard-working and healthier subjects that the civilizing mission and *la mise en valeur* was meant to produce were bolstering French ability to extract profit from their West African colonies.

From the perspective of the African people who were living under French colonial rule, the civilizing mission and colonial development had radically different meanings than they did for the French coloniaslists. Epidemic health measures often meant destruction of homes and property with little or no compensation, families were often not able to bury their loved ones with the necessary funeral rites, and those who became sick or were suspected of having been exposed to a sick person could be confined to lazarettos. Even when an epidemic was not present, Africans endured coercive

CT: Yale University Press, 1973), Albert Sarraut, *La Mise en Valeur des Colonies Françaises* (Paris: Payot, 1923).

vaccination campaigns, forced labor, heavy military conscription, capricious justice, and intrusive hygiene requirements.

In The French Colonial Myth, Bruce Marshall argues that although the Gaullists and the post-war De Gaulle government claimed that France and its colonies were part of a whole that could not be broken apart without devastating France itself, the colonial populations did not favor a post-colonial contract to be part of a Greater France:

> The constitution of the French Union that was drafted by the Constituent Assemblies in 1945-46, was perceived by most Frenchmen as [a] gift to the native elite, given in the expectation that it would bind the colonial people securely to France…These modern Frenchmen were…the victims of a mistaken belief and the casualties of their desires ['to preserve what they considered their own against the attractions of more seductive rivals']. Intent of preserving French grandeur, they failed to recognize the hatred generated by colonial rule and were finally defeated by the mythical beast of nationalism bent on revenge.[3]

The belief of French colonialists in the necessity of the grandeur of France, as supported by its colonial territories, to the health of the French nation was an ideological current that ran through the colonial era. It was reinforced by French military losses in continental Europe – most notably in the Franco-Prussian war in 1871 and after being overrun by Germany in 1940.

French ideology was at odds with itself and colonial reality in several ways that are revealed in this dissertation. The general conflict of the Revolutionary values of liberty, fraternity, and equality with the inherently oppressive nature of imperial rule over African subjects is one. Another is the call for economic and human development in

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[2] Conklin, *A Mission to Civilize*.

[3] D. Bruce Marshall, *The French Colonial Myth and Constituion-Making in the Fourth Republic* (New Haven: Yale University Press, 1973) p. 1-2.

Africa without the necessary financial contributions from France. More specific to the Native Medical Services was the opposition of the professional expectations of medical workers - trained in curative medicine – to the demands of the Medical Service and the colonial government that medical workers take on work oriented toward preventive medicine that was the philosophical basis of the policies of the Medical Service. Because there were not enough resources to provide traditional curative medicine to the entire West African region, the Native Medical Services adopted a policy of focusing on preventive medicine. This preventive medicine consisted of, among other things, offering vaccinations at isolated medical outposts, trying to prevent people from collecting water in open containers, and encouraging people to burn traste and waste instead of dumping it near houses or using it to fertilize fields.

There was also a longstanding and never fully resolved conflict between French goals of extending health care across the region and the colonial realities of limited personnel and financial resources. Even preventive medicine required more resources than were available to wage an effective campaign to blanket the West African colonial territories with French medical and public health services.

French Empire

French colonial interest in West Africa was part of the second wave of French colonial expansion, which followed a retreat from the Americas and looked to Africa and Asia. Roughly, this second wave of colonial expansion started in the mid-nineteenth century and lasted until the mid-twentieth century.

The Government General of French West Africa was established in 1904, and the Federation it ruled over included the territories of Mauritania, Senegal, French Sudan (Mali), Guinea, Côte d'Ivoire, Upper Volta (Burkina Faso), Niger, and Dahomey (Benin). These territories covered about 1,800,000 square miles.[4] The geography of this huge area includes a swathe of desert running across much of Mauritania, northern Sudan, and northern Niger. South of that is a semi-desert region stretching across Mauritania, Sudan, and Niger. South of that is a strip of steppe across northern Senegal, southern Mauritania, Mali, and southern Niger. The savanna stretches across Senegal, Sudan, Upper Volta, Dahomey, and a small part of Niger. Deciduous forests grow to the south of the savanna in Guinea, Côte d'Ivoire, Upper Volta, and Dahomey. Tropical rainforests grow on a small portion of the Senegalese coast and much of Côte d'Ivoire. In the coastal area of Senegal in 1913, the population density was 26 - 64 people per square mile, but inland there were only 2 – 26 people per square mile.[5] The three most populous ethnic groups in Senegal were the Wolof, the Fula (Peul) and Toucouleur, and the Serer.

[4] C. W. Newbury, "The Formation of the Government General of French West Africa," *The Journal of African History* 1, no. 1 (1960).

[5] J. G. Bartholomew, "Africa Population," (London: J. M. Dent & Sons, Ltd., 1913).

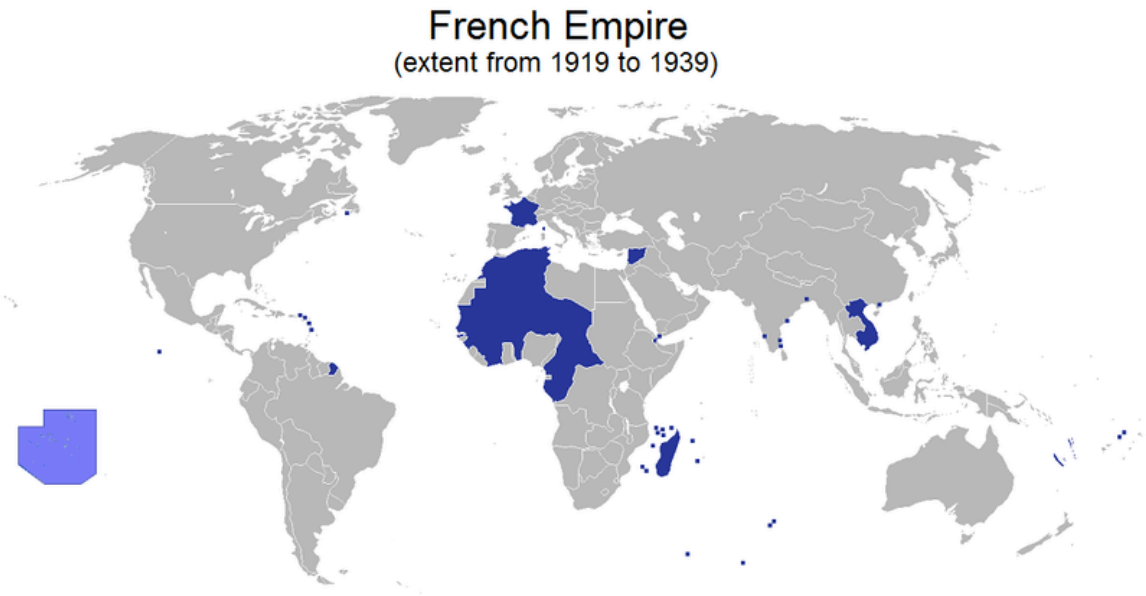

Figure 1 Map of French Empire[6]

Medicine and Public Health

Discoveries in medical science during the era of the second wave of European Imperialism informed the practice and principles of the Native Medical Service. Tropical medicine is a branch of medicine focusing on what Western doctors saw as diseases that were specific to tropical climates. The problem with this designation is that most "tropical diseases" can occur in temperate areas as well, and are more closely related to poverty and poor living conditions than to climate. Tropical medicine came into its own as a discipline around the turn of the twentieth century. Many scholars date tropical medicine to Patrick Manson's establishment of the London School of Tropical Medicine in 1899, although European doctors and scientists had been studying the diseases of their

tropical colonies since the first wave of European imperial expansion in the Americas. The combination of the germ theory of disease with ongoing discoveries in medicine and science in the early twentieth century made tropical medicine more effective than ever.[7]

In 1867 Joseph Lister published *The Antiseptic Principle of Surgery*, proposing the revolutionary idea that operating rooms and surgical tools should be clean. The idea caught on quickly and reduced deaths in hospitals drastically. In 1870 Robert Koch and Louis Pasteur propounded the germ theory of disease, which held that diseases are caused by specific organisms, and do not spontaneously generate in people. The implications of germ theory took longer than antisepsis did to catch on throughout the medical community.

Ronald Ross discovered the mosquito vector of malaria in 1897. Carlos Finlay had theorized that mosquitoes were the vectors of yellow fever in 1881, but Walter Reed confirmed it in 1900 and generally gets credit for the discovery. David Bruce identified tsetse flies as the vectors of sleeping sickness (trypanosomiasis) in 1902. In 1908 Pirajá da Silva described the disease cycle of snail-borne schistosomiasis (bilharzia), although Theodor Bilharz had identified the cause of urinary schistosomiasis much earlier, in 1851.

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[6] From Wikimedia Commons at http://commons.wikimedia.org/wiki/File:French_Empire_1919-1939.png.

[7] On tropical medicine, see: Philip D. Curtin, *Disease and Empire : the Health of European Troops in the Conquest of Africa* (Cambridge, U.K. ; New York: Cambridge University Press, 1998), David Arnold, ed. *Imperial Medicine and Indigenous Societies*, Studies in Imperialism (New York: Manchester University Press,1988), John Farley, *Bilharzia: A History of Imperial Tropical Medicine* (Cambridge: Cambridge University Press, 1991), James E. McClellan III, *Colonialism and Science: Saint Domingue in the Old Regime* (Baltimore: Johns Hopkins University Press, 1992), Megan Vaughan, *Curing their Ills : Colonial Power and African Illness* (Stanford, Calif.: Stanford University Press, 1991), David Arnold, ed. *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500-1900* (Atlanta, GA: Editions Rodopi,1996), Waltraud Ernst and Bernard Harris, eds., *Race, Science, and Medicine, 1700-1960*, Studies in the Social History of Medicine (New York: Routledge,1999).

In vaccinations, Edward Jenner developed the smallpox vaccine in 1796. The first vaccine for cholera came in 1879, anthrax in 1881, rabies in 1882, diphtheria in 1890, typhoid fever in 1896, and plague in 1897. In 1907 Paul Ehrlich introduced a chemotherapeutic treatment for sleeping sickness. In 1923 the first diphtheria vaccine appeared and in 1927 vaccines for tuberculosis and tetanus came out. In 1928 Alexander Fleming discovered the antibiotic properties of penicillin, but it was not until 1940 that Howard Florey and Ernst Chain created a form of penicillin that could be used to cure infections. The first sulfa drug came out in 1935.[8]

Assimilation and Association

Assimilation and association were the two models of French colonial relationships. Forms of each were present throughout the era and politicians, administrators, and scholars discussed the merits of each at length. The doctrine of assimilation was to adopt Africans into French culture, essentially transforming them into "Black Frenchmen." Although assimilation was theoretically the ultimate end of the Civilizing Mission, the thought of millions of Africans being full French citizens was not popular in France.[9] Regarding assimilation, the French view was that the closer the Africans got to the French culturally, the more advanced they were becoming as people. Part of the self-imposed duty of France to the "less evolved" peoples of the world was to colonize them and help their civilizations "evolve" both culturally and economically.

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[8] Charles-Edward Amory Winslow, *The Conquest of Epidemic Disease: A Chapter in the History of Ideas* (Madison, WI: The University of Wisconsin Press, 1980).

[9] Raymond Betts, *Assimilation and Association in French Colonial Theory, 1890-1914* (New York: Columbia University Press, 1961), Michael Crowder, *Senegal: A Study in French Assimilation Policy* (London: Oxford University Press, 1962).

Although being "less evolved" was offered as a motivation for embarking on a civilizing mission in their colonies, it was also a reason that colonial France never fully embraced the implications of assimilation. The French believed that the Africans living in their colonies would not be able to understand or responsibly carry out the duties of a "real" French citizen. On the other hand, many colonialists, administrators, and doctors sincerely believed that the civilizing mission was effecting deeply positive change for the colonized people. Although it is easy to doubt that any of the impulse to expand and maintain an empire was due to sincere desire to do good, it is possible that such sincerity existed. Alain Ruscio's characterization of the problem of French sincerity is particularly evocative:

> In the 1960s and 70s it was understood that the colonizers also had (in addition to whatever other financial, economic, or political reasons) ideological motivations along the lines of Kipling's 'White Man's Burden.' This notion was largely considered a hypocritical pretext, a justification of a deeper phenomenon that historians had yet to discover. But what if we have under-estimated this aspect? What if the good conscience of the white man, starting with the conquest of the world in order to bring 'sa (=la) Civilization' to all was, at least along with strategic or economic interest, a true cause of expansion? What if France, both the cradle of the Enlightenment and the eldest daughter of the Church, believed in its *mission*?[10]

In his 1933 article "Education and Race Relations," Lord Lugard sketched the difference between British and French approaches to imperialism, as many understood them.

> It may, I think, be justly said that the attitude of the white to the coloured races of the world-whether they be the inheritors of ancient, if outworn, civilisations in

[10] Alain Ruscio, *Le Credo de L'Homme Blanc: Regards Coloniaux Français XIXe - XXe Siècles* (Bruxelles: Éditions Complexe, 1995). p. 13.

> India or China, or races in Africa which lay no claim to an indigenous civilisation-has been, and still is, characterised by two opposing principles or schools of thought. The older principle or theory is that of assimilation or imitation, which demands that the subject race should accept as a model the standards and methods of its civilised mentor. The later alternative may be described as that of "education" in its derivative sense as the "leading forth" or evolution from lower to higher standards by a process of adaptation and gradual transition. Whichever of the two systems is adopted must necessarily permeate the education of the rising generation, and be reflected in their attitude and aspirations.[11]

The French were the assimilationists here, while the British favor what Lugard calls "education." Lugard's characterization of the different styles, although simplistic, was widely shared at the time.[12]

Senegal was distinct from other territories in West Africa due to its status as the heart of French West Africa and home to its Four Communes. Dakar, Saint Louis, Gorée, and Rufisque gained the status of *communes de plein exercise* in 1848. Thus, the Africans born in those four cities (*originaires*) elected a deputy to represent them in the French parliament.[13] Granting voting rights to the *originaires* was a profoundly assimilationist gesture, and one that colonial France eventually regretted. The French government wanted the grandeur that came with a colonial empire filled with exotic subject peoples, but it did not want those subject peoples to assert themselves politically.

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[11] Lord Lugard, "Education and Race Relations," *Journal of the Royal African Society* 32, no. 126 (1933). p. 1.

[12] W. Bryant Mumford, *Africans Learn to be French; A Review of Educational Activities in the Seven Federated Colonies of French West Africa, Based upon a Tour of French West Africa Undertaken in 1935* (London: Evans Brothers, 1937).

[13] Raymond Betts, *Assimilation and Association in French Colonial Theory, 1890-1914* (New York: Columbia University Press, 1961), Michael Crowder, *Senegal: A Study in French Assimilation Policy* (London: Oxford University Press, 1962), G. Wesley Jr. Johnson, *The Emergence of Black Politics in Senegal: The Struggle for Power in the Four Communes, 1900-1920* (Stanford, CA: Stanford University Press, 1971), P. Mille and E. D. M, "The "Black-Vote" in Senegal," *Journal of the Royal African Society* 1, no. 1 (1901).

Association was the other French approach to colonial rule, and it called for letting the subject peoples "develop along their own lines" within what the French thought of as reasonable limits.[14] Until 1915, the *originaires* were nominally French citizens, but their status as such was tenuous. Blaise Diagne pushed two laws through parliament early in his tenure as representative of the Four Communes. The first was in 1915 and stated that *originiaires* had the right to serve in the French metropolitan army, not in the colonial troops like the *sujets* (African non-citizens of France). Implicitly, it supported the status of *originaires* as French citizens, but in 1916 Diagne cemented the citizenship of *originaires* in another law, which stated that those born in the Four Communes and their descendents were citizens of France.

Sources

The research for this dissertation took place at the French National Colonial Archives and Senegalese National Archives. The sources are official colonial documents. The French saw African workers as extensions of their French superiors, so the records focus almost exclusively on the French officials, policies, and workers. Finding a way to access the voices of the African medical workers and patients is difficult, but important. This dissertation sees the history of public health and the Native

[14] On the surface, French association seems to be analogous to British Indirect Rule. William Cohen provides the best explanation of the difference in William B. Cohen, "The French Colonial Service in French West Africa," in *France and Britain in Africa: Imperial Rivalry and Colonial Rule*, ed. Gifford and Louis (New Haven, CT: Yale University Press, 1971). After identifying the turn of the twentieth century as the point where France officially stopped endorsing a policy of assimilation in the École Coloniale, Cohen asserts: "When practiced in its purest form the policy of association potentially could have been similar to that of British Indirect Rule. But, with the exception of rare men such as Lyautey in Morocco, it had few sincere adherents. The goals of association and Indirect Rule were quite different; whereas Indirect Rule was seen as a way for the colonial societies to develop eventual self-

Medical Service as an area where the actions and perspectives of French and Africans converge, and one that can offer a way to understand the colonial era in Africa as part of both French history and African history.

Chapters

Chapter One examines yellow fever in 1900 as the catalyst for the creation of the Native Medical Service in French West Africa, but also examines prevailing European theories of disease and how those theories affected the response of French doctors to the yellow fever outbreak. A study of the 1900 yellow fever epidemic in Senegal shows how the disjunction between goals and means in the health service mirrored a similar one within the colonial government. The response to the outbreak showed a lack of preparation and the ineffectiveness of the public health measures against yellow fever. This chapter examines how medicine and public health both highlighted and compensated for some of the weak areas of colonial authority.[15]

Chapter Two follows the development of the Native Medical Service from 1905 to 1929, including Gallieni's Native Medical Service in Madagascar that served as a model for the West African service. It introduces the idea of medical workers as cultural

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government, association was considered the only way to ensure the evolution of the colonial societies and – in the end – their assimilation to France." p. 501.

[15] Works on medicine in the service of colonialism: McClellan III, *Colonialism and Science: Saint Domingue in the Old Regime*, Vaughan, *Curing their Ills : Colonial Power and African Illness*, James E. McClellan III and François Regourd, "The Colonial Machine: French Science and Colonization in the Ancien Régime," *Osiris* 15 (2001), M. A. Osbourne, "Science and the French Empire," *ISIS* 96, no. 1 (2005), Philip D. Curtin, *Death by Migration: Europe's Encounter with the Tropical World in the Nineteenth Century* (New York: Cambridge University Press, 1989), Philip D. Curtin, "The End of the 'White Man's Grave'? Nineteenth-Century Mortality in West Africa," *The Journal of interdisciplinary history* 21, no. 1 (1990), Curtin, *Disease and Empire : the Health of European Troops in the Conquest of Africa*, Sidney Chaloub, "The Politics of Disease Control: Yellow Fever and Race in Nineteenth Centrury Rio de Janeiro," *Journal of Latin American Studies* 25, no. 3 (2008).

ambassadors from France to African subjects. This "social role" for medical workers was one of the most important ways that the Native Medical Service compensated for the limits on the ability of the colonial government to reach peoples under its authority. Cultural ambassadorship of medical workers in West Africa represented a central point in French colonial ideology – the belief across the political spectrum of administrators and officials that French civilization was beneficial to African subject peoples.

Chapter Three shows an example of the disjunction of Native Medical Service's goals and means to a similar disjunction in the goals and means of the colonial state through a study of the 1914 plague outbreak. The 1914 outbreak became entwined with Dakar politics in a way that none of the other outbreaks did, with the election of Diagne, military recruitment, and Lebou land rights converging on anti-epidemic health measures. This chapter follows up on the development of public health measures that had been introduced during the yellow fever outbreak of 1900 and introduces the push to residential segregation. Specifically, the government pushed the Medical Service to advance segregationist policies in efforts to rearrange the African population of Dakar to be more "legible" and to seize valuable land.[16]

Chapter Four examines French educational ideology and the way that racial assumptions shaped medical education in West Africa by studying the Dakar Medical School. The chapter shows that the Dakar Medical School was organized in a similar way to other colonial medical schools and that the training at Dakar was carefully

[16] James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998). Scott argues that states arrange their populations and resources to be more "legible," that is, easier to track and profit from.

adapted to keep medical students firmly in the underclass, that is, to avoid creating *déracinés* with aspirations to political and professional equality.

Chapter Five assesses the effectiveness of standard anti-epidemic measures through the plague outbreaks of 1929 and 1944. The dramatic example of DDT use by the Americans during the 1944 outbreak shows other methods to have been only marginally effective. These later plague outbreaks offer a range of comparisons in anti-epidemic methodology, both changing and resilient beliefs about public health, and continued efforts toward segregation.

This chapter also demonstrates how French colonial ideology was at odds with itself by examining how the Native Medical Service responded to the 1929 and 1944 plague outbreaks. In both instances, familiar disjunctions between goals and means show up in the actions of the Native Medical Service. The disjunctions take the form of public relations blunders and tension between medical workers and political administrators over how to address the 1944 outbreak.

Chapter Six illustrates the relationship of the Native Medical Service to France's larger imperial reputation, especially in the post-Second World War era. It offers a reference point for tracing the way France's international concerns were reflected in colonial policy. This chapter also offers further evidence in the general assessment of the ineffectiveness of the Native Medical Service in its role as buttress to the colonial state.

From 1930 to 1944, the Native Medical Service's goals continued to overmatch its resources and the social role of medical workers continued to be an important part of their function. In this chapter, an examination of the development and organization of the Native Medical Service in the 1930s and 1940s reveals a continuing disconnect between

the goals of the Service and the limited means it had to achieve them. The habit of overburdening the services and personnel of the colonial state reveals one of the ways that French ideology was at odds with French capability. That is, the ideologically determined goals of colonialism in French West Africa limited the power of the colonial state by cutting into the effectiveness and the reach of its services.

The dissertation takes 1944 as an end point for three reasons. First, it was the year of the last significant outbreak of plague and it was the first time a truly effective method of combating the flea vectors appeared. Second, it was the year of the Brazzaville Conference, which had set important precedents for decolonization despite not having been meant to be a step toward decolonization. Third, it was the first year of the operation of the French interim government after the fall of Vichy at the end of the Second World War. The interim government oversaw the writing of the 1946 constitution that would mark the beginning of the Fourth Republic.

Chapter 1: The Yellow Fever Outbreak of 1900

The yellow fever epidemic of 1900 marked the beginning of the increased focus on municipally and colonially regulated public health measures. It also opened the medical system of the colonial administration to the surveillance of the health of Africans, both in cities and eventually in the countryside. The yellow fever outbreak inspired the creation of a medical service meant for Africans, the *Assistance Médicale Indigène* (Native Medical Service). The French methods of dealing with public health, the ill, and the "suspect" (those who had been in contact either with ill people or contaminated objects) during the yellow fever outbreak set precedents for how sanitary and medical authorities would deal with future disease and public health issues. In a formative period for health policy, it became important for French colonial authorities to legislate and regulate public health, and to use measures of isolation, quarantine, disinfection, sanitation, and housing regulations that would become standard public health procedures.

Those anti-epidemic techniques, in turn, had been influenced by prevailing European theories of disease. Although Robert Koch and Louis Pasteur had introduced the germ theory of disease in the 1870s, French responses to the yellow fever outbreak revealed that medical ideology retained much of its previous humoral and miasmatic (or contagionist and localist) character.[17] Methods for dealing with disease and the beliefs

[17] Ngalamulume offers a nuanced discussion of these two broad types of theories of disease causation and spread, as well as an interpretation of what sort of ideas guided French attempts to prevent and control

undergirding those methods mixed the most recent scientific discoveries with traditional European practices meant to support humoral balance and control miasmatic emanations.[18]

During the outbreak, the role of public health was to assure the health of French government administrators and the European employees of large French companies in French West Africa (mainly in Dakar, Saint-Louis, and Rufisque). The Native Medical Service had yet to be created in West Africa, and the French Medical Corps was not yet an instrument of colonial policy regarding the African subject population.[19] In 1900, African medical workers played very little role in the health services, and the inability of the Medical Corps to deal with the Africans afflicted with yellow fever was a consequence of the lack of workers.

When yellow fever struck Senegal in 1900, the first few cases went unnoticed and misdiagnosed. Even when doctors had figured out that there was, indeed, an outbreak of yellow fever and the colonial government made an official declaration of it, many people refused to believe it. Dr. Alexandre Kermorgant, author of the local administration's

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disease. Instead of drawing a line between miasmatic theories of disease and germ theory, Ngalamulume argues that germ theory built on processes that miasmatic theory had established; namely, classifying Africans as naturally prone to disease and encouraging urban segregation. Ngalamulume argues that ignorance of yellow fever produced ineffective policies. The author further argues that medicine did not incorporate germ theory until ten years after it was established and that urban African poor suffered the most from these factors. See: Kalala Ngalamulume, "Keeping the City Totally Clean: Yellow Fever and the Politics of Prevention in Colonial Saint-Louis-du-Senegal, 1850-1914," *Journal of African History* 45, no. 2 (2004).

[18] Medicine had made dramatic advancements since the mid-nineteenth century. In 1847 Semmelweis had discovered how to prevent puerperal fever and by 1867 Joseph Lister had published his *Antiseptic Principle of the Practice of Surgery.* Robert Koch and Louis Pasteur's revelatory germ theory of disease, developed in the 1870s, fundamentally changed the theory and practice of medicine, but not immediately. In 1880 Carlos Finlay propounded the theory that mosquitoes carried yellow fever, which was confirmed by the Walter Reed Commission in 1900. Ronald Ross demonstrated that malaria was transmitted by way of mosquitoes in 1897, building on the 1880 research of Laveran. The first plague vaccine was also developed in 1897.

official report, attributed the disbelief to traders and merchants who did not want business interrupted and "vieux Sénégalais" who, among other reasons, thought that it was impossible for yellow fever to show up again after an eight year hiatus.[20]

After the epidemic retreated in 1901, a delegation from France, the Grall-Marchoux "Sanitary Mission to Senegal" visited the colony to evaluate the colonial administration's response to the yellow fever outbreak. They examined methods, policies, and results of public health and medical action during the outbreak to offer recommendations for improved measures. The recommendations of the Sanitary Mission paralleled those of the sanitarians in France who championed the Health Law of 1902, honed the methods of the administration, and served to further cement public health policy in French West Africa.

Origins of The Outbreak

Until 1889, all the deceased of Gorée were buried all over Dakar, which is…nothing but a vast necropolis that is made more dangerous because all the yellow fever cadavers are buried there and headstones have largely disappeared.[21] – Kermorgant, *Épidémie de Fièvre Jaune du Sénégal*, 1901

Dr. Kermorgant's report presents a narrative of the outbreak from the perspective of an important medical administrator who witnessed it. In his report, Kermorgant (President of the Superior Colonial Health Council and Inspector General of the Colonial Health Service 1897-1908) endeavored to leave his readers with the impression that

[19] The Native Medical Service provided medical care to the African population. It began in French West Africa in 1905.

[20] Dr. A. Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal," *Annales d'Hygiène et de Médecine Coloniales*, no. 4 (1901).

[21] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 330.

French colonial sanitary and political authorities scrambled to contain the outbreak, furiously disinfecting everything they could get their hands on and evacuating non-essential Europeans back to France. Kermorgant's rhetorical efforts failed to impress the members of the Sanitary Mission of 1901, however; they were critical of the Health Service's efforts to control and combat the epidemic.

The precise origins of the 1900 yellow fever outbreak in Senegal remain obscure. After making a "retrospective diagnosis," a civil doctor in Dakar believed that he had overlooked two cases of yellow fever in 1899. One in August he had failed to notice because he was unfamiliar with the disease - he diagnosed that patient with "bilious fever." The other came two or three months later, when the same doctor was called to a hut where a man he described as Syrian had been producing copious amounts of bloody sputum (*vomissements noirs)* and quickly died. At the time, it did not occur to the doctor that the man might have had yellow fever. Kermorgant pointed out that despite all the investigations the colonial government had made in its own research into the outbreak, it did not find a single case of importation:

> In a word, it has been impossible to discover the fissure through which yellow fever penetrated Dakar. Can we not admit, in this case, that infectious germs already in the area from previous epidemics might have revived? Although Doctor Le Corre accepted this hypothesis, Doctor Roques rejected it.[22]

The cause of the outbreak was a controversial issue central to both Kermorgant's report and the Mission's investigation.

[22] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal."

Kermorgant addressed several possibilities for the origin of yellow fever, namely that it was endemic, that it was imported from elsewhere, or that dormant microbes in the soil or other "suspect materials" were exposed after escaping disinfection. Kermorgant believed that yellow fever was not endemic. He accepted that it may have been imported, but he favored the theory that yellow fever microbes were hibernating in the soil, having leeched from corpses or contaminated clothes and linens. His theory was that these microbes were inert until some construction projects for improving the port in Dakar disturbed the earth and awoke the previously dormant microbes, which became active again and started infecting people.[23]

Kermorgant believed that it had been proved that yellow fever, having been imported through clothes and linens of sick people, could somehow survive and be transmitted years later.[24] He acknowledged that Dr. Walter Reed's American team in Cuba had found that yellow fever was not transmitted in clothes and linens, but thought they were too hasty. He insisted that better proof be furnished before the French could dispense with their disinfection of objects belonging to sick people or people coming from contaminated areas. He also opposed the belief that yellow fever was not transmitted through the air. He mentioned Reed's confirmation of Finlay's theory of the mosquito vector of yellow fever and noted that most people had put their air-transmission cases down to mosquitoes. He disagreed, writing: "the mosquito theory is both simple

[23] Yellow fever is a viral mosquito-borne illness that has no specific treatment. Those infected with it can only be treated for their symptoms. There are three stages of the disease: the early stage is characterized by headache, muscle aches, jaundice, fever, loss of appetite, and vomiting. The early stage lasts three to four days and typically goes into remission afterwards, most people recover during the second stage (remission). The third stage of yellow fever is rare and called the intoxication stage. During this period there can be liver and kidney failure, hemorrhaging, delirium, seizures, coma, shock, and death.

and seductive, but it is not developed enough yet for us to accept it without reservation, and it does not explain all the cases of contagion." Throughout the report, Kermorgant steadfastly advanced his idea that "yellow fever germs are conserved in the soil for an indefinite period of time and that it is dangerous to disturb the ground where they lie."[25]

According to contemporary medical beliefs, sanitary issues had a direct causal impact on the origin and spread of disease. To a locationist, the sanitary state of Dakar was such that infectious disease was inevitable. To a contagionist, the "natives" were so unhygienic that they were bound to spread the inevitable disease around. Like many health professionals of his day, Dr. Kermorgant was a little of both. In his role as Inspector General, Kermorgant wrote his report casting the cities' efforts as heroic in the face of a disease that had inadvertently been released due to efforts to improve Dakar. Kermorgant interpreted at length the "sanitary indicators" of the cities (Dakar, Rufisque, Gorée, and Saint Louis) and their importance. He painted a picture of Dakar as a pit of filth, ripe for outbreaks of dangerous diseases: "The soil of Dakar is highly suspect, as much due to the yellow fever cadavers buried there as to the variety of detritus left to accumulate in any excavation and generally everywhere."[26] He complained of the total lack of any sort of waste removal service, drainage for rainwater, or sewers. As a result, those who favored the mosquito vector theory would note, Dakar had a plethora of excellent breeding sites for mosquitoes during the rainy season. In addition, household waste was routinely dumped in the ocean or the river, where it lingered and reeked. Piles of refuse also formed in streets and courtyards. None of the big colonial cities in French

[24] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal."
[25] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 432.

West Africa had waste removal or sewers, so these conditions held in Saint-Louis, Rufisque, and Gorée as well.

French colonialists believed that their efforts to sanitize their colonies were for the benefit of all involved: "It is only by sanitization that European governments have been able to effectively gain a foothold in the colonies; and without hygiene the most fertile lands would have no value and no inhabitants."[27] Through sanitation and hygiene, not only would the "natives" live longer and healthier lives, but both they and the colonizers would be more prosperous. The quote acknowledges the double role of public health measures in bringing colonial territories under European control and in improving the general health of Europeans living in the West African colonies.

Closely tied to the sanitary state of the city was the question of who was responsible for it. Problems with dwellings arose, according to Kermorgant, from the unhygienic habits of the occupants. Noting that a "considerable" number of blacks and Syrians came in from south of Senegal, Kermorgant explained that "these two categories of people are repulsively dirty; it is they who most often carry all sorts of germs and diseases and it is against them that we take the fewest precautions."[28] Kermorgant further argued that African neighborhoods were dangerous to Europeans because of what he described as the anti-hygienic habits of their inhabitants. In his opinion, the "natives" should be required to build their "huts" at a distance from European houses: "An entire dense population of blacks grubs pell-mell in these suburbs, in these narrow and poorly ventilated huts, one on top of the other, and makes the ground filthy with trash of all

[26] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 340.
[27] ANOM, H 48, *Mission Sanitaire*, 1901.

sorts."[29] Thus, the contagionist theory of disease dovetailed with common French beliefs about Africans.

As a solution to the poor sanitary state of the cities, Kermorgant proposed that after moving the African population far away from the Europeans, the French would be able to start cleaning up Saint Louis and its suburbs. Kermorgant argued that legal strictures against unhealthy lodgings should be applied and that severe measures had to be taken against Moroccans and Syrians, who, he said, were mainly porters and constituted a health risk because they were dirty people and because the merchandise they carried could be infected.[30] Thus, in a textbook example of what Maynard Swanson called the sanitation syndrome, Kermorgant linked race, filth, and disease.[31] Black Africans and other non-Europeans (like Syrians and Moroccans) were characterized as disease reservoirs and inherently unhygienic. Some of the conditions resulting from poverty, like overcrowded homes, were ascribed to "native habits" or lack of civilization.

French reports frequently depict African populations (of cities, especially) as a "mass" or "horde" wallowing in filth. Ribot and Lafon's 1908 book is an example that such depictions of Africans were commonplace, and not limited to official reports: "The native autochthonous population of Dakar are the Lebou. Among them live, with no safeguards [for sanitation or public health] all the nomads, the manual laborers, and the workers. These people sleep wherever and eat whatever, piling up in a narrow hut, often

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[28] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 382.
[29] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 416.
[30] Earlier in the section, Kermorgant discussed the 1882 Sanitary Law, but it is not clear whether he was still talking about that law in the quoted statement.
[31] Maynard W. Swanson, "The Sanitation Syndrome: Bubonic Plague and Urban Native Policy in the Cape Colony, 1900-1909," *The Journal of African History* 18, no. 3 (1977). Swanson argues that plague was

doing tiring work during the day. They end their days far into the night with songs and dances accompanied by their 'tom-toms'."[32] The mentality that Kermorgant's report on yellow fever showed, thus, was the lingering miasmatic and humoral theories of disease and the closely linked sanitation syndrome. Dakar was characterized as a dirty (unsanitary) city and its African inhabitants as unhygienic and prone to disease. The colonial government's priorities, accordingly, were to protect the Europeans and sanitize the cities.

Early Stages of the Outbreak

The cases of two of the first French victims of yellow fever illustrate the tenacity of earlier, pre-germ theory, ideas about disease among French doctors in the field. A European employee of the French company Hersent entered the hospital in Dakar on April 16th with severe tonsillitis. Kermorgant reported that: "This man, of vigorous constitution and sanguine temperament had already done a tour of two years in Senegal and had recently returned from a two month stay in France. He lived in a newly-built house." The description provides evidence of the continuing importance of humoral ideas about health, acclimatization, and sanitary lodgings.[33] His sanguine temperament was supposed to make him less likely to be ill, the time he had already spent in Senegal should have been sufficient to ensure his successful acclimatization, and his residence in a new house built by a European company should have protected him from the dangers of

a convenient excuse to advance segregationist policies in South Africa and that the association of Africans with disease played an important role in urban apartheid.

[32] Georges Ribot and Robert Lafon, *Dakar: Ses Origines - Son Avenir* (Bordeaux: G. Delmas, 1908).

[33] Humoral, referring to the four humors of the human body: blood, phlegm, black bile, and yellow bile. Keeping the humors in balance was believed to be of central importance to good health.

"native huts." On April 19th another European man entered the hospital. He was suffering from "cerebral softening." Both men died, neither diagnosed with yellow fever. The first was said to have died of a "pernicious fit" and the second of "infectious jaundice."[34]

The widow of the second man wanted to bring his body to France for burial, so the doctors thoroughly disinfected the body. During the procedure Dr. Lafage mentioned to his colleagues that in different circumstances, he would suspect yellow fever. Kermorgant explained that Lafage's suspicions were thought to be unfounded because of the time of year, the low temperatures, and strong North winds. On April 30th a Moroccan man entered the hospital with bloody sputum and died within 24 hours. Still, doctors noted nothing out of the ordinary until May 8th, when two sick people were sent to the hospital with what Kermorgant described as unmistakable symptoms of yellow fever. The European civil population was affected by the outbreak first among whites, with numbers of the European military beginning to succumb about two months later. European patients, both military and civilian, continued to enter the hospital and receive various diagnoses of diseases other than yellow fever. It is unclear when yellow fever started to affect Africans.

Lafage issued a report in early May calling attention to the danger to public health in Dakar and amending the cause of death for the last five people to yellow fever. The homes of the sick and the recently deceased had to be disinfected, but carefully so as not to cause panic because the health officials were not ready to declare an outbreak (perhaps

[34] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 341-342.

an excuse on Kermorgant's part for what the Sanitary Mission would find to have been poorly executed disinfection).[35]

The Director of Health officially declared an outbreak of yellow fever in Senegal on May 18th. According to Kermorgant, however, the epidemic was declared too late for Dakar's first arrondissement to take effective measures against contamination from the second. Kermorgant also wrote that the official declaration of a yellow fever outbreak scared no one because no one believed it was true. Many Europeans and "mulattoes" held this opinion, he explained, and merchants in particular complained, seeing the declaration as nothing but an obstacle to business.

The Administration Takes Action

The Administration's actions during the yellow fever outbreak further demonstrated how the germ theory of disease had not yet taken hold and that non-Europeans were seen as inherently prone to disease. Public health (composed of sanitation of the environment and hygiene of the people living there) at this time consisted of cleaning physical locations more than it did monitoring or treating patients as a physician typically would, yet the people charged with maintaining public health were medical doctors. Hence Dr. Vallin's call, reported in the *Revue de Médecine Légale*, for a separate profession that would be concerned with hygiene.[36] Before the advent of the Native Medical Service, the health of the European citizens was the primary

[35] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 344.

[36] *Revue de Médecine Légale*, p. 222. M. Vallin thought that hygienists and doctors were fundamentally incompatible professions, reasoning that: "The practitioner has no faith in hygiene; hygiene annoys him and hinders his professional liberty. The law on declaring transmissible disease does not have more fierce opponents than practitioners."

concern of the health services in French West Africa and the health of Africans and other non-Europeans was only important insofar as how it affected the Europeans.

Health measures based on germ theory and miasmatic theory would have led to similar reactions to those the Administration actually took to the outbreak, in that *assainissement*, or sanitization, did improve health; however, a more thorough penetration of germ theory might have produced more efforts to treat individuals. Some tasks, like getting rid of pools of standing water, were undertaken in the spirit of miasmatic beliefs, with some more modern theories (like mosquito vectors) aligning conveniently on the appropriateness of the measure.

Many anti-epidemic measures, especially quarantines, were also obstacles to business. Kermorgant noted that the application of the measures was "unanimously protested." Kermorgant claimed that the mayors all wanted to be helpful, but their constituencies were very resistant: "Merchants went back and forth from contaminated areas to healthy areas doing business, relegating the dangers to public health to the back burner."[37] He explained that some people were upset because of the damage to commercial transactions due to the obstacles to transporting merchandise, some thought the exodus to France gave the colony an unfavorable image of being insalubrious that would cut down on its development, and "others, and this made up the largest part, were completely disdainful of hygiene and did not understand the measures."[38]

The administration's primary emphases, when it responded to the outbreak, were first to improve the sanitation of cities through increased efforts at *assainissement* (clean-

[37] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal," p. 380.
[38] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal," p. 379.

up), and second to disinfect contaminated areas and personal items. Their secondary emphases were on quarantine, often in the form of sanitary cordons around certain neighborhoods or areas of town, and isolation, often in the form of camps or lazarettos.[39] The general view regarding cleaning up the major cities to make them healthier was that the focus should be on removing and disposing of trash and waste. The Dakar City Hygiene Council met in late May following a request from the Head Doctor. The hygiene "wish list" they compiled during their session was entirely concerned with trash and household waste.

The other major component to the cleanliness of Dakar was evacuation and disinfection of any home where someone had been ill with or died of yellow fever. The mayor of Dakar put together a disinfection team and placed Dr. Maignol at its head. Kermorgant praised these efforts, saying that they "were executed with remarkable decisiveness and rigor."[40] Municipal arrêtés created public disinfection services in Dakar, Rufisque, and Saint Louis at the beginning of the epidemic.[41] Kermorgant reported that contaminated places, private or military, were completely disinfected.

In their 1908 book promoting Dakar, Ribot and Lafon reported that Dakar was the first city in France or the colonies to establish municipal hygiene services in accordance with the spirit of the 1902 law and the 1904 decree on public health. Elaborating on the sanitary capacity of Dakar, they stated that the Municipal Disinfection Service "has all

[39] A lazaretto (French *lazaret*) was a kind of isolation area often outside town where sick or "suspect" people were rounded up and sent.

[40] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 350.

[41] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 165: There was a municipal arrêté issued October 14, 1900 creating the disinfection service, then on August 8, 1903 there was another one issued that regulated the disinfection of construction debris before moving it across town.

the modern equipment to constitute a full set."[42] This consisted of: a hand Clayton apparatus (which produced sulphur dioxide gas for disinfection), 3 Helios B machines with formalin, a Linger machine, a pressurized formogène lamp (which produced formaldehyde for disinfection), and a mobile sterilization engine. They enumerated the disinfection apparatuses of the Health Service (the port and the lazaretto), the hospital, and the army, claiming: "this gives one an idea of the power of the sanitary armament of the city and a check on any epidemic that might arise. This check was established when the epidemic cases of yellow fever were successfully isolated."[43] They then cited the disinfection of a home in 1907 with an infant with smallpox as another proof of Dakar's ability to turn back epidemic disease: "The smooth functioning of the Disinfection Service is aided by obligatory medical declaration, which is 'the preamble of all modalities of intervention.' By way of the best practices approved by the Consultative Committee on Public Hygiene of France, pathogenic germs are destroyed and thus all the sources of microbial contagion disappear in Dakar."[44] Eight years after Kermorgant's report on the yellow fever epidemic, Ribot and Lafon echo his optimistic view of public health in Dakar.

Back in 1900, on May 20th, authorities instituted a quarantine of anything or anyone coming from Dakar (anything leaving Dakar by train, also on people travelling from contaminated areas and anything leaving Dakar by sea) and installed a lazaretto at Kelle (on the railroad) in efforts to arrest the spread of yellow fever. For people and things leaving by sea there was a lazaretto at Baba-Guèye near Saint Louis. Sanitary

[42] Ribot and Lafon, *Dakar: Ses Origines - Son Avenir*. p. 142.
[43] Ribot and Lafon, *Dakar: Ses Origines - Son Avenir*. p. 142.

guards were posted on all the bridges of Kor, Leybar, and Gandiolais, to ensure that travelers coming from contaminated areas had sanitary passports. A sanitary cordon manned by *Tirailleurs Sénégalais* blocked the peninsula of Dakar and the railroad ran from Rufisque as head of the line.[45] On June 23rd Rufisque was put under quarantine due to its "bad sanitary state," and there was a sanitary cordon established a kilometer from the city. At this point, Thiès became the head of railroad line. In Dakar the situation became so bad that on July 4th all European troops evacuated Dakar and were replaced by African troops. A total of 175 military and civilians left. A lazaretto was established at Kayes, surrounded by a barrier and a sanitary cordon. The municipal authorities also took action, but their efforts consisted mainly of trying to set up a trash collection service and burning trash, which Kermorgant described as "everything that could be done to remedy the horrible state of things."[46]

The capabilities of the existing medical services at the time of the outbreak evidenced significant gaps.[47] Quarantines, for example, were largely ineffective, the proper facilities for treating and isolating sick people were lacking, and there were not enough staff to carry out the many public health related duties that were necessary. In the aftermath of the yellow fever outbreak, it occurred to the French administration that they could no longer ignore the health of their African subjects, but they also realized that they were unequipped to do much about it. Successful control of future outbreaks would be

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[44] Ribot and Lafon, *Dakar: Ses Origines - Son Avenir*. p. 146.

[45] *Tirailleurs Sénégalais* were African subject troops in the French Army.

[46] Kermorgant, "L'Épidémie de Fièvre Jaune du Sénégal." p. 379.

[47] In 1895 Senegal, Sudan, Guinea, and Cote d'Ivoire were joined together as a federation in Afrique Occidentale Française. The General Government of the region was consolidated in 1904 and was assigned a Governor-General.

important to establishing and maintaining legitimacy for French rule, regarding both other colonial powers and the African subjects. If the French could not identify diseases when they broke out, treat them effectively, or even keep them from spreading, their credibility as "Bringers of Civilization" would sustain damage.

The Sanitary Mission

France launched numerous sanitary missions in the early twentieth century. Most were to confirm recent discoveries in tropical medicine. One such was the Sanitary Mission to Brazil that launched in 1901 after the Senegal Mission was finished (and which also included Dr. Grall).[48] The Senegal Mission did not have a medical or scientific discovery to test, instead, a group of doctors led by Grall reviewed the local responses to the yellow fever outbreak in an effort to formulate the most effective public health measures possible for future epidemics. Dr. Grall and his team made specific responses to ideas the Kermorgant had advanced in his report and offered pointed criticisms of the municipal responses to the outbreak in Dakar, Saint Louis, Gorée, and Rufisque.[49]

While Kermorgant's report is a description of the outbreak from the point of view of a doctor at the scene, the Sanitary Mission's report is an evaluation of the response to the outbreak and instructions for future outbreaks. In contrast to Kermorgant, the

[48] Articles that mention the Mission or its members: Alain Chippaux, "Histoire de la SPE, la SPE à 100 Ans - Notes Pour Servir à son Histoire," *Bulletin de la Société de Pathologie Exotique* 101, no. 3 (2008), Laveran, "Introduction," *Bulletin de la Société de Pathologie Exotique* 1 (1908), Annick Opinel, "The Emergence of French Medical Entomology: The Influence of Universities, the Institut Pasteur and Military Physicians (1890-c.1938)," *Medical History* 52 (2008).

[49] Charles Grall was Doctor Inspector General for Colonial Troops in 1901. Emile Marchoux had been running the laboratory in Saint Louis before he became a member of the Mission. After the Mission to Brazil he left the army and became the head of Tropical Microbiology at the Pasteur Institute.

Sanitary Mission was made up of doctors and scientists who mostly adhered to the germ theory of disease and gave credence to the recent studies of yellow fever. The Sanitary Mission recommended some of the basic and fundamental anti-epidemic measures that would remain in use for decades. These measures included quarantine, *assainissement*, regulating housing, isolation, and disinfection**.**

Regarding the origins of the disease, the Sanitary Mission agreed with Dr. Kermorgant that the sanitary state of the cities was deplorable and noted that the disease first showed up on the outskirts of the European section where it bordered the "native village." Also like Kermorgant, the Mission exhibited the sanitary syndrome: "This fact [that yellow fever first appeared among Europeans in the area that bordered an African neighborhood] is of the highest importance regarding prophylaxis and the Mission will ask for the Minister's special attention to the aptitude of the black to introduce and spread disease."[50] They disagreed with Kermorgant that yellow fever arose from the disturbed soil. The Mission supported a combination of importation and mosquito vector theories. They concluded that it did not start by way of contaminated water, nor was construction a factor. Instead, they argued that it was imported from Grand-Bassam (Côte d'Ivoire) and highlighted the necessity of closely monitoring the disinfection status of contaminated clothes and other belongings when they were being sold or given away.

Regarding the responses to the outbreak, the Sanitary Mission did not agree with Kermorgant that the disinfection measures were undertaken decisively or effectively, nor that what the administration had done all there was to be done. According to the Sanitary Mission, almost everything "remain[ed] entirely to be done" regarding improving the

sanitary status of Senegal to the point where it would be acceptably inhabitable for Europeans. They alleged that there were holes in sanitary legislation in Senegal that allowed the disease to spread as widely as it did. The Mission's opinion was that the fault lay not with the personnel who "have proven their great devotion", but with the administration, which was "lulled to sleep by a false sense of security."[51]

The Mission was critical of the administration, the health services, municipal services, and the "inveterate habits of filthiness of the native population."[52] Not only did the "natives" display "total ignorance about the most elementary aspects of hygiene concerning the disposal of waste material," but compounding the problem was a list of sanitary and medical shortcomings. These shortcomings included the absence of municipal sanitation services; insalubrity of the majority of dwellings in Saint Louis, Dakar, Rufisque, Gorée, and at the outposts; lack of places to treat contagious patients and for disinfection; "total absence" of any place in the cities or in the outposts to isolate and treat contagious patients; disinfection of houses executed incorrectly; and belongings of the deceased often not disinfected before being given out or sold by the disinfection teams.[53]

The Mission's report stressed the importance of the new orientation for health related services, that of surveillance of the sanitary status of the "native population," while acknowledging that building a health system to service Africans would be challenging: "It is appropriate to note, here, the insufficiency of medical services,

[50] ANOM, H 48, *Mission Sanitaire*, 1901.
[51] ANOM, H 48, *Mission Sanitaire*.
[52] ANOM, H 48, *Mission Sanitaire*.
[53] ANOM, H 48, *Mission Sanitaire*.

especially in the outposts; funds were allocated to remedy the situation, but we must not forget this aspect of the situation." The Sanitary Mission noted that it would be fair to say that all these measures were temporary and health would not really be secure until sanitary projects had improved the "conditions of the soil and the atmosphere." They noted in addition that the full cooperation of city administrators would be necessary to the success of the new public health system: "all these efforts will remain fruitless if the municipal administrators, particularly those in Dakar and Saint Louis, do not want to take the necessary steps to realize the improvements to the hygiene of the cities, 'Contagion only becomes more virulent as conditions become more insalubrious.'"[54] The Mission warned that if mayors were unwilling to expend their resources to make the recommended improvements to their cities, the urban clean-up portion of the Mission's instructions would fail and the dirty cities would become more diseased.

General improvements to be made to city sanitation included quality of water and protecting the soil from pollution. Drinking water needed to be purified in Saint Louis, but was fine in Dakar and Rufisque. Trash collection and a sewer system that would deposit waste far out into the ocean or the river so that it would not wash back up on shore were needed to protect the soil from germs and filth. The Mission believed that there were two types of diseases in France's West African colonies: the dysenteric type and the malarial type. The dysenteric types were supposed to be caused by pollution of drinking water or poor quality drinking water. The malarial types were more complex, and the Mission believed that they rose from the ground, especially in marshy areas or areas covered in stagnant water. The solution they proposed to reduce the incidence of

[54] ANOM, H 48, *Mission Sanitaire*.

malarial diseases was eliminating the marshes in or near the cities. This recommendation could stem from either localist beliefs in dangerous miasmas or from the germ theory era mosquito vector explanation. Localists would want to eliminate the stagnant water that they believed produced dangerous vapors, while those who followed Finlay and Reed wanted to eliminate stagnant water because it served as a breeding ground for mosquitoes.

The Sanitary Mission established the essential parts of the colonial anti-epidemic regime. It also advocated a new direction for the health services: a prevention-based program that would allow the French to keep track of the health of the African population without requiring the enormous investment of resources that extending curative care to the African population would have.

General Findings of the Sanitary Mission

The Senegal Mission affirmed that the actions taken during the yellow fever outbreak were appropriate insofar as they went, stipulating that the authorities should have done more and noting that the Health Services needed more facilities and personnel to safeguard the sanitary situation in French West Africa's larger cities. The Mission studied the effects of the disease on "different races," also taking into account the African population (primarily as carriers of disease, not as patients). Significant disagreements with Kermorgant's report included belief that the disease was imported and acknowledgement of the role of mosquitoes in the transmission.

The Mission decided that the cities of French West Africa needed municipal services to collect and burn trash, and that starting those services should be of the highest

priority. The strong focus on cleaning up surface filth and removing bad odors betrayed lingering belief in the miasmatic or localist school of medical thinking. The Mission also prioritized efforts to regulate "unhealthy lodgings." Commissions for regulating unhealthy lodgings abounded in France, and the concern was also important to the French medical establishment in French West Africa. Especially in the cities, regulating the salubrity of dwellings also conveniently played into segregation efforts and efforts to wrest the most valuable land from its traditional inhabitants, as the experiences of the Lebou show, especially in the plague outbreak of 1914.[55]

> To be complete, this segregation should include the absolute separation of Dakar in two areas: the European city and the Native city. Blacks, even the most civilized, cannot get used to certain European habits any more than Europeans could adopt certain Native customs. The result is frustration for both groups as long as dwellings are integrated. The administration thought, in 1905, that it had to leave insalubrious Native households – those living in brick or wood houses, not straw huts – as they were situated among European households.[56]

Kermorgant advocated segregation in his 1911 treatise *Hygiène Coloniale*, continuing the position he took in his yellow fever report ten years before.

Quarantine

The quarantine regime of 1884 recommended surveillance of all importations regardless of provenance, especially regarding goods coming from "suspect" places like Brazil, but the Mission recommended that the quarantine rule be used only in exceptional cases, while still agreeing that all materials that could be disinfected should be. The

[55] Further discussed in chapter three.
[56] Dr. A. Kermorgant, *Hygiène Coloniale* (Paris: Masson, 1911). p. 160.

Mission affirmed that anything or anyone coming from unhealthy or infected areas could be put under quarantine according to the length of the voyage and the gravity of the peril. Ships were the primary target of this sort of quarantine, but it also included merchandise and people arriving from overland trips. In the case of an outbreak of disease, an interior quarantine might be applied to a specific area, like a city or a neighborhood. Not all interior quarantines were absolute, though. Most of the time it would be sufficient to regulate exits from the affected areas, using sanitary cordons to restrict entries and exits even more severely if it became necessary. Quarantines were meant for when the infected areas were few and very limited. The Mission stressed that quarantines had to be cancelled when or if the disease spread.[57]

Sanitation

The Mission found that disinfection had not been obligatory, that potential disinfection measures were very limited, and that disinfection teams were not in place nor were they well instructed. Especially in Saint Louis the teams were left to their own devices: "one might say that the apathy…that characterized the municipal authorities of Saint Louis facilitated the spread of the disease while also creating potential dangers for future outbreaks. The situation was made worse by the total lack of urban hygiene; a situation that was bad in Dakar and Rufisque was deplorable in Saint Louis." The head of the Mission, Dr. Grall, said that in Saint Louis in particular, the conditions most favorable to the "multiplication of the virulence of contagious germs" existed. These conditions were: daily, constant, long-standing pollution of the soil and riverbanks by

[57] ANOM, H 48, *Mission Sanitaire*.

trash that was regularly dumped there; accumulation of trash and waste near dwellings and on the ground nearby, and "a great heap of dirty people living in these dwellings right along with their domestic animals." He concluded by noting that Dakar made a significant effort to deal with these issues from the beginning of the outbreak. Rufisque followed that example to some small extent, but in his estimation Saint Louis made no effort at all.[58]

Grall's judgment was that: "Sanitary legislation has been lax, if not in spirit, at least in its interpretation; and application of sanitary measures has been neither complete nor in conformity with the regulations instituted in the 1897 decree. The personnel has been inexperienced and insufficient, and we have lost sight of the wisdom of the past."[59] He concluded that delays in noticing the disease had deleterious effects on the interior prophylactic measures, also that distancing vulnerable groups was undertaken late and not completed, nor was it continued for long enough. The first cases had not been isolated, as there was no place where they could have been, and relevant laws were not established.

As the above criticisms show, efforts at clean-up were not evenly applied across the larger cities of Senegal. The Sanitary Mission demanded more vigilance from municipal authorities. They sanctioned Rufisque and Saint Louis, urging them to follow Dakar's example more closely:

> Urban hygiene ought to be strictly overseen at all times, but as soon as there is danger for public health, we must take it even more seriously. This is what was done in Dakar, to a certain extent the same took place in Rufisque during the last

[58] ANOM, H 48, *Mission Sanitaire*.
[59] ANOM, H 48, *Mission Sanitaire*.

> epidemic; in Saint Louis they were content to wallow in the filth of the public way, of the courtyards, and of the houses. This must not happen again – the Governor should intervene, as he has the right and the duty to do, to shake up the apathetic municipal authorities.[60]

Cleaning gutters so that rainwater would not collect and stagnate, filling in any holes where water could collect, and covering unused or dry wells were all very common parts of clean-up; they all served to stave off malaria and yellow fever by depriving mosquitoes of places for their larvae to grow. Similarly, courtyards and abandoned lots had to be checked and purged of anything that would hold standing water.

Housing

The existence of "unhealthy lodgings" remained a prominent concern for the French throughout their time in West Africa. The Mission deemed it necessary to delineate limits outside of which straw huts could exist and inside of which one had to build *en dur* (with sturdy materials that were inhospitable to insects and could be disinfected). The Mission wanted Dakar to make efforts to get rid of the "native slums" in the city. In addition, the Mission called for a 150-meter protective zone outside the city limits where no straw huts could be built.[61]

Unhealthy lodgings concerned the administrators of Dakar in 1901 and remained a concern throughout the colonial era. The relationship between unhealthy lodgings and segregation was complex. Calls for segregation frequently used the proliferation of unhealthy lodgings as a rationale. Although the French thought segregation was both

[60] ANOM, H 48, *Mission Sanitaire*.
[61] ANOM, H 48, *Mission Sanitaire*.

practical and useful, metropolitan legislation that was in place in the four communes meant that when Africans were the owners or occupants of the land, or when they had *originaire* status, they had incontestable rights. For the French, as an official would later note, "The problem becomes singularly complex."[62]

Isolation and Disinfection

The Mission saw isolation and disinfection as parts of the same procedure. Isolating the contagious people entailed disinfecting objects they had used, furniture, and places or rooms they had occupied. According to an 1822 law, anything that could not be disinfected was to be burned. In the Mission's report, Dr. Grall was careful to remind his readers that the 1822 law did not give the property owners any right to reimbursement, but that it was customary to give "generous compensation."

Anti-epidemic control measures frequently called for moving entire neighborhoods or villages from suspect or infected areas to lazarettos or other temporary camps. Once health workers noticed an outbreak of disease, they isolated the sick person and frequently people who had been in contact with him. Next, they disinfected the contaminated areas and objects if they could, and destroyed personal property that they could not disinfect, such as clothing and houses. Sometimes a sick person or someone suspected of having a dangerous disease could be isolated in his home, but the Mission (and administrators after them) thought it was better to require the sick and suspected sick to go to isolation camps. In 1901, there were not any isolation camps in Senegal. Although there was an isolation building in Dakar, it was near other buildings and

[62] ANOM, 2 G 27\39, Annual Report for French West Africa, 1927.

hospitals and was judged to be "totally insufficient."[63] During the previous yellow fever epidemic the Kelle lazaretto had been built between Dakar and Saint Louis to hold travelers and merchandise for observation, but "The use of the lazaretto was regulated too late, suspended prematurely, and was both too rigorous and too lax." The Sanitary Mission wanted the observation period for people extended to five days and more limited entrance of personnel and merchandise into the first arrondissement of Dakar. They thought the requirements for "non-susceptible" items had been too strict and that airing them for a few days would have sufficed. Regarding susceptible items, however, they thought the prohibition should have been absolute unless they could be disinfected.[64]

Recommendations

> Water-closets do not exist [there] and the natives that live there in large numbers all around the European colony have no practice of hygiene, the result is that air is always full of unhealthy germs that emanate from their waste and fetid and disagreeable odors grow with the heat.[65] – Sanitary Mission of Senegal, 1901

The Sanitary Mission's recommendations provide evidence of how the Mission steered health services in the direction that they would continue to take through the colonial era. The Mission recommended that sanitary legislation be coordinated. For military installations, from the first sign of an outbreak the susceptible groups and individuals ought to be separated out from the rest of the population. Repatriation and

[63] ANOM, H 48, *Mission Sanitaire*.
[64] ANOM, H 48, *Mission Sanitaire*.
[65] ANOM, H 48, *Mission Sanitaire*.

isolation could only be avoided, noted Grall, when there were sanatoria available in the heights of Fouta-Djallon.[66]

In areas prone to epidemic outbreaks, the Mission stressed that the first duty was not to mistake the disease. They highlighted the importance of being able to tell what diseases the "natives" had, even if the symptoms seemed benign, because they feared that it could usher in an "epidemic [that would be] fatal for non-acclimatized races." Setting a precedent for expanding health and medical services to the indigenous population, they declared: "The health of the European race is dependent upon that of the native races, of which we must ensure the surveillance of dangerous manifestations of disease. In this regard, everything remains to be done. We must keep a close watch on the health and hygiene of the blacks; to do this, we must organize an information and monitoring service."[67] In closing their report, the Mission reiterated that, after there had been a first sign of outbreak, the only way to control the ravages of disease was to isolate the ill and disinfect the contaminated areas as well as the susceptible objects. It was obligatory to declare all "suspect cases [of disease]" and any negligence was to be punished.

The Mission stressed that, despite the obstacles, science and dedication would prevail over the filth and miasmas:

> Thus, everywhere the hand of man has dug trenches to drain the swamps, the miasmas that exhale putrefied vegetable matter and stagnant water have been reduced to nothing.[68]

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[66] For more on sanatoria, see: O. R. McCarthy, "The Key to the Sanatoria," *Journal of the Royal Society of Medicine* 94 (2001).
[67] ANOM, H 48, *Mission Sanitaire*.
[68] ANOM, H 48, *Mission Sanitaire*.

The Sanitary Mission represented the importance to France as an international actor of improved health conditions in French West Africa. In this early period they worked to create a healthy environment for European administrators and troops. They also worked to devise ways to cope with the "unhealthy" tropical environment with medicine to support the consolidation of their hold on their colonial territories. The military pacification process made it important for Europeans to be able to live in Africa for extended periods of time. The Sanitary Mission was also an expression of France's drive to assert itself as active in the latest epidemiological research.[69]

The 1902 Law in France[70]

Sanitarians in France had the unenviable job of convincing property owners, doctors, and everyday citizens that sanitary regulations would not spell the end of individual rights to privacy and property. They did not quite succeed, even after fifty years of diligent work. In 1902 the Health Law, in its final form, did not have sufficient means built in to it to enable officials to enforce the diluted elements of the law. Sanitarians in France wanted to establish mandatory declaration of suspected and actual cases of various illnesses and documentation of the cause of death with the 1902 law, but they were unable to enforce these measures.

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[69] Chippaux, "Histoire de la SPE, la SPE à 100 Ans - Notes Pour Servir à son Histoire.", Laveran, "Introduction.", Opinel, "The Emergence of French Medical Entomology: The Influence of Universities, the Institut Pasteur and Military Physicians (1890-c.1938)."

[70] For an excellent treatment of the passage of the 1902 Health law in France see: Ann-Louise Shapiro, "Private Rights, Public Interest, and Professional Jurisdiction: The French Public Health Law of 1902," *Bulletin of the History of Medicine* 54, no. 1 (2007). Also see: Ann F. La Berge, *Mission and Method: The Early Nineteenth-Century French Public Health Movement* (New York: Cambridge University Press, 1992).

Beginning with the first attempt to institute sanitary standards in the Melun law of 1850 until the passage of the 1902 law, hygienists in France worked to push through new sanitation legislation. Their primary objectives included: regular inspection of homes, mandatory reporting of contagious disease, mandatory vaccination (for smallpox), disinfection, building regulation, requiring building permits for houses, more authority over landlords, a better definition of "insalubrity," and more authority for professional hygienists. Ordinary citizens resisted sanitary regulation, as did physicians and property owners.

By 1850, it had been generally believed that cities caused physical and moral decay, especially of the poor and working class whose homes and neighborhoods were filled with bad odors and trash. Many believed that living in such an unsanitary environment caused generations to become progressively weaker and more corrupt.[71] The Melun law represented an effort to clean up these neighborhoods. In France, defining sanitation as cleaning up surface trash, filth, and odors was already a carryover from earlier understandings of hygiene in 1850, but it still played a significant role in how officials thought about sanitation and public health in West Africa in 1900.

Overall, the 1902 law required doctors, midwives, and health officers to report cases of contagious disease; instituted mandatory smallpox vaccination; and divided departments into sanitary wards under the surveillance of sanitary commissions. It also closed some of the most egregious loopholes in the Melun law by giving mayors more authority over health matters, including authority over all houses – even those inhabited

by the owner and not facing the street. Mayors could also order that work be done on houses at the owner's expense and they could take sanitary action without a specific complaint. As some hygienists objected, however, mayors had little inducement to enforce such regulations on their constituencies.

The 1902 Health Law might not have had much bite in France, but in France's West African colonies laws regulating sanitation and hygiene were somewhat easier to establish, apply, and enforce. In the communes themselves, though, Africans voting, along with powerful business and commercial interests, made enforcing the spirit of the 1902 law very difficult and not much more popular than it was in France.

The experiences of the medical services during the yellow fever outbreak highlighted a weak area of the colonial government, which was its inability to monitor and control the health of Africans as it affected Europeans. Medical services highlighted that weakness when French doctors failed to recognize early cases of yellow fever and then when their efforts to combat the outbreak were not very effective. The Native Medical Services came after this revelation of weakness, but it also established the standard set of anti-epidemic measures. These anti-epidemic techniques were based on beliefs that limited their effectiveness and would continue to do so.

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[71] On degeneration due to tropical climates and "bad air," see: Dain Borges, "'Puffy, Ugly, Slothful and Inert': Degeneration in Brazilian Social Thought, 1880-1940," *Journal of Latin American Studies* 25, no. 2 (1993).

Chapter 2: The Native Medical Service – The Social Role of Medical Workers and the Cultural Core of Colonial Health Care

With the creation of the Native Medical Service, the political and cultural applications of public health in French West Africa became more salient. The Native Medical Service had its roots in the aftermath of the yellow fever outbreak of 1900, when French officials realized that they needed some way to monitor the health of their African subjects.[72] As the ideal of development loomed larger and French ideology changed, harnessing what colonialists perceived to be vast untapped sources of African human potential (as administrative workers, manual laborers, and medical workers among other things) became increasingly important. Access to the Native Medical Service, however, was not widely available to the African population and did not have the positive impact on population growth that the French desired.

In this chapter, the public health services and the colonial government are shown to be interdependent. The public health services were one of the colonial government's primary methods of working toward its goals of increased population, increased productivity, and increased development. African medical workers were a convenient

[72] Myron Echenberg, "Medical Science in Colonial Senegal: the Pasteur Institute of Dakar and the Quest for a Yellow Fever Vaccine 1924-1945," in *Workshop on Health and Medicine in Africa* (Bryn Mawr and Haverford Colleges, 2005). Echenberg argues in this paper that the Pasteur Institute of Dakar had goals that opposed those of the colonial health services, offering the Pasteur Institute of Dakar as a "case study of how colonial science sought to control an infectious disease more dangerous to stranger Europeans than to seasoned Senegalese. The majority of the population's greater vulnerability to malaria and to gastro-intestinal ailments might have dictated a different set of priorities for the PID. A case study of the PID illustrates how public health policy reflected colonial power but not necessarily local needs." p. 1.

and cheap alternative to European workers. Their importance in the Medical Service continued to grow over time, and the French administration expected them to be better able to communicate the social aspects of the public health program than Europeans.

The French saw their African medical workforce as being almost totally dependent on the leadership of European supervisors. The perspective of this chapter, which holds that the African medical workers were important in and of themselves, was not the French perspective. Medical workers represented French efforts to forge deep cultural affinity between themselves and their colonial subjects. The cultural connections that the French developed consisted of a shared respect for French culture and the adoption of some aspects of French culture by some of the colonized people. French administrators and policy-makers believed that African medical workers would be better able to perform the duties of cultural ambassador than French doctors would. Thus, because of the significance of spreading French culture both to the general colonial project and to the health services, African medical workers were the key to the functioning of the Native Medical Services.

The importance of cultural ambassadorship to the Native Medical Services was that, in order for Africans to accept French public health programs, there had to be a set of shared expectations about cleanliness, hygiene, and the benefits of Western medicine. The French expected that spreading French culture would help Africans identify with certain French ideals of health and medicine while also making the often-harsh epidemic control measures more palatable to the African public.

This chapter follows the development of the Native Medical Service from 1905 – 1929 and analyzes the significance of the social role of medical workers. The social role

of medical workers was a tool the French used to make up for some of the weak areas of the colonial government, such as the lack of manpower and the vast areas the French wanted to administer. A subject population who shared some French cultural values was supposed to be easier to communicate with, easier to influence, and in short, easier to control with fewer French representatives on the ground. Cultural ambassadorship of medical workers in West Africa also represented a central point in French colonial ideology – the belief across the political spectrum of administrators, officials, and thinkers that French civilization was beneficial to African subject peoples.

Race Regeneration for a Larger and Healthier African Work Force

First of all, the Native Medical Service stands for the preservation of the race. - Albert Sarraut, *La Mise en Valeur*, 1923

The French idea of race regeneration, helping the African population grow, quickly became the most important goal of the Native Health Service.[73] First invoked by Julien le Cesne, who became Director of the Compagnie Française de l'Afrique Occidentale in 1915, so many colonial enthusiasts and officials called upon the obligation to "Faire du Noir" that it became a vulgar dictum with something like a life of its own. The idea proved to be durable; in 1942 Governor General Pierre Boisson said: "No matter how we choose to pursue the development of Africa, it is more than necessary; it is

[73] See Alice Conklin, "'Faire Naître' vs. 'Faire du Noir': Race Regeneration in France and West Africa, 1895-1930," in *Promoting the Colonial Idea: Propaganda and Visions of Empire in France*, ed. Chafer and Sackur (New York: Palgrave, 2002). Conklin compares the role of French women as resources to build up the French "race" and colonial subjects as resources in general. Although she is careful to point out that French women had civil rights that African colonial subjects did not, she sees a similarity in how the French state tried to make use of them, especially in the inter-war period.

indispensable that we Faire du Noir."[74] Dr. Ricou, the General Inspector of Medical Services for French West Africa explained it this way:

> 'Faire du Noir,' for us, means extending and deepening our medical activities; above all it means orienting our medical services toward combating the great endemic African diseases and particularly toward combating the 'Demographic Disease', social diseases that debilitate and lead to degeneration, that strike down the children…and sterilize the adult…[75]

The French saw themselves as protecting "the native races" and promoting their "harmonious development." Low population density was just as much a problem as any endemic disease, like malaria, or "social disease", like syphilis or alcoholism.[76] Thus, the colonial medical and public health services led the way in the mission to "faire du noir."[77] Race regeneration was linked to the hopes and plans of the French colonial administration for the colonies for economic and human development (*mise en valeur*) and the civilizing mission.[78] It was also one of the principal measurements of the success of the medical services and of French colonization. The French utilized what could be called a medical *mise en valeur* to further the larger goals of both human and economic development and the civilizing mission.

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[74] ANOM, 14 Mi 1835, 2 G 42/7, Dr. Ricou, Inspector General of Sanitary and Medical Services of French West Africa, "De la Réorganisation des Services Sanitaires et Médicaux de l'Afrique Occidentale Française," 1942.

[75] ANOM, 14 Mi 1835, 2 G 42/7, Ricou, 1942.

[76] Classification of syphilis and alcoholism as "social diseases" was a convention of the time.

[77] ANOM, 14 Mi 1147, J 16, *Les Annales Coloniales*, no. 42, March 20, 1919. "Among the important political and economic problems that the public powers are looking at in AOF [French West Africa], one of the most urgent is the problem of *peuplement*." The article indicated that this problem of population would not be turned around until there was a Native Medical Service that was widespread enough to "spread our methods of hygiene, prophylaxis and general medicine everywhere, and above all to make [Africans] understand and accept them."

[78] Sarraut, *La Mise en Valeur des Colonies Françaises*.

For Albert Sarraut, development was about supporting the growth of "human richness, moral and social value, the *human value* of the protected races."[79] He stressed that his concept of development was not the same as what he called the imperialist doctrine of the *pacte colonial* where colonies were thought to exist solely for the economic benefit of the colonizer, and where France mercilessly exploited its colonies through extraction.

> The old mercantile or 'imperialist' idea of the early days is fading, giving way to the idea of human solidarity. In colonizing, France will without doubt exploit its colonies for its own benefit, *but also for the general benefit of the world*, from territories and resources that the indigenous races of this backwards country could not or did not know how to develop by themselves, and from which the profit was lost for them and for the rest of the world.[80]

In Sarraut's articulation of the French *politique coloniale*, the Native Medical Service would protect the population and encourage growth.

When the Native Medical Service was created in 1905, the point of health services changed from safeguarding the health of Europeans to bolstering the health (and thus the population) of Africans. The activities of the Medical Service were an important part of the French colonial state's efforts to extend and maintain its reach. Public health measures were a manifestation of the ability of the colonial state to bring subject peoples under its authority as much as a police force, postal service, or train system would have been. Health services stretched into the interior, constantly attempting to recruit patients and believers in the value of Western medicine. Being able to track, control, and survey the health of their subjects helped further a number of the most important French goals

[79] Sarraut, *La Mise en Valeur*, p. 88.

for their colonies, such as increasing the population and reducing the incidence of epidemic disease.[81]

French ideology made a philosophical shift during the First World War era that concerned development and the ideals of colonial rule – that development should benefit both the colony and the colonizer – in contrast to the older belief that colonies existed for the good of the *métropole*, the "colonial pact." These changes manifested themselves primarily in the rhetoric of the Colonial Ministry in France and the colonial government in West Africa; the reality of colonial rule for everyday African subjects did not change significantly.[82]

Goals for the Native Medical Service

The Native Medical Service was the first free health service for indigenous people in West Africa, and it cared for functionaries, the general African public, and in some cases Europeans. It also provided hospital services, sanitary police, hygiene, public health, and epidemic care and control. The most important patients were laborers,

[80] Sarraut, *La Mise en Valeur*, p. 87.

[81] Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*.

[82] This shift in the philosophy of colonial rule has been characterized differently by various scholars: Sarraut explained it as a transformation from the colonial pact to a commitment to colonial development (*la mise en valeur*) in Albert Sarraut, *La Mise en Valeur des Colonies Françaises*. Wilder described it as a move from welfarist ideology to humanist ideology on the part of the French government; a change that he argued was not directed at the colonies, but was fundamentally a metropolitan phenomenon that pervaded France's actions as far as "Greater France," see Gary Wilder, *The French Imperial Nation-State: Negritude & Colonial Humanism between the Two World Wars* (Chicago: The University of Chicago Press, 2005). Betts argued that the shift was from assimilation to association in colonial policy in Betts, *Assimilation and Association in French Colonial Theory, 1890-1914*. French administrators of the time followed the pattern of Sarraut's reasoning (some before Sarraut, some after) in explaining that there had been a move away from exploitation and toward development. They believed that the latter was beneficial to both France and its colonies, while the former had been quasi-destructive.

pregnant women, and their infants because of the central mission of the Medical Service to support a strong work force and population growth.

The Native Medical Service had two purposes; the first was to help the African population to increase in health and number: "The goal to reach is to develop the native races in quality and quantity."[83] The second was to spread French culture: "Everywhere the doctor appears, civilization advances; bringing moral and physical well-being to the primitive races."[84] Both of these goals were part of French efforts to improve the lives of their subjects and represented the French belief in the essential beneficence of colonization.

During the colonial period there was virtually no independent medical community operating in the French West African colonies.[85] Independent medical services were mostly composed of traditional practitioners, some of whom the French tried to co-opt, such as the "matrons" or traditional midwives. As long as the French controlled the licensing and practice of western medicine, Africans would only be doctors to the extent that that the Native Medical Service allowed it. Also, since the colonies of French West Africa were not settler colonies, there were not large European populations that required the services of many private doctors. Instead, medicine, sanitation, and hygiene - in short all things public health - came under the purview of the colonial government and these

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[83] Jules Carde, *Instructions du Gouverneur Général Carde sur le développement de l'Assistance Médicale Indigène sociale et sur la protection sanitaire des travailleurs en A.O.F.* (Paris: Agence Économique de l'Afrique Occidentale Française, 1931). p. 2

[84] ANS, 1 H 30, "Le Service de Santé aux Colonies", 1931. p. 14.

[85] There was no independent medical community in the sense that there were very few private physicians practicing Western medicine. There were many traditional African practitioners of the healing arts, and they were the primary source of health care for most Africans in the hinterlands.

services were government services.[86] The Native Medical Service in West Africa was a department of the colonial government, as was the case with General Gallieni's first medical assistance program for Africans in Madagascar. Despite the inter-dependence of the colonial government and the health services, their ideas about the role of individual doctors in many instances did not align – in some instances, medical personnel resisted public health and hygiene duties.

Gallieni Sets a Precedent in Madagascar

The example of General Joseph-Simon Gallieni in Madagascar is crucial to the development of Medical Assistance services in French West Africa. The organization of the medical services followed his example. In 1903 Dr. Grall had established a Native Medical Service in Indochina. West Africa followed closely.

Gallieni had a long and illustrious military career, which included tours in Tonkin, Senegal, and Madagascar (1896-1905).[87] Although his chroniclers praise him for his military prowess and efficient pacification of Madagascar, Gallieni realized upon his

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[86] Shapiro reveals that there were numerous parallels between the ideology of the South African government and the government of French West Africa when considering how African medical personnel would or could be integrated into the European-run government health services: "The ratio of doctors to the population was ultimately determined by the ability of the local community to support the medical practitioner at a standard of living customary among his peers. Therein lay the major contradiction embedded in the structure of medical care in South Africa. The (rural) poor who suffered most from preventable and treatable diseases enjoyed least access to health care. But, with mounting fear for the spread of infectious diseases to the white population and the concern for an adequate labour supply to the mines, the Departments of Native Affairs initiated an inquiry in 1927 into the training of Africans in medicine and public health." Karin Shapiro, "Doctors or Medical Aids - The Debate over the Training of Black Medical Personnel for the Rural Black Population in South Africa in the 1920s and 1930s," *Journal of Southern African Studies* 13, no. 2, Special Issue on The Political Economy of Health in Southern Africa (1987). p. 239.

[87] For a short but informative essay about the career of General Gallieni, see Barnett Singer and John Langdon, *Cultured Force: Makers and Defenders of the French Colonial Empire* (Madison, WI: The University of Wisconsin Press, 2004). See also: G. Grandidier, *Le Myre de Vilers, Duschesne, et*

arrival in 1896 that: "Pacification was not the only goal. I also had to pursue the Civilizing Mission of France." [88] In Madagascar, Gallieni envisioned the civilizing mission taking the forms of "developing" the Malagasies physically and intellectually, shoring-up what he viewed as their crumbling social order, and developing the land – a definition very similar to Albert Sarraut's later description of *mise en valeur*.[89] Along with bringing civilization, race regeneration was a high priority for Gallieni. "Moreover," he said, "in Madagascar, as in other colonies where I had previously served, the primary obstacle to the development of the land and the development of European colonization was the very low population density in relation to the immense tracts of exploitable land."[90] To Gallieni, race regeneration was the most pressing issue, and depopulation was one of the most basic and immediate problems in Madagascar. He saw the declining population numbers as evidence of physiological degeneration. By counterpoising the low population density with the "large tracts of exploitable land" Gallieni made it clear that the problem was centered on economic efficiency and profit possibilities instead of the more idealistic goal of "human development." On the other hand, the French believed that their conception of proper hard work would serve to develop and civilize African populations.

Conveying concern for his new subjects, Gallieni declared that: "Decimated by the persecution of the last rulers and ruined by a system of taxes and arbitrary *corvées*, the Malagasies of Emyrne had lost all their energy, and had fallen into a miserable state

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Gallieni: Quarante Années de l'Histoire de Madagascar 1880 – 1920 (Paris: Société d'Éditions Géographiques, Maritimes et Coloniales, 1924).

[88] General Joseph Gallieni, *Neuf Ans À Madagascar* (Paris: Librarie Hachette, 1908).

[89] Sarraut, *La Mise en Valeur des Colonies Françaises*.

of resignation and habits of laziness and carelessness that are the sad mark of peoples oppressed by tyranny. "[91] Here, Gallieni expressed typical French ideas about what happened when Africans were left to rule themselves. Generally, the French believed that African societies existed in a Hobbesian state of lesser advancement along the road to civilization.[92] There was, according the contemporary European belief, only one path to civilization: that which the Western European states had followed in their development. African societies had the possibility to reach the same stage that Europeans had in their statecraft, but they were behind, which is what the French meant when they referred to Africans as "less evolved."

The crumbling social and political order in Madagascar was not Gallieni's only problem, though. Smallpox, leprosy, tuberculosis, syphilis, and malaria all found easy breeding grounds there. Gallieni noted that the population of some regions had been decimated by disease, and that in 1896 Madagascar had barely 3 million inhabitants. In his opinion, "the natural fecundity of the race" and the resources of the land would have multiplied this number by ten if the scourges of taxes, tyrants, and disease had not devastated the people.[93] This was the situation that France was inserting itself into, to "save the day" according to its philosophy of colonial Humanism.[94] While helping the

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[90] Gallieni, *Neuf Ans À Madagascar*. p. 30.
[91] Gallieni, *Neuf Ans À Madagascar*. p. 29-30.
[92] Hobbes had theorized in *Leviathan* that in its natural state, humanity is savage and life is "nasty, brutish, and short."
[93] Wilder would argue that being interested in profit more than people was not an example of bad faith or of cynical excuses on the part of the French, but a facet of the French guiding principle of humanism (at home and abroad) that was inherently at odds with itself.
[94] Gary Wilder, *The French Imperial Nation-State: Negritude & Colonial Humanism between the Two World Wars*. This is Wilder's ideological explanation of France's actions toward its colonies.

Malagasy, the French intended to also help their own economy and boost national prestige.

Gallieni attacked the problem of depopulation with Western medicine. Two months after his arrival he created a medical school to train Malagasy doctors and a Native Hospital to be the clinic of the medical school, both in Antananarivo. Both opened February 6, 1897. He gave directions to the health services and territorial authorities to organize a free medical service (consultations and medication) for the Malagasy. He also gave the military doctors the task of doing hygiene inspection and vaccination tours.

Figure 2 Madagascar Medical School[95]

[95] From http://www.asnom.org/image/320_ecole_medecine/98_11_ecol_mada.jpg.

In 1901 Gallieni created a corps of Malagasy doctors who were recruited from the ranks of the graduates of the Medical School. Medicine and doctor visits were beginning to be available throughout the countryside.[96] At that point, the development of Madagascar was progressing at a rate that pleased Gallieni, and he felt that the indigenous people were "participat[ing] more usefully in the economic development of the colony."[97] He was also pleased with the devotion evidenced by the Malagasy doctors. They worked in the hospitals, a variety of sanitary units, did tours, gave advice and did free medical consultations.[98] In 1904 Gallieni was able to report that the now eight-year-old Native Medical Service was spreading into freshly pacified Western and Southern regions and was "producing rapid results."[99] The same year saw the definitive organization of the Native Medical Service, which included a special tax that went to its budget. The Native Medical Service was defined by decree as a free service to "natives". The two other decrees that defined the Native Medical Service in Madagascar basically codified the system that Gallieni had already set up. Despite having built more hospitals and medical centers, though, supplies were still low and smallpox was still a problem.

Mise en Valeur – Economic and Human Development as a Guiding Principle of French Colonialism

> A grand country like ours, no matter where it goes and what it does, must be able to say – and say everywhere – that it stays true to itself. That is, it must be able to look its colonial politics straight in the face, like a mirror of its conscience, and not be ashamed or feel remorse due to any shocking contradiction, any brutal

[96] Gallieni, *Neuf Ans À Madagascar*. p. 178.
[97] Gallieni, *Neuf Ans À Madagascar*. p. 178.
[98] Gallieni, *Neuf Ans À Madagascar*. p. 179.
[99] Gallieni, *Neuf Ans À Madagascar*. p. 258.

> antinomy between what it does overseas and what it does at home…It may be true, as it is sometimes said, that some ideas are not fit for exportation, but it is even more true that France, outside its boundaries, cannot abdicate the very essence of its genius, of its humanitarian mission, which is to act righteously and for the good, to civilize in the full sense of the word, to affirm an inspiration in all places where the great traits of national tradition can be found. - Sarraut, *La Mise en Valeur des Colonies Françaises*, 1923

Although his name is the most readily associated with the term *mise en valeur*, Albert Sarraut did not invent the concept, which had been prominent in discussions of colonial policy since at least the mid-1890s. The meaning of *mise en valeur*, though, experienced substantive transformations throughout the first half of the 20th century. Development and the civilizing mission were meant to work together. For Sarraut, development meant "holistic development."

Sarraut's concession that some ideas were not fit for exportation was in reference to the idea of assimilation – of making "Black Frenchmen" out of Africans. Ideas like full citizenship were not fit for exportation, for example, because Africans were supposed not to be ready for them. Association, the more popular colonial philosophy since the very early 20th century, held that Africans must not be "uprooted" from their traditional cultures. The traditional cultures, however, contained elements that the French did not want to preserve. Ideally, Africans would embrace French culture, but not to such an extent that they would demand to be treated as full citizens.

Governor General Jules Carde later pointed out that French culture was more effectively entrenched in some colonies, whereas others that had less contact with the French over the years were not as well integrated culturally; specifying that the peoples of Upper Volta, Niger, and Mauritania "were brought under our authority more recently,

and still have their prejudices, which are egotism and the tyranny of their atavistic defects, very deeply anchored: their education thus remains entirely to be done."[100] The human development aspect of *mise en valeur* was the more compelling goal for health services because it defined an important part of their mission of cultural ambassadorship to Africans. To the French, Africans who shared French ideas about health, disease, and personal hygiene were more culturally evolved than "atavistic" Africans who did not. This process of cultural evolution, essentially what the French thought of as the process of civilization, was at the heart of the idea of human development.

Origins of the Native Medical Service in West Africa

History of the Colonial Medical Corps

French domestic public health services had provided Gallieni with a model for the Native Medical Service program he pioneered in Madagascar.[101] In French West Africa, the French military had an enormous role in medical and health care under both civilian and its own authority. In 1890 a Colonial Medical Corps was created within the Navy and placed under the Naval Minister of Colonies. The Ministry of the Navy administered the newly formed Medical Corps because, at the time, the Navy administered all the colonies.[102] When the Ministry of Colonies was formed in 1894, it took over the administration of the colonies. The Colonial Army itself was established in 1900, and the

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[100] Carde, *Instructions du Gouverneur Général Carde*. P. 41.

[101] Martha L. Hildreth, *Doctors, Bureaucrats, and Public Health in France, 1888-1902* (New York: Garland Publishing, Inc., 1987). While Hildreth does not discuss Gallieni or colonial health services, she does discuss the development and growing strength of public health and hygiene in France and its various institutional manifestations.

[102] ANS, 1 H 30, "Le Service de Santé aux Colonies", 1931. p. 17-18.

Army Medical Corps in 1903. It took over the duties of the Navy Medical Corps and continued until 1968, when it merged with the General Medical Corps of the Armed Services. In 1903, medical officers could sign up for the newly formed Army Medical Corps instead of staying with the unit or corps they were in already. Several civilian physicians were recruited straight into the Medical Corps (like Dr. Alexandre Yersin, who formulated a widely-used plague vaccine).[103]

The Medical Corps was headed by a senior physician with the rank of *Médecin Inspecteur de Premiere Classe*. In 1909, the Colonial Health Authority was established as an autonomous department within the Ministry of Colonies with its own operating budget. Although the French Metropolitan Army Medical Corps was active in North Africa (Algeria, Tunisia, Morocco), the Colonial Army Medical Corps occupied all other areas in the empire. Colonial troops serving with their unit (i.e., not *hors cadres*, or detached) would be under military authority, and not under the Government General of French West Africa. European doctors in French West Africa were mostly members of the military, although more of them were detached (and not under military authority) than were serving in their units.

Hierarchy and Organization of the Native Medical Service

After the Native Medical Service was created, the Governor General of French West Africa was its ultimate authority in the colonies. Above him was the Minister of Colonies, in Paris. Under him were the Lieutenant Governors of each colony. For each colony there was a Head Doctor and Inspector of Sanitary Services who was also the

[103] For an extensive narration of this progression, see Bernard Brousolle and Pierre Pluchon, *Histoire des*

Head of the Central Hospital in the capital of the colony. Eventually there were European doctors in charge of each sanitary district, which were supposed to correspond to the administrative districts, or circles.[104] Under the European doctors were the African medical workers. These consisted of African doctors, pharmacists, midwives, nurses, sanitary nurses, visiting nurses, health aides, and guards. From 1903 to 1939 the highest-ranking administrative officer headed services for any colony (the Governor) or group of colonies (the Governor General). This person took care of assignments, organization of services, set up new medical facilities, and supervised sanitation services. Each federation of colonies had a Federal Director of Health; he would be a senior physician with the ranking of General and he administrated the health programs.

In 1925 Dr. A. Lasnet inaugurated a new geographical orientation for the health services, organizing them according to administrative districts.[105] Central points in the network were the various colonies' main hospitals. In theory, the capital city of each district would feature a smaller hospital, to be run by a European doctor along with the help of African medical workers. Each subdivision was supposed to have dispensaries and clinics run by nurses. Since the Native Medical Service was chronically short on people and funding, it was unable to fully realize this plan.

Médecins et Pharmaciens de Marine et des Colonies (Toulouse: Privat, 1985). See chapter 7.

[104] Sanitary districts were instituted in 1925.

[105] Lasnet (b. 1870 – d. 1940) Graduated from the Bordeaux Navy School of Health in 1893 and was posted first to West Africa, then to Madagascar where he worked under Director of Health Services Clavel and was promoted from Dr. Lieutenant-Colonel to Dr. Inspector-General in less than five years. Lasnet was made a Maréchal at 48 and was the only colonial doctor to receive the Grand Croix of the Legion of Honor. After the First World War he became the Inspector-General and President of the Superior Council of Colonial Health, making him responsible for directing the health services for the Ministry of Colonies. It was he who inspired Jules Carde to circulate his memos urging the Native Medical Service to concentrate on preventative, social, and collective medicine in the late 1920s.

The Medical Facilities of the Native Medical Service

One goal of the Native Medical Service was to increase the number of medical facilities and the number of people using them each year, and generally that is what happened. Hospitals, clinics, maternities, lazarettos, leper colonies, dispensaries, sanitation teams, and mobile hygiene teams comprised the facilities (*formations sanitaires)* of the Native Medical Service. There were both "fixed" and "mobile" medical services, the first being a permanent emplacement accessible to those close by, and the second being a roving medical team that could reach more remote areas. Colonial Ambulances were what the French thought of as mobile medical facilities. Although the facilities themselves did not move, there was supposed to be a form of transport dedicated to them so they could bring in patients or transfer them.

In 1903, the Pasteur Institute and the Colonial Medical Corps agreed to have microbiologists of the Medical Corps trained at the Pasteur Institute in Paris, and laboratories and overseas Pasteur Institutes were established. The Medical Corps also built some laboratories for itself: the Muraz Center in Bobo Dioulasso, Upper Volta (for sleeping sickness); the Marchoux Institute in Bamako, Mali (for leprosy); the Trachoma Institute (IOTA) also in Bamako (for tropical ophthalmology); and the African Institute for Food and Nutrition Research (ORANA) in Dakar (for malnutrition).

Figure 3 Pasteur Institute Dakar[106]

The medical groups were the center of much of the Native Medical Service's work. Even mobile teams had a home base. As such, they formed a network attempting to secure the countryside with outposts for Western medicine. They were the physical manifestations of the attempt on the part of the colonial state to bring the hinterland more under control. French West Africa went from "a few thousand" patient visits in 1905 to 300,000 in 1920 and 10,000,000 in 1935. In 1905 there were 10 dispensaries and ambulances, while in 1949 there were 852 medical facilities.[107]

In 1910 there were 88 regularly manned Native Medical Service posts in French West Africa. In addition to the 88 dedicated medical posts there were regular sanitary

[106] From http://www.asnom.org/image/710_instituts_pasteur/inst_pasteur_dakar.jpg.

posts, totaling 16. These sanitary posts were designated either "colonial" or "local." Senegal had 2 colonial and 2 local sanitary posts. Haut-Sénégal and Niger had 3 colonial posts. Guinea had 1 local post. Cote d'Ivoire had 5 local posts, which were all ambulances. Dahomey also had 3 local ambulances.[108] Both sanitary and medical posts gave free medical advice and medications to African patients. Delrieu admitted that these numbers were the same as they were in 1909, but added that they had been more active in 1910.[109]

Personnel of the Native Medical Service

Duties of European doctors

Émile Roux (Director of the Paris Pasteur Institute from 1904 – 1933) suggested that the civil doctors of the Native Medical Service should be French or naturalized French and have a French diploma of medical doctor, they also had to have a diploma from one of the Institutes of Colonial Medicine (at Paris, Bordeaux, or Marseille) or be able to present equivalent credentials. They were engaged for a period of five years, with

[107] l'Association Amicale Santé Navale et d'Outre-Mer (ASNOM), "L'Oeuvre Humanitaire du Corps de Santé Colonial Français," www.asnom.org.

[108] M Delrieu, "Assistance Médicale Indigène pendant l'année 1910," *Journal Officiel de l'Afrique Occidentale Française, Rapports et Documents*, no. 62 (1911). An ambulance was usually established in a military post, the doctor was usually an officer with multiple duties, including caring for the European and African troops, as well as administering the local Native Medical Service, "Patient visits are scheduled, patients arrive more and more often, locally recruited medical aides start to assist at the ambulance as well as traditional midwives. The young colonial doctor, having been trained at the Pharo, is not surprised. Little by little this aspect of his professional life becomes his first priority. Even as the military cedes administrative duties to civilians [trained at the École Colonial, established in 1895], and the troops stationed at the larger posts are withdrawn, the doctor stays." p. 115.

[109] Delrieu, "Assistance Médicale Indigène."

a 6-month break after each two years.[110] European doctors were responsible for training and directing the work of their subordinates and were seen as the prime movers of the service: "It is clear that the Native Medical Service can only give as much as they give, themselves."[111] The African doctor's aides and medical students of the circle were under the European doctor's authority, along with the "native" nurses. The doctor was supposed to make occasional tours of his region to care for those who could not come to him and to oversee the disease and hygiene conditions. Roux also stipulated in his 1911 report that the dry season should be almost entirely devoted to vaccination tours.[112] Actually getting the doctors to travel proved difficult, and the later addition of a second doctor for each district was an attempt to solve the problem.

During the First World War, many colonial doctors were called back to the European front. The Native Medical Service, predictably, suffered. Money, medications, and material were all in short supply. To fill in some of the empty positions in the Native Medical Service, the White Russian "hygienists" came in 1922. The Russian doctors functioned as adjunct hygienists because their Russian medical degrees did not give them the right to freely practice medicine in French territory.[113]

Numbers of Doctors, Posts, and Patient Visits

France was faced with a situation where it could not possibly furnish adequate numbers of doctors in its West African colonies, and the African populations had not

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[110] Émile Roux, *Manuel à l'Usage des Administrateurs et du Personnel des Affaires Indigènes de la Colonie du Sénégal et des Colonies Relevant du Gouvernement Général de l'Afrique Occidentale Française* (Paris: Augustin Challamel, 1911).

[111] ANOM, 14 Mi 1710, 2 G 26/2, Medical Services Annual Report.

[112] Roux, *Manuel à l'Usage des Administrateurs*.

been won over completely to Western medicine anyway. For example, in 1911 the circle of Ouagadougou received a dispensary. It was supposed to serve 1,500,000 people with two doctors. The geographical reach of colonial authority thus was not sufficient for the purposes of French goals (such as permeation of French cultural ideals throughout West African societies, spread of French language, and presence of the Native Medical Service in the life of the average rural dweller.)

Table 1 Native Medical Service 1910[114]

	Patients 1909	Patients 1910	Days of Treatment 1909	Days of Treatment 1910	Medical Posts	European Doctors	African Doctors & Students	Budget 1910 in francs
Senegal	106,486	130,078	352,219	417,344	22	18	14	367,435
Guinea	33,867	37,328	295,431	315,475	13	17	8	287,111
H-S/ Niger	29,352	38,289	232,051	269,110	28	27	8	258,632
Mauritania	missing	5,862	37,980	39,109	5	4	0	55,958
Cote d'Ivoire	22,449	16,400	missing	112,840	12	15	3	288,346
Dahomey	missing	18,145	72,956	98,294	8	11	4	222,940

The numbers of European doctors present in French West Africa fluctuated from one year to another and during the course of a year. In 1924, there were 90 European doctors. In 1925, there were as many as 120 and as few as 92. In 1926 there were 133 doctors at the lowest point and 165 at the highest. There were 156 European doctors in

[113] Carde, *Instructions du Gouverneur Général Carde*.

[114] Delrieu, "Assistance Médicale Indigène." For comparison, a 2nd class Major-Doctor at the Central Native Hospital, after four years of service, made 9,625.73 francs. ANOM, 14 Mi 1129, H 23.

1927.[115] Faced with these very high patient-to-doctor ratios, the question arises whether civilization through medicine was primarily theoretical. However, the European doctors were not the only agents of French civilization.

> A long period was necessary to accustom the populations to the health service. Cultural reticence, the rivalry with traditional medicine, the fact that patients are separate from their families…all these difficulties had to be overcome gradually.[116]

The gradual triumph of the health services over "reticent" African population was the responsibility of medical workers in their capacity as cultural ambassadors.

African Personnel

It would be difficult to overstate the importance of African personnel to the health work of the French.[117] In his 1927 report, Governor General Jules Carde[118] estimated that any obstacle to recruiting more African personnel was an obstacle to the work of the health services.

In the Native Medical Services, Native Doctors, Native Midwives, and Native Sanitary and Visiting Nurses, as well as various subordinate workers like hygiene workers, vaccinators, and sanitary guards comprised the African medical personnel. As

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[115] ANOM, Annual Reports for French West Africa, 1925 – 1944. Carde, *Instructions du Gouverneur Général Carde*.

[116] (ASNOM), "L'Oeuvre Humanitaire du Corps de Santé Colonial Français."

[117] Issues of race and status in medicine in African history: Steven Feierman, "Struggles for Control: The Social Roots of Health and Healing in Modern Africa," *African Studies Review* 28, no. 2/3 (1985), Karen Flint, "Competition, Race, and Professionalization: African Healers and White Medical Practitioners in Natal, South Africa in the Early Twentieth Century," *Social History of Medicine* 14, no. 2 (2001), Shapiro, "Doctors or Medical Aids."

[118] Jules Carde (b. 1874 – d. 1949). He was Governor-General of French West Africa from March 1923 – October 1930, then from October 1930 – September 1935 he was Governor-General of Algeria. He was also an officer of the Legion of Honor.

Roux put it: "The corps of Native Assistant Doctors were created to furnish capable auxiliaries for the Native Medical Service Doctors, to serve as intermediary interpreters for the blacks, aides for everyday service, and substitutes in need for centers that are too far from the doctor's residence to be visited daily."[119] Still, the most prestigious position as an African medical worker was being an African Doctor.

The first African medical workers were referred to as "Native Doctor's Aides." Doctor's Aides were the forerunners of the "Native Doctors" of the Native Medical Service. The Doctor's Aides existed before the Dakar Medical School was established, meaning that their training was more individual and less standardized than it would be at the school. The European doctor would have a couple of students that he would train to be Doctor's Aides over a period of two years. They learned how to treat dislocations and fractures, perform minor surgical procedures, care for the most frequently occurring maladies of the area, and give vaccinations. After the two years the Doctor's Aides did a six-month internship at the main hospital of the colony. There was an exam at the end of the internship that the Head of Health Services presided over. After passing the exam the Native Doctor's Aide qualified to be employed by the Native Medical Service under a doctor, or in an isolated post in the hinterland with a doctor in the capital of the circle.[120]

African midwives performed the critical service of providing care to pregnant women and in that way intervened most directly in the critical task of preventing infant mortality and educating women about pre- and post-natal hygiene and nutrition. In a circular from April 12, 1921 Governor General Merlin had advanced the idea of having

[119] Roux, *Manuel à l'Usage des Administrateurs*.
[120] Roux, *Manuel à l'Usage des Administrateurs*. p. 472-474

African assistants who would do no obstetrical work, but would be responsible for the cleanliness of the birthing areas and nutrition. Governor-General Carde wanted to reconsider this idea, which had not been developed, calling the assistants Visiting Nurses and having them also conduct social and hygiene propaganda and education. These nurses were supposed to come from the local populations that they would serve after training at the hospital in the capital of the colony.

The Sanitary Guards were supposed to take care of the work of hygiene and health measures, and were still to be developed when Carde wrote his report in 1927. Until then, only urban centers had sanitary teams carrying out the jobs of larva eradication, protection of drinking water, destruction of waste and filth, killing rats, disinfection, and isolation of contagious people.

The importance of African medical personnel was both physical and ideological in that they carried out the bulk of the work of the Native Medical Services along with bearing the responsibility to fulfill the social role that the government was relying on the help bring its African subjects more firmly under the French colonial umbrella.

Governors-General and Health Policy – Focus on Cultural Ambassadorship[121]

From 1900 to 1930 there were seven Governors General and five acting Governors-General when the former were indisposed. Governors General Roume, Merlin, and Carde were the most significant for their work on the Native Medical Service and general health policy in West Africa. For the French Colonial Ministry in Paris and

[121] See: Wilder, *The French Imperial Nation-State: Negritude & Colonial Humanism between the Two World Wars*. Conklin, *The Civilizing Mission*, and Barnett Singer and John Langdon, *Cultured Force:*

the regional colonial governments, using medicine and public health to boost the numbers of the African population in an attempt to procure more laborers and squeeze more profit, prestige, and potential military support from the colonies was standard policy and for the most part, the Governors General adhered to it. The Governors General had authority and a degree of autonomy – their priorities were thus reflected in the activities of the colonial state. Health services were so fundamentally interconnected with other functions of the colonial government that the Governor General was virtually required to put time and energy into them.

Makers and Defenders of the French Colonial Empire (Madison, WI: The University of Wisconsin Press, 2004).

Table 2 Governors-General of French West Africa, 1900-1936

Name	(b. – d.)	Term Begins	Term Ends
Jean Baptiste Émile Louis Barthélemy Chaudié	1853 – 19..	28 September 1895	1 November 1900
Noël Ballay	1847 – 1902	1 November 1900	26 January 1902
Pierre Paul Marie Capest (acting)	1857 – 19..	26 January 1902	15 March 1902
Ernest Roume	1858 – 1941	15 March 1902	15 December 1907
Martial Merlin (acting)	1860 – 1935	15 December 1907	9 March 1908
William Ponty	1866 – 1915	9 March 1908	13 June 1915
François Joseph Clozel (acting)	1860 – 1918	January 1912	August 1912
François Joseph Clozel	1860 – 1918	14 June 1915	3 June 1917
Joost Van Vollenhoven	1877 – 1918	3 June 1917	22 January 1918
Gabriel Angoulvant (acting)	1872 – 1932	22 January 1918	30 July 1919
Auguste Brunet (acting)	1878 – 1957	30 July 1919	16 September 1919
Martial Merlin	1860 – 1935	16 September 1919	18 March 1923
Jules Carde	1874 – 1949	18 March 1923	15 October 1930
Jules Brévié	1880 – 1964	15 October 1930	27 September 1936

Governor General Ernest Roume gave spreading French culture high priority, pursuing the spread of civilization through building railroads and telegraph lines.[122] He was also a staunch supporter of *mise en valeur*.[123] In his 1905 state of French West Africa essay, Roume stated that the double goal they had been working toward was developing communications and ameliorating health conditions.[124] Roume was the Governor General who presided over the establishment of the Native Medical Service in French West Africa.[125]

Following Roume, William Ponty was cut from the same philosophical cloth regarding African cultures: he saw them as feudal, tyrannical, and exploitative.[126] As such, he believed that those "primitive" characteristics should be supplanted by more civilized French cultural values like paid labor and participation in a cash economy. He also believed in *mise en valeur* as part of the French project in its colonies, but he put more emphasis on developing education than on improving public health services.[127]

Martial Merlin and Jules Carde were associationist Governors General.[128] They did not see the traditional figures of authority and the political systems they operated in

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[122] Ernest Roume (b. 1858 – d. 1941). He was Governor-General of French West Africa from March 1902 – March 1907. He was Governor-General of Indochina from January 1914 – January 1917.

[123] See Alice L. Conklin, *A Mission to Civilize: The Republican Idea of Empire in France and West Africa, 1895-1930* (Stanford, CA: Stanford University Press, 1997).

[124] ANS, bi I 4 686, *Le Service de Santé aux Colonies*, French Colonial Army, 1931.

[125] In Conklin's assessment: "The *mise en valeur* of African resources was itself part of France's civilizing mission in West Africa, and the railroads and improved sanitation were as essential to African progress as they were to French prosperity." Conklin, *A Mission to Civilize*. p. 51.

[126] William Ponty (b. 1866 – d. 1915). He was Governor-General of French West Africa from February 1908 to his death in 1915. He was a knight of the Legion of Honor.

[127] Conklin draws a line between the philosophies of Governors General like Roume and Ponty and those like Merlin and Carde. She categorizes Van Vollenhoven as a sort of transitional figure. Conklin, *A Mission to Civilize*.

[128] Martial Merlin (b. 1860 – d. 1935). He was Governor General of French West Africa from December 1907 – March 1908 and again from September 1919 – March 1923, then he was Governor General of

as necessarily feudal and tyrannical. The policy of governing the subjects of French West Africa shifted at a theoretical level from one of assimilation to association. The differences on the ground were in many cases minimal, though the shift to association had important philosophical implications regarding the "protection" of African traditions. The fact, however, remained that there were not enough French personnel to rule "directly," and there never had been. African intermediaries were a way of governance as they had been from the beginning.[129] Philosophically, under association there was supposed to be more of an effort to search out rulers who had legitimacy among the people they would administer for the French, instead of the older idea that choosing men strictly for loyalty and not for any traditionally accepted right to rule.

Governor General Merlin had steered the Native Medical Service toward hygiene and preventative and social medicine in his circular of April 12, 1921. Afterward, Governor General Carde reinforced the preventative focus in his March 12, 1924 circular. Jules Carde was Governor General of French West Africa from March 1923 – October 1930. His tenure spanned a reorganization of the Native Medical Service, and in 1927 he conducted a tour of the region and submitted a detailed report of the state of the Native Medical Service in the region. He is most widely known for his bootstrap version of *mise en valeur* that involved creating development without external French investment, as

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French Equatorial Africa from June 1908 to May 1917. He served as Governor General of Madagascar from July 1917 to August 1918, then Governor General of Indochina from August 1923 to April 1925.

[129] For more on the debate over the differences between direct and indirect rule: M. Semakula Kiwanuka, "Colonial Policies and Administrations in Africa: The Myths of the Contrasts," *African Historical Studies* 3, no. 2 (1970), Véronique Dimier, "Direct or Indirect Rule: Propaganda Around a Scientific Controversy," in *Promoting the Colonial Idea: Propaganda and Visions of Empire in France*, ed. Sakur (New York: Palgrave, 2002). Cohen, "The French Colonial Service in French West Africa." For more on Association and Assimilation see: Betts, *Assimilation and Association in French Colonial Theory, 1890-1914*, Crowder, *Senegal: A Study in French Assimilation Policy*.

Sarraut's plan had called for, and for his labor policies, which leaned heavily on the use of forced labor.[130] Because of his determination to wring more production and profit out of the colonies, Carde was obliged to be concerned with African health and encouraging population growth.

In order to encourage population growth, Carde identified two major tasks for the Native Medical Service: first to combat infant death by educating mothers about infant health, and second, to combat adult death by getting rid of social illnesses through epidemic research and mandating the use of precautionary public health measures.[131] Carde placed special emphasis on the need to organize the Native Medical Service effectively toward these ends.

Carde reminded his Lieutenant Governors that M. Daladier's (the Minister of Colonies) instructions of December 30, 1924 had laid out the general directions to follow in the organization of the Native Medical Service: "they [the ministry] have clearly oriented the Native Medical Service toward preventative and social medicine, and have made individual curative medicine less important; the influence of which on the development of a race is relatively weak."[132] In practical application for infant mortality, this would mean policies such as pushing midwives to go to houses to help mothers

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[130] Most historians, with Frederick Cooper, *Decolonization and African Society: The Labor Question in French and British Africa*, ed. Chazan, African Studies Series (Cambridge: Cambridge University Press, 1996). and Conklin, *A Mission to Civilize*. being examples, see the use of forced labor as in conflict with the republican national values that France espoused. Gary Wilder, *The French Imperial Nation-State: Negritude & Colonial Humanism between the Two World Wars*.takes the opposing position, arguing that Carde was essentially concerned with improving the standard of living for Africans and implying that the French did not use a lot of forced labor.

[131] Carde, *Instructions du Gouverneur Général Carde*.

[132] Carde, *Instructions du Gouverneur Général Carde*.

instead of trying to increase the capacity of maternity wards.[133] More home visits were meant to make midwives' contact with the mothers closer as well as to facilitate the surveillance of the children's health and make "infant hygiene propaganda" more productive.

Carde was sure to communicate the importance of shifting the focus to preventative medicine. He believed that individual curative medicine such as that practiced in hospitals had to make way for more emphasis on preventative medicine, which "is the only way to achieve the development of the population."[134] Although curative medicine had been officially relegated to secondary importance in the 1920s, Governors General still had a difficult task ahead of them in actually convincing the doctors and other health workers to travel and in general to put preventative measures before curative ones.

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[133] The clash between medicine and public health was not limited to French West Africa. Shapiro describes how the South African government did not want to start a medical service where black doctors could work, and as long as that did not happen, neither would training of black doctors in South Africa. Why not establish a Government Medical Service that would focus on preventative medicine? The medical profession objected to it, citing impossibility of merging curative and preventative medicine. Shapiro quotes a Medical Officer of Health in Germiston, "The present economic, competitive and curative bases on which the profession rests does not provide for a reconciliation between curative and preventive medicine. Prevention of disease is against the economic interests of the profession." (J.H. Rauch, 'Preventive Medicine and Public Health,' *South African Medical Journal*, v 11, 9 May 1936, p. 382) The fundamental difference between the organization of public health services in French West Africa and in South Africa rests on the status of South Africa as a settler colony. Even though both were concerned about African health as it related to available labor (of some sort), the presence of white settlers was a deciding factor in not training black doctors in South Africa. Shapiro, "Doctors or Medical Aids."

[134] Carde, *Instructions du Gouverneur Général Carde*. p. 2.

Jules Carde - A Case Study of French West Africa and Public Health Services 1926 – 1931

In his 1927 report, the problems that Governor General Carde identified in the Native Medical Service were of several types: the effectiveness of the medical personnel, the fulfillment of the social role by medical personnel, and insufficient numbers of doctors and other medical workers. Carde grouped the problems as first, those regarding the *Assistance curative* (individual medical care) and second, those regarding public health and infant mortality. He saw the problems as resulting from "imperfect application of the directions given."[135] Carde's assessment implied that the problem was not a lack of personnel or money, but that the medical workers were bunglers. His evidence, however, indicated that he was aware that "screw-ups" were not the full extent of the problems. His conclusions also reinforced the growing importance of preventative medicine and the corresponding decreasing importance of individual medical care. Regarding individual medical care, Carde thought that the focus was not shifting toward prioritizing preventative medicine quickly enough, suggesting that most hospitals (except for Dakar's) should be racially integrated in the interest of efficiency.

Public health was a much larger and more important category than individual medical care, and included the bulk of Native Medical Service duties. Carde described problems with this group of services in much more detail than he did those of individual medical care, classifying them under six different headings: 1) Insufficient application of instructions in each of the colonies individually 2) Rudimentary organization of mobile teams regarding orders given to the teams and to transportation 3) French doctors and

heads of service exercising selective understanding of their commanding role and their social importance 4) Administration and technicians hesitating to create new services and to ameliorate existing ones 5) The erroneous assumption that the Health Services were solely responsible for doing all this when their work was in fact useless without enforcement from the Lieutenant-Governors and 6) Hesitation in combating sleeping sickness, leprosy, and flu.[136] Carde needed to implement *mise en valeur* without any extra financial support from France. Thus, a large part of his energy was directed at making sure the Native Medical Service did not waste any of the funds it already had by not working at optimum efficiency. From a more general standpoint, the problems of the Native Medical Service fall into categories of mission and personnel.

Problems with the Implementation of the Mission of the Native Medical Service

In theory, the duties of the medical workers in the Native Medical Service were not only to care for the sick but also to teach the general population both good hygiene and "proper" moral and cultural values. This extra-medical duty was the "social role" – a new iteration of the civilizing mission. Although all medical personnel had a social role to play, that of the African medical workers was the most critical and consequently the object of the most complaint in evaluations of the Health Services. The social role that African medical workers were supposed to play was many-faceted. They were propagandists, ambassadors, translators, and educators in addition to their more strictly medical duties.

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[135] Carde, *Instructions du Gouverneur Général Carde*. p. 39.
[136] Carde, *Instructions du Gouverneur Général Carde*. p. 39.

> [The African medical worker] by his racial and linguistic affinities, by his knowledge of habits, traditions, and prejudices he represents, on condition of being well guided by European doctors, is the most effective method of education and penetration.[137]

As Governor General Carde saw it, African students taught by the French were "active instruments of the propagation of our ideas."[138] In his 1927 report to his Lieutenant Governors, Carde stressed that: "Native doctors [were] in general highly praised even by Europeans, but insufficiently trained in their social role, which is their most important function."[139] Performing their social role was the most important function for African medical workers because the French wanted their health services to reach as many people as possible, and given the vast distances they had to cover and without enough personnel to ensure easy access for all Africans, cultural ambassadorship was their best chance of spreading their influence in the hinterlands.

Carde also praised the knowledge of the African midwives, but criticized their unwillingness to go to the homes of pregnant women, noting that they preferred to squeeze as many as possible into maternity wards instead of making rounds in isolated areas. In evaluations of African medical workers, Governors General often mentioned the importance of the European supervisor to the quality of their work: "In general the Assistant Doctors and Midwives correctly do their work if they are well guided and not isolated in the bush for too long. The same cannot be said for some of the Visiting Nurses who do not fulfill their important social role."[140] European doctors were charged

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[137] Carde, *Instructions du Gouverneur Général Carde*. p. 7.
[138] Carde, *Instructions du Gouverneur Général Carde*. p. 52.
[139] Carde, *Instructions du Gouverneur Général Carde*. p. 52.
[140] ANOM, 14 Mi 1804, 2 G 39/9, AOF General Inspection of Sanitary and Medical Services, 1939.

with providing this guidance and were also credited with the success of their underlings if the Native Medical Service progressed in achieving its goals. French administrators believed that African medical personnel generally worked "as well or poorly as their superiors know how to utilize them."[141] This quote would substantiate Carde's earlier claim that many problems arose from what he called imperfect application of instructions.

Again, the issue of the untended social role arose among the category of workers who would become "Sanitary Nurses." Carde complained that, more even than the doctors, the Sanitary Nurses were unaware of their social role:

> Those who are assigned to isolated posts spend most of their time applying bandages to old sores, and randomly giving out quinine pills. They do nothing in the way of hygiene propaganda, nothing to track social or epidemic diseases, [and do] not even [perform] vaccinations under the pretext that they are not vaccinators. Moreover, they stay in the same place for too long without going for additional training at a hospital.[142]

To remedy this problem, Carde suggested that the entire category of personnel, vaccinators included, be grouped together in each colony as Sanitary Nurses. He also stipulated that the Head of Sanitary Services would henceforth have to make a tour of his area to correct wayward nurses. As an incentive, the very best nurses would be rewarded with a title, "Health Aide", but Carde limited the number of Health Aides to no more than 1/5 of the total number of nurses.[143]

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[141] ANOM, 14 Mi 1779, 2 G 36/43, AOF General Inspection of Sanitary and Medical Services, 1936-1938.
[142] Carde, *Instructions du Gouverneur Général Carde*. p. 9.
[143] Carde, *Instructions du Gouverneur Général Carde*. p. 10.

Carde was deeply troubled that the European doctors were not making tours of their regions, and suggested that a doctor should be away from his post touring the region at least three days a week.[144] Neither doctors nor African personnel were fulfilling their "social roles," and in many cases, according to Carde, did not understand the importance of having a lot of contact with Africans and spreading French culture and civilization. Emphasizing this, Carde reminded his Lieutenant Governors of the extreme importance of the "native" personnel, due to their being much better able to communicate with and influence other "natives" about French culture.[145]

Shortcomings of Personnel

Governor-General Jules Carde pointed out in 1927 that, as the Native Medical Service was organized by districts, ideally a European doctor would be at the head of each district. Sometimes, though, a European doctor would be responsible for several sanitary districts (and all the sanitary personnel therein). He believed that 150 doctors would have sufficed for French West Africa when he was writing in 1930, but added the caveat that 200 doctors would be necessary in five years, eventually reaching an upper limit of 250.

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[144] Carde, *Instructions du Gouverneur Général Carde*. p. 43.

[145] Shapiro, "Doctors or Medical Aids.": The Loram Committee that was studying the problem of how to train black doctors in South Africa recommended that black physicians be trained in segregated classes at the University of Witwatersrand, following the same course of study as white students. One question the committee considered was: Why train black doctors and not more white ones? They held that white doctors alone would not be able to meet demand for health care of blacks. Shapiro quotes a supporting reason for training black doctors that echoes exactly what the French reasoned a little earlier on: " 'the psychological factor in the better understanding between doctor and patient, due to the bond of a common race, language, and social outlook.'" (quoted from Loram Committee Report) It was also believed the black doctors could combat the so-called magical medical beliefs of his patients. Further, the committee envisioned being able to pay these doctors less for their work in the proposed

In a collaborative effort to shed light on the "problems of *mise en valeur*" in the French colonies, Antoine Daudet (the Associate Director of the National Association of Economic Expansion) wrote a chapter assessing the Native Medical Service and colonial education in 1927. For Daudet, one of the most important difficulties was recruiting enough French medical personnel. Daudet put the colonial population at 57 million and posited that a doctor was necessary for every 5,000 people. This ratio would have necessitated 11,400 doctors by Daudet's calculations, and he noted that the budget would not support that. To point out the extreme shortage of personnel, he mentioned that, at the time he wrote, there were only around 1,010 doctors, pharmacists, and dentists working in the French colonies. He further noted that their low population densities made it even harder to extend medical care to the colonies.[146] Daudet went on to state that the "ignorance and the indolence of the native races" made the task more difficult, as well.[147]

"Not 12, but 40 native doctors are needed each year," Carde had declared.[148] Colonial administrators emphasized the social role of the African personnel in particular (and of all medical personnel generally) as the incredibly important, yet under-served, basic task of the Native Medical Service along with race regeneration. Lack of medical workers was only one part of the problem – there was also a problem of even distribution, especially for midwives. Up until 1927 most of the African midwives had come from

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Government Medical Service. The idea was to restrict black doctors' practice to government work, so they would not compete with private white doctors, nor ever treat white patients.

[146] Antoine Daudet, "L'Assistance Médicale et l'Enseignement aux Colonies," in *Les Principaux Problèmes Relatifs à la Mise en Valeur de Notre Domaine Colonial* (Paris: Éditions de la S.A.P.E., 1927). p. 26

[147] Daudet, "Les Principaux Problèmes." p. 26.

[148] Carde, *Instructions du Gouverneur Général Carde*. p. 8.

Soudan. The Health Services insisted upon employing African medical workers in the regions they came from, so that having the bulk of midwives from the same area presented a problem. Carde instructed his Lieutenant Governors to push local recruitment: "It is indispensable that other areas supply a proportionate number [of midwifery students] for their needs."[149] According to Carde the biggest obstacle to midwives were the matrons (traditional midwives) who "monopolize deliveries and whom our midwives are not numerous enough to replace." He wanted to indoctrinate the matrons about hygiene and cleanliness. He encouraged the midwives to bring the matrons into the French fold: "not to make them disappear, but only to better their practice."[150]

Because some of the most widespread problems Carde encountered on his tour of French West Africa involved under-utilization of medical workers, he stipulated a more balanced use of personnel: "during my tour, I found that there is a tendency to group native personnel around a French doctor when they would be more useful in a detached post…For nurses, the waste of personnel is the same: in certain dispensaries I saw 8 or 10 nurses, [and] in posts without a doctor as many as 3 or 4 not doing any exterior service."[151] Carde's overall assessment of the Native Medical Service was that much work remained to be done before it could produce the population-boosting results that administrators expected from it.[152]

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[149] Carde, *Instructions du Gouverneur Général Carde*. p. 8.
[150] Carde, *Instructions du Gouverneur Général Carde*. p. 9.
[151] Carde, *Instructions du Gouverneur Général Carde*. p. 11-12.
[152] Carde, *Instructions du Gouverneur Général Carde*. p. 1.

French administrators and chroniclers (foreign ones as well, as Mumford exemplified) criticized the "primitive" nature of Africans and African cultures, indicating that Africans were primitive physically, mentally, and morally.[153] With this belief in African "atavism" firmly in place, the Native Medical Service would seem to be an unmitigated good for both French and Africans. It would use cheap African labor for the majority of its work, bringing Western medicine to "primitive" people, while the workers themselves derived the civilizing benefits of French science and culture at the same time as they served to spread this civilization to their compatriots: "the passivity of the native disappears, or tends to disappear, in the exact measure that he escapes from the atavistic straitjacket, either under our influence or due to contact with others of his race, doctors, teachers, workers, trained in our schools."[154] The French thus remedied their chronic lack of European manpower and used the subject population to maintain and consolidate the power of the colonial government.

As the health services expanded and began to combat epidemic and endemic disease in an effort to protect the African population, they had to re-orient themselves from a focus on hospital treatment and individual patients to broad preventative and educational practices. To this end, in 1911 Roux had instructed the Lieutenant Governors that the Native Medical Service would treat Europeans only in the case of an epidemic.[155] The clash between the ideology of medicine and that of public health was pervasive during the early part of the twentieth century, and it contributed to some of the central

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[153] Mumford, *Africans Learn to be French; A Review of Educational Activities in the Seven Federated Colonies of French West Africa, Based upon a Tour of French West Africa Undertaken in 1935*.
[154] Carde, *Instructions du Gouverneur Général Carde*. p. 52.
[155] Roux, *Manuel à l'Usage des Administrateurs*.

problems that the Native Medical Service experienced. Much of Carde's "imperfect implementation" can be attributed to people who saw themselves as medical professionals either refusing to do things that they would have seen as more appropriate for social workers, or not realizing that they were expected to do them. These untended duties included things like making tours of the regions they were responsible for, making home visits instead of trying to accommodate more pregnant women in the maternity wards, and attending to hygiene education and French culture programs for rural Africans – the things that made up the vaunted "social role."

Chapter 3: The 1914 Plague Outbreak

This chapter examines the 1914 plague epidemic to show how public health measures had developed since the yellow fever outbreak, to investigate the anti-epidemic rationale for residential segregation efforts, and to look at African resistance to anti-epidemic measures as a way to access the African experience of colonial public health. The important role of Africans as subordinate workers in the Native Medical Services shows that the relative success (or lack thereof) of the initiatives of the health services depended upon African labor, not just European will. They were the guards who made sure "suspects" remained confined to isolation camps, they were the guards who enforced *cordons sanitaires*, they made up the teams responsible for disinfecting and incinerating houses and belongings, and they performed some of the mandatory vaccinations.

The involvement of the Native Medical Service in the plague outbreak of 1914 served political and social purposes as well as medical ones.[156] The plague gave the authorities an opportunity to move poor African tenants and land owners off their valuable land and into new "villages" that would promote better sanitation (the official reasoning went) through more hygienic spatial planning and through segregating the African population from the European population. African homes and businesses could be uprooted and moved to less desirable areas while business interests took over the

[156] *Assistance Médicale Indigène*, health services for Africans in French West Africa.

previously "unhealthy" areas.[157] Using the opportunity presented by public health concerns, the administration and commercial interests were able to bypass the rights of the *originaires* to some extent, engaging in land speculation. Despite the state's denial that *originaires* had civil rights similar to "real" French citizens, the colonial government was unable to dispose of land as it saw fit without resorting to public health subterfuge. Thus, the way that officials drew upon the context of the plague epidemic to expropriate land and coerce residents of that land to move to segregated neighborhoods demonstrates that, for French colonial officials in West Africa, public health measures served the strategic purpose of helping to overcome limitations on the power of the colonial state. In the end, both the colonial state and the Native Medical Service were struggling with the same kind of obstacle: their resources were insufficient to achieve their goals.

Like the Native Medical Service itself, the story of attempts to segregate residential Dakar began with the 1900 yellow fever outbreak. Property ownership complicated the question of enforcing sanitary measures, and was an especially contentious issue in cities where land was more valuable for commercial interests. In 1905, a Lebou chief and Camille Guy (Governor of Senegal, November 11, 1902 – August 26, 1907) concluded the Guy convention, which provided that the French would have proprietary rights to certain traditional Lebou areas of Dakar in exchange for their respect of Lebou rights to occupy the land. Many Lebou felt cheated after the agreement

[157] See Raymond F. Betts, "The Establishment of the Medina in Dakar, Senegal, 1914," *Africa: Journal of the International African Institute* 41, no. 2 (1971).

took place, arguing that the chief responsible for the negotiations was not a representative of all the Lebou people and not authorized to sign away their ownership of the land.[158]

The Guy convention was part of the larger process of the French consolidating their ownership of the highly valuable land in and around Dakar and Rufisque. The rights of Lebou living on their traditional land as owners, tenants, or both would continue to be a source of contention through the plague outbreak of 1914 and as the French increasingly segregated Dakar.

The yellow fever outbreak and its aftermath mark the beginning of the French colonial conception of medical care and public health in West Africa as having not only political and cultural implications, but specific applications as well. Segregation was a convenient tool for divesting Africans of valuable land. It also served to remove a so-called reservoir of disease from the European neighborhoods, so that the goal of making a more healthful environment for Europeans would be more easily attainable.[159]

A major difference between the 1900 yellow fever epidemic and the 1914 plague epidemic was that during the 1914 plague, the Native Medical Services existed and the government had already begun its program of monitoring the health of its African subjects and attempting to manipulate it as well. During the plague outbreak of 1914, the colonial government used the Native Medical Services to push the efforts at segregation further than it had during the yellow fever outbreak. In that way, the plague outbreak continued the trend toward segregation in public health policy. The official record of the

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[158] Johnson, *The Emergence of Black Politics in Senegal: The Struggle for Power in the Four Communes, 1900-1920*.

1914 plague thus also pays a little more attention to the effects of the disease on Africans and their responses to it. While French efforts regarding yellow fever were aimed overwhelmingly at protecting and treating Europeans, in 1914 the colonial administration was faced with an epidemic whose effect on the African population it could not ignore.

The French efforts to combat the plague both fell short and encountered resistance.[160] Imposing harsh and invasive anti-plague measures on people and inspiring resistance to those measures was an obstacle to the effectiveness of French efforts to control plague. The French believed that if they could get African residents of Dakar to live where and how the administration wanted them to, that they could stop the current plague and prevent future plagues. Problems arose when residents did not want to leave their neighborhoods and have their houses burned.

Based on the information about plague that they had at the time, the French were doing what they thought would improve public health. Doctors did not fully understand how plague spread, so they responded with attempts at quarantine, isolating people, and destroying items they thought could become infected with plague. Efforts to control rodents by offering money for dead rats were ineffective. The health services used the best vaccines they could find, but those were not very effective and many people hesitated to have the vaccine.

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[159] On segregation see: John W. Cell, "Anglo-Indian Medical Theory and the Origins of Segregation in West Africa," *The American Historical Review* (1986), Thomas S. Gale, "Segregation in British West Africa," *Cahiers d'Études Africaines* 20, no. 80 (1980).

[160] Elikia M'Bokolo has argued that that the plague epidemic of 1914 revealed numerous fissures in what has been understood to be a well-established colonial regime. Elikia M'Bokolo, "Peste et Société Urbaine à Dakar: L'Épidémie de 1914," *Cahiers des Études Africaines* 22, no. 85 - 86 (1982).

Understandings of Plague, Present and Past

Describing the differences in current understanding of plague and the 1914-era understanding of plague serves to familiarize the reader with the disease, its causes, and treatment and to provide a basis for evaluating French responses to plague outbreaks in light of their understanding of the disease.

Currently, the understanding of human plague is that it is a single disease caused by the *yersinia pestis* bacillus, which has three forms: bubonic, septicemic, and pneumonic.[161] The first is the most common and is the starting point for most cases of plague. Humans are not naturally part of the plague cycle: to survive, plague only needs a population of fleas and their animal hosts. Most cases of humans contracting plague involve a bite from an infected flea. This leads to the initial, bubonic form of the disease. The bubonic plague usually produces buboes on the lymph nodes around the groin, neck, or armpits, but in rare cases no buboes appear. With septicemic plague, a fleabite results in plague without the formation of buboes, and bacteria migrate to the blood. Pneumonic plague develops when the infection travels to the lungs: at this point, the infected person can transmit the disease through coughing or sneezing on another person. An epidemic usually does not perpetuate itself through pneumonic person-to-person transmission of plague because those who become infected die so quickly. An epizootic outbreak must be present for plague to sweep a human population.[162]

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[161] Thomas Butler, "Yersinia Infections: Centennial of the Discovery of the Plague Bacillus," *Clinical Infectious Diseases* 19, no. 4 (1994), Marcel Leger, "La Peste au Sénégal de 1914 à 1924," *Annales de Médecine et de Pharmacie Coloniales* 24 (1926), Myron Echenberg, *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914-1945*, ed. Isaacman, Social History of Africa (Portsmouth, NH: Heinemann, 2002).

[162] An epizootic is an epidemic outbreak among animals.

Symptoms of bubonic plague include sudden onset of fever, chills, weakness, and headaches. Within twenty-four hours a painful bubo will form. The body temperature rises, as does the pulse, but the blood pressure drops. In some cases people develop purpuric lesions (from bleeding under the skin), which can become necrotic and cause gangrene in the extremities. Symptoms of septicemic plague include the high concentration of bacteria in the blood, fever, and no formation of buboes. Victims of bubonic plague sometimes develop plague pneumonia; caused by bacteria spreading from the bubo, through the blood, to the lungs. Pneumonic plague can produce coughing, chest pain, and bloody sputum. Any type of plague can cause nausea, vomiting, diarrhea, and abdominal pain. Cases of plague are currently treated with a course of antibiotics.[163] If the person infected with bubonic or septicemic plague receives treatment within twenty-four hours of the first symptoms, the chances of recovery are greatly increased, with mortality rates of up to 15 percent. If not, the mortality rate of those infected with bubonic or septicemic plague is around 50 percent. The mortality rate for pneumonic plague is close to 100 percent, with or without treatment.[164]

In 1914, French medical knowledge held that bubonic, septicemic, and pneumonic plague did not necessarily occur in any particular sequence.[165] They believed that it was possible to have an outbreak of plague that was not preceded by an epizootic.

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[163] Thomas Butler, "Yersinia Infections: Centennial of the Discovery of the Plague Bacillus," *Clinical Infectious Diseases* 19, no. 4 (1994).

[164] There is variation in these percentages depending on the source. These were taken from *The New York Times Health Guide*, http://health.nytimes.com/health/guides/disease/plague/overview.html.

[165] Myron Echenberg, "Pestis Redux: The Initial Years of the Third Bubonic Plague Pandemic, 1894-1901," *Journal of World History* 13, no. 2 (2002), E. H. Hankin, "On the Epidemiology of Plague," *The Journal of Hygiene* 5, no. 1 (1905), Leger, "La Peste au Sénégal de 1914 à 1924.", Kalala Ngalamulume, "La Question Sanitaire durant les Premières Années de l'AOF, 1895-1914," in *AOF:*

Throughout French accounts of the 1914 plague outbreak, doctors insisted that rats had not started dying out in abnormal numbers until well into the human epidemic. They also believed that septicemic and pneumonic forms of plague had appeared in humans before cases of bubonic plague. Treatment of infected people consisted of isolation and disinfection, which was the same treatment given to those who had come into contact with an infected person.[166] Morbidity and mortality during the 1914 outbreak is difficult to determine. The French admit in their official accounts that they did not know the number of people who were actually ill and died of plague. It is likely that their records show only a fraction of the actual figure.

Origin of the 1914 Outbreak

Like yellow fever in 1900, the plague epidemic of 1914 went unnoticed for some time. It began in April, but the Governor of Senegal did not declare the outbreak until May 13th, only a few days after doctors had realized that there was an epidemic outbreak. Although the French tried to determine the origin of the plague, they were never able to find a definite answer. The closest they came was to point out the possibility that the 1914 outbreak of plague in Dakar might have been related to the 1912 outbreak in Casamance. The origin of the earlier outbreak was never determined, either. They reported that the plague had not been imported via boat from an affected area of Morocco, nor had it been brought in overland from Southern Morocco.

Réalités et Héritages, Sociétés Ouest-Africaines et Ordre Colonial, 1895-1960, ed. C. Becker (Dakar: Direction des Archives du Sénégal, 1997).

[166] Penicillin was not in use until the 1940s.

Throughout reports on the 1914 epidemic, doctors insisted that there was no attending epizootic of plague at the beginning of the outbreak, and that rats only started dying off due to plague after what they called the "first stage" of the epidemic, which was a wave of pneumonic plague. Also, some health officials supposed that the African population might not have been forthcoming about the excess of dead rats. Doctors and administrators routinely castigated the African population for being unhygienic, dirty, and disease-ridden,

> Naturally, there was no practice of disinfection, neither during the illness, nor after the death… The conditions in which the natives attended to the sick rendered contagion nearly obligatory…one day we found a very crowded hut with seventeen people grouped around a pneumonic plague victim who was in agony.[167]

They noticed the crowded living conditions of Africans in cities like Dakar, but few French saw those living conditions as something people might not prefer; instead seeing it as the stubborn anti-hygienic lifestyle of the "natives."

Course of the 1914 Outbreak

The plague outbreak began in April 1914 and lasted until January 1915, primarily affecting Dakar and the Cape Verde region. The French believed that the plague outbreak occurred in two periods; during the first period they thought that it was transmitted person to person and during the second period that rodents carried it. Contemporary reports insisted that in Dakar, the human plague did not follow a rodent epidemic or any other sort of epizootic. Doctors began noticing buboes and infected rats

in greater and greater numbers in mid-June, which to them signaled the "second stage" of the outbreak. Doctors noted, though, that the pneumonic form of the "first stage" did not disappear entirely.

In Dakar, doctors reported that the "first stage" patients exhibited either the septicemic form or the pneumonic form. They described those with septicemic plague as having quick onset, often taking the patient in the middle of doing something. Initial symptoms were violent headaches and sensations of weight and constriction in the chest associated with a rapid pulse (130-140 bpm). Usually doctors detected nothing by stethoscope and did not find abnormally high temperatures. Some patients died suddenly, "we saw patients whom death took in the middle of a word or phrase"; patients described everything as being painful, they produced foamy sputum at first, then bloody sputum, and experienced nausea and vomiting, but no abdominal problems, normal urine, and no swollen lymph nodes. Doctors reported seeing very rapid development of the disease in patients, taking no longer than three hours, and followed by cardiac arrest.

Around the 10th of April health authorities noticed a sharp rise in African mortality in Dakar. There were 106 deaths in April, as opposed to 57 for each of the three previous months. On May 11th two people died at the Native Hospital, exhibiting "all the classic symptoms of plague."[168] From May 11th to the 30th, there were 71 deaths recorded, but as the doctors noted that probably was not accurate:

> This number certainly does not express an accurate number for plague mortality in Dakar; in effect, the natives, hoping to spare themselves the isolation and

[167] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914," *Annales de Médecine et de Pharmacie Coloniales* 19 (1921). p. 43.
[168] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 38.

> disinfection measures prescribed to fight the spread of plague, do not declare their sick, and probably bury numerous cadavers clandestinely, at night, not far from houses.[169]

In an effort to contain the plague, the medical authorities placed an interior cordon in Dakar, separating the European city from the "native" city, as well as an exterior cordon that separated the Cape Verde peninsula from the rest of Senegal. No new cases of plague came to light from May 30th to June 12th, but by June 30th, 196 more people had died. During July the situation worsened, leaving 348 dead at the end of the month.[170] In August, the number of deaths per day reached its zenith at 13.3, but during the second half of the month they fell to 11.1. All in all, at least 1,425 people died in Dakar of plague. The city was declared plague-free on January 23, 1915.[171] The doctors attributed August's falling death rate to the "strict application of prophylactic measures," which included incinerating affected homes, isolating the sick and anyone they came in contact with, and vaccination.[172]

Dr. André Marcandier reported that 1,425 died in Dakar, 144 in Rufisque, and 2,117 in the other districts with 1,100 of those in Yoff, totaling 3,686.[173] The numbers taken from the collated reports of Doctors Collomb, Huot, and Lecomte come out to 2,747. Marcandier estimated that official figures were low and thought that the actual number of deaths was around 5,000 for Senegal. The precise numbers that the health

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[169] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 40.
[170] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."
[171] The First World War dates for reference: August 1, 1914 Germany declared war on Russia. November 11, 1918 Germany signed the armistice with the Allies.
[172] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 40.
[173] Marcandier was a Doctor First Class in the Navy. Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)," *Archives de Médecine et Pharmacie Navales* 106 (1918).

services collected show that they tried to keep precise records, but they could not. The numbers of populations, sick, and dead were all highly unreliable, the authors of official reports were often aware.

Table 3 1914 Plague Epidemic[174]

	Total Cases	Total Deaths	Population
Dakar	--	1,425	15,000
Yoff	--	1,000	2,000
Rufisque region	180	144	12,000
Diourbel	--	6	--
Guélor	--	58	--
Pout (region)	309	178	2,682
Tattène (region)	82	42	530
Tiaroye (region)	approx. 345	260	--
Kaolack (region)	40	36	800
Diagagniao (region)	198	137	4,320
Tiomboledj (region)	70	56	--

The French report described the geographic movement of the outbreak in order of where cases first came to their attention, by date. The following map appeared in the official report of Collomb, Huot, and Lecomte. Generally, the report described the outbreak as originating in Dakar, spreading to the Cape Verde region, and then finally reaching Rufisque.[175]

[174] Taken from Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915).", Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."

[175] Specifically the official report lists the affected areas in order: Dakar, Diourbel, Guélor, Yoff, Rufisque, Pout Region (villages of Pout, N'Dara, Khayes, Keur-Moussa-Bougane, Keur-Gallo-Issec, Keur-Masamba-Diep, N'Guer, and Diarrhérat), Tattène region (villages of Tattène and Niouk-Ham), Tiaroye region (Kambérène, Yombel, Tiaroye-plage, Tiaroye-Bà), Kaolack region (villages of Kaolack, Kahone, and Borndou), Diagagniao region (villages of Keur-Oussemane-Bambara, Nyamar, Coquiane, Keur-Oussemane-Sy, Diaye-Diaye, Guedj, Guadaguène, Feylar, Soussoune, Diaro, and Gondj), Thiomboledj region (villages of Fallock-Fandane, Thiomboledj, N'Diander, Dik-Séne, Tanguis, Takhoun, Keur-Moussa-Hann, Kali-Mafal, and Tène-Toubah).

The French were frustrated by their inability to fully control the movements of the African population. In official reports they repeatedly noticed Africans travelling who either said they were not sick, had not been in touch with any sick people, had vaccinations, or even had a vaccination card, but who were sick, or who had been caring for sick relatives or friends, or whose vaccination cards were false. There were also reports of sick people travelling on foot, and slipping through sanitary cordons or quarantines. In Rufisque, they found the body of a young man who they believed had been chased out his neighborhood several hours before he died. They concluded that the other residents had wanted to avoid the isolation and disinfection measures that would follow if the French found the man dead in his home. There was one report of a woman being infected by a pestilent dog she had taken in. There was also mention of two men who the French refer to derisively as "'healers.'" They reported that these healers travelled from Guélor to Diagagniao, bringing the plague with them. The healers then returned to their home villages (which were not listed) and died of plague. Although strict burial procedures were in place, the French complained about large funeral gatherings where friends and relatives would come from distant villages and then return home, a tradition that the French believed spread plague.

The effectiveness of the health services was limited by the overwhelmed and confused doctors and administrators whose efforts did not seem to help stop the epidemic. In addition, they were unable to control the movement of people who might have been exposed to plague. Insufficient personnel, funds, and facilities combined to inhibit the effectiveness of the health services' efforts to contain and exterminate the disease.

Public Health Measures and Official Prophylaxis

Anti-epidemic measures against plague in 1914 fell into the same four categories as measures against yellow fever had in 1900: vaccination, isolation, disinfection, and destruction.

Vaccination

Marcandier said that, "Initially, the vaccinations, like most of the other prophylactic measures, were very poorly received by the native population," and when the Navy set up a vaccination station at the town hall, at first the only Africans to seek vaccinations were those who needed to leave Dakar and were required to be vaccinated before they left.[176] African naval personnel were reported to have undergone the vaccinations with little problem. During the first half of June, the Navy station at town hall vaccinated 634 people. It rose to 2,410 in the second half of June and reached 3,049 in the first half of July.[177] Marcandier attributed the rising numbers of Africans presenting themselves for vaccination to their growing confidence in the efficacy of the vaccine.

In Dakar every medical and sanitary organization dedicated itself to giving the most vaccinations possible. The Navy alone gave 46,813 vaccinations. All the *Tirailleurs* sent to France were vaccinated before they left with a triple injection of Haffkine vaccine. Total vaccinations in the colony were 129,752.[178] The two types of vaccinations the health services used during the outbreak were the Haffkine vaccine and

[176] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 200.
[177] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)."

the Yersin serum.[179] Haffkine vaccine was ordered from the Paris Pasteur Institute. Official reports recorded that the French West Africa bacteriology lab furnished about 2,500 to 3,000 Haffkine doses per week during the entire second half of 1914.[180]

On August 2nd, the Governor of Senegal issued a decree that required two doses of the vaccine. August was the zenith of plague deaths, but fewer people were vaccinated than had been in June and July: only 1,252. At the end of the month three doses of vaccine began to be required. Then, in September, more people went to be vaccinated, totaling 7,078. Even more were vaccinated in October: 9,049.[181] Marcandier reported that on market days, the crowd of people waiting to be vaccinated was enormous and at times became unmanageable: they had to ask the police to maintain order in the line. There was also a rumor circulating that the vaccine shot would cure those who already had plague, so that people who were already ill and had buboes would come to be vaccinated.[182]

On November 18th, the Superior Hygiene Committee decided that anyone who had been vaccinated more than five months before had to be revaccinated with the currently required three doses. Vaccinations for the month of November reached 10,879. In December, Marcandier reported that the inhabitants of the nearby village Tiaroye wanted to get vaccinated at the Dakar navy station in the town hall. The Tiaroye vaccinations made up part of the month of December's total of 7,597 vaccinations.

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[178] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."
[179] A serum is derived from the blood of an immune animal. A vaccine is made from a neutralized portion of whatever causes the disease, and then stimulates the creation of antibodies in the patient.
[180] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."
[181] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 201.
[182] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)."

Table 4 Navy Plague Vaccinations, 1914[183]

Month	Vaccinations
May/June	3,044
July	4,724
August	1,252
September	7,078
October	9,049
November	10,879
December	7,597
1915 January	2,708
1915 February	932
Total Navy Vaccinations	46,813

Table 5 Vaccinations by Other Organizations[184]

Municipal Doctors	7,300
Central Native Hospital	1,100
Bacteriology Lab and Segregation Camp	2,953
Total All Vaccinations for Senegal[185]	129,052

[183] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)."
[184] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)."
[185] Includes 52,264 vaccinations given to *Tirailleurs*.

Table 6 Plague Vaccinations in Three Shots[186]

Month	First Shot	Second Shot	Third Shot	Total
May/June	3,044			3,044
July	3,604	459	211	4,274
August	247	615	390	1,252
September	2,160	3,288	1,630	7,078
October	2,356	3,483	3,210	9,049
November	3,331	4,030	3,518	10,879
December	2,102	2,343	3,152	7,597
1915 January	814	870	1,024	2,708
1915 February	301	294	337	932
Total	17,959	15,382	13,472	46,813

At the end of July, because of the continued epidemic in Dakar, vaccination and revaccination became mandatory in the colony by decree of the Governor General. The measure included all Syrians, Moroccans, and Africans who had been in a contaminated area (but did not include Europeans). Each person vaccinated got a card indicating the date of the injections. Train travel required this card.[187]

Marcandier's report indicates that one injection conferred immunity for one to two months, but three injections conferred immunity for up to six months. Marcandier concluded that the vaccinations, along with the other prophylactic measures, helped to rid Dakar of the epidemic outbreak and prevent its return the following year.

Destruction and Isolation

Although these towns were not sites of efforts to impose residential segregation on well-established mixed neighborhoods, nor of politically sensitive urban land

[186] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)."

redistribution, the experiences of the people of the three towns that follow are typical as far as public health measures of destruction and isolation during the outbreak.

Examples of Three Towns

The official reports present a picture of prophylactic destruction and traumatizing isolation: Diourbel, Guélor, and Yoff being examples. In Diourbel, on May 16th a "native" who had come from Dakar on May 7th presented all the signs of pneumonia but said he had not been in contact with any sick people in Dakar. Later, however, it became known that on May 6th he had cared for a sick person who died the next day. When the outpost doctor was advised of this situation he put guards around the house where this man was staying, which was outside the village, and kept in "rigorous isolation" anyone who had been in contact with the man, who died on the 18th. On May 25th, all 24 of the isolated group were moved to a temporary lazaretto away from the village.[188] The contaminated house was burned after being surrounded by screens to keep rats from escaping. On May 26th all the isolated got an inoculation of 10 cubic centimeters of Yersin serum. A young girl died suddenly on the 28th, and on the 29th a woman died who had a violent reaction to the inoculation. Then a 13-year-old girl who also had a violent reaction died on the 30th, and hers was the last death. Eleven days after the last death the remaining members of the isolated group were released after their belongings were destroyed or disinfected.

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[187] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."
[188] French *lazaret*, an isolation camp for sick people or those who had come into contact with them.

In Guélor, the huts of the three dead men were immediately burned, along with their belongings. Forty-two Africans who had been part of the entourage or neighborhood of the plague victims were isolated in a lazaretto outside the village. Time had elapsed between the arrival of the plague victims and the medical response, so that plague spread beyond the original neighborhood and the "contaminated natives, living in distant huts had escaped isolation. Families who wanted to avoid the requirements of the sanitary police carefully hid new deaths. As soon as the local authorities became aware of the situation in July, the entire region was already overrun with plague."[189] The health services destroyed all the contaminated places and established a large central lazaretto where the inhabitants were isolated. New villages were rebuilt a certain distance away from the burned ones for the people isolated at the lazaretto. The isolated people were released after disinfection or incineration of their belongings and household items.

In Yoff, officials believed that contagion was especially virulent due to the cramped living conditions in straw homes clustered around a central courtyard, "and in which women and children milled around pell-mell in disgusting filth and with the sick."[190] A cordon of *Tirailleurs* isolated the village and the Haffkine vaccination was given starting on June 30th. Death rates fell for several days after vaccinations began, but soon returned to around twenty-five per day, "The inhabitants, apathetic and hostile to our intervention, refused to undergo a second vaccination and only accepted the disinfection of huts and isolation of the sick with the greatest difficulty."[191] There were no building materials handy in the area, so they tore down the existing huts, disinfected

[189] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 47.
[190] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."

the materials and rebuilt the huts a short distance away. Death rates per day immediately fell. The epidemic stopped around August 15th.

In other villages, prophylactic destruction of homes and property continued similarly to the cases described above, along with isolation in lazarettos of groups of people suspected to have been exposed to plague. Forced relocation seems to have been frequent. The reports do not mention any assistance, financial or otherwise, for those whose homes and property had been destroyed. These harsh measures met notable resistance from Dakar's inhabitants.

Official Procedures and Protest

The official procedures outlined by Antonetti, the Lieutenant Governor of Senegal, outstripped the capabilities of the health services, as did French goals for the health services in general. The official procedure was that each time a case of plague was found, the following measures were taken: the patient was immediately taken to the hospital in a closed car, and corpses of the deceased were taken to the cemetery and buried without delay. Africans inhabiting the contaminated hut and those neighboring it were taken to a lazaretto with their baggage. After this was done one of the hygiene service doctors designated the huts to be burned and those that could be disinfected. The same day, the Hygiene Commission did an evaluation and as soon as possible the huts were burned or disinfected by a Clayton apparatus and cresyl washes.[192]

The specific sanitary defense measures against plague for the Dakar district included an isolation camp built near each village or cluster of villages for plague

[191] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 48.

victims. Near this camp would be another camp divided into sections for people coming from contaminated or suspect neighborhoods. A cemetery would be built near the first camp. The actual number of lazarettos near Dakar for plague victims and suspects at the time of the outbreak was one. That lazaretto closed in June due to a temporary decline in plague deaths. In July, construction began on a new lazaretto and a new segregation village. Any contaminated or suspect huts, along with any objects that could harbor fleas or pathogenic germs were supposed to be incinerated. This procedure was implemented more fully than that of building multiple isolation camps for plague patients and suspects. Once neighborhoods were free of plague, the inhabitants were supposed to abandon them and move their "huts" to a new location. There were efforts to move African residents of old Dakar neighborhoods to the new Medina village site, but these were not hugely successful, primarily due to resistance from residents. Lastly, official procedure called for rigorous surveillance by special personnel of all sick camps, suspect camps, new villages, and isolation camps run by the administration. There were sanitary guards at the existing lazarettos, and during the outbreak the Native Health Service deployed sanitary teams to inspect and clean up as much of Dakar as possible, but there were problems getting enough funding, personnel, and there was a lack of public cooperation.[193]

Destruction

During the epidemic sanitation teams in Dakar burned 641 "shacks," 953 "straw huts," and 280 buildings.[194] Marcandier's numbers were slightly different from those of

[192] ANOM, 14 Mi 1141, H, Arrêté, October 12, 1914.
[193] ANOM, 14 Mi 1126, H14, Santé, 1914-1919.
[194] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914."

the official reports: he recorded that from May 14, 1914 to January 1, 1915, the Hygiene Service disinfected 336 buildings. He reported the same numbers of "shacks" and "straw huts" incinerated as the official reports did. In Dakar, the incineration of African homes began on May 14th with the destruction of 23 "huts." Marcandier reported that, "This prophylactic measure and the isolation period at the lazaretto were very poorly accepted by the natives."[195] Africans demonstrated on May 20th in front of the town hall in protest of the harsh measures of the Health Services. The market was closed and deserted for several days in protest, and many Africans refused to do business with Europeans. During the month of June the Health Services abandoned their incinerations. They began conducting incinerations again in July and "in the months following, their efforts were of varying intensity."[196] In November, the residents of the "*Parc à fourrage* protested evacuation and incineration of their huts with force."[197] The Health Services backed down.

Isolation

When the decree declared on the 13th of May that the city of Dakar was contaminated by plague, it also prescribed a sanitary cordon from Kambérène to Hann, thus isolating the entire Cape Verde peninsula from the rest of the colony. A mounted company of *Tirailleurs* from Thiès enforced the cordon. On May 18th an interior quarantine was established by the troops of the Dakar garrison to isolate the European city from the contaminated "native" quarter. Europeans could go anywhere freely, while

[195] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 192.
[196] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 192.
[197] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 192.

Africans deemed indispensable to the material life of Dakar (employees of houses of commerce, or the administration), including daily workers who cleaned streets and houses, were given a "pass card" that allowed them to enter the restricted areas of the city. Fraudulent cards were so abundant that the official report claims that 2,000 to 3,000 Africans visited the "European city" daily. Reports blamed these false pass holders for the spread of plague throughout the city: "What's more, cases of plague being soon found in the European quarter, the interior quarantine was lifted on May 20th."[198]

Four hundred and five people were held at the Dakar lazaretto during the period of May 12, 1914 to June 1, 1914. The lazaretto closed June 1st and did not reopen until the epidemic was winding down.[199] The May 13th decree provided for an observation period of five days for the inhabitants of suspect areas. Haffkine vaccines were required upon exit from the lazaretto. In August, the lazarettos were occupied by troops, while at the same time health officials had to procure shelter for those whose houses had been burned.

Local authorities decided to create a segregation camp and a new village. On August 25th, these two places began to function. They began by progressively evacuating the entirety of the "native" quarter called Santiaba, located next to the train station, which had been the most affected by the epidemic. Eventually, hygiene teams evaluated the abandoned huts and incinerated them, except for those that could by disinfected and taken to the new village.

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[198] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 66.
[199] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 192.

African residents of Dakar were taken each day in groups of fifty or sixty to the isolation camp, which was made up of three large board shelters divided into twenty compartments, each of which was big enough for six people. In addition to the shelters there were twenty-five huts big enough for eight to ten people. Each shelter or group of huts was a separate small neighborhood, surrounded by barriers and with its own facilities (this seems to have been an ideal, rather than a reality). The offices of the head doctor and accountant, along with the food storage, were in a shelter divided into four compartments. The lazaretto also had a large "*sulfuration*" chamber.

The inmates brought their old clothes and their belongings of value, and everything was treated in the *sulfuration* chamber for twenty-four hours. The patients and suspects were fed by the administration. The patients and suspects were held in observation for ten days before being taken to the new segregation village near Ouakam (Medina). Those who had not been vaccinated got three cubic centimeters of the Haffkine vaccine. At least, this was how the camp was supposed to function. Diagne's letter to Ponty points out that facilities were severely lacking.

Since the yellow fever outbreak, the French had lamented the "unhygienic" or even "anti-hygienic" habits, living conditions, and neighborhoods of Africans. The possibility of using residential segregation as a remedy had remained in the background and the Medical Service never seriously pursued it. The 1914 plague outbreak changed that. Marcandier suggested segregation:

> Dakar must protect itself from a recurrence of the disease. One essential measure must be taken: complete separation of natives and Europeans, with the natives isolated in a special village. There should be constant sanitary surveillance of the new native settlement and of anything brought in from outside it. One also hopes

> that the funds and resources of the local Hygiene Service will be augmented and that the civil doctor will be required to report epidemiologically suspicious deaths.[200]

A new "native village" was planned for Dakar, and the intention of French officials was to move as many Africans as possible out of their current homes and neighborhoods, which were largely inter-mixed with European homes and businesses, and into the new village. August 13, 1914 was the date of establishment of a new "Segregation Village for Natives." It was originally the site of the segregation camp and lazaretto. According to Betts, most of the resistance to home incineration and removal to the "native village" was on the part of the Lebou.[201]

The official reports describe the new segregation village (the Medina) as built on the road to Ouakam two kilometers from Dakar and made of wooden board shelters in four compartments. Each shelter was supposed to house four families while they waited for those who were interested to have time to move into their new grounds. The Administration's description of the segregation village makes it seem like a generous offer of "new grounds" instead of a poorly sited forced segregation settlement. There were police guards in the village to prevent entrance of Africans from the old contaminated quarters of Dakar, and to prevent non-disinfected objects from being brought in. Inhabitants of the camp were vaccinated and given a sanitary identification card that permitted them to go to Dakar from 6 am to 6 pm to work, but they had to eat and sleep at the camp. They were not allowed to enter the contaminated areas of Dakar.

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[200] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 218.
[201] Betts, "The Establishment of the Medina in Dakar, Senegal, 1914."

A doctor oversaw the segregation village, made daily rounds to check the health of the inhabitants, care for the sick and see that hygiene measures were carried out (trash collection, distribution of drinking water, antilarval measures). In these conditions about 2,900 Africans from the Santiaba neighborhood were evacuated to the Bel Air lazaretto and then to the new segregation village near Ouakam during September and October. Their former neighborhood, Santiaba, was destroyed.

The way the French enforced epidemic measures depended in part on the race and political status of the population at risk: whites were rarely required to bend to health measures. Non-European whites, Africans, and blacks were subject to the decrees of the colonial government and punished for not obeying them. The status of *originaires* of the four communes was difficult for the French to negotiate because of their historical status as quasi-citizens of France. The physical area affected by an outbreak, whether it was a neighborhood, a village, or a whole city, informed French anti-epidemic responses as well. Other important factors were the time of year, the climate, and the elevation of the land.

African Reactions to Anti-Epidemic Measures

Earlier that summer, Ponty had reported in a summary for the Cabinet that the "entire population of Dakar" willingly submitted to the required health measures and that some even asked for disinfectant for their homes.[202] This would prove to be a temporary situation.

[202] ANOM, 14 Mi 1141, H, Letter from Governor General Ponty to the Minister of Colonies, Cabinet, West Africa Service, and Central Africa Service, May 27, 1914.

In a letter to the General Commandant Superior on November 18, 1914, Senegal's Lieutenant Governor Antonetti instructed the General Commandant to send a detachment of 100 to 120 men to Diagagniao in case what he called "a certain effervescence" in the region was too much for the health authorities on site. The problem was that "the natives are refusing to submit themselves to health measures."[203] The "brusque change of attitude" surprised Antonetti, who had visited the area toward the beginning of the epidemic and reported that "the townspeople accepted the health measures submissively, although not voluntarily."[204] He concluded that the people of Diagagniao had been inspired by the "open rebellion of the Lebou of Dakar" and what he thought was too mild treatment of the rebels by the administration. He warned that any appearance of weakness could prompt the people of Diagagniao to rebel as well.[205]

The "open rebellion of the Lebou of Dakar" that Antonetti spoke of was dramatic. On May 20th (the epidemic had been officially declared on May 11th) 1,500 Lebou armed with clubs demonstrated in front of the City Hall. The next day they began a strike in the Dakar market that lasted until the 25th. They refused to sell food to Europeans or their employees. Governor General Ponty reassured them that the government was not going to take their land and make them move away from the city center. In October, when authorities planned to move a large number of Lebou to the Medina (located far outside the city center) and burn their houses, a group of 200 people surrounded the hygiene teams that had started the work, and the French authorities called off the destruction.[206]

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[203] ANOM, 14 Mi 1141, H, Letter from Antonetti, November 18, 1914.
[204] ANOM, 14 Mi 1141, H, Letter from Antonetti, November 18, 1914.
[205] ANOM, 14 Mi 1141, H, Letter from Antonetti, November 18, 1914.
[206] Betts, "The Establishment of the Medina in Dakar, Senegal, 1914."

Dakar was not the only place where Africans resisted the destruction of their homes. In Pout, the contaminated neighborhoods were burned and the inhabitants taken to the lazaretto, "but these measures encountered energetic opposition from the population."[207]

Governor General Ponty believed that "misinformed and badly intentioned people" had leaked news of the Municipal Hygiene Commission of Dakar's confidential decision to declare an outbreak of plague.[208] Ponty believed that this news, given to the supposedly naturally rowdy Lebou, had inevitably disturbed them. Ponty noted with some relief that the incredibly rapid spread of the plague had, in a sense, kept the Lebou in line.

The destruction of their homes was not the only epidemic measure that people resisted. As we have seen, the willingness to be vaccinated was inconsistent among Africans, and many families were reluctant to report sickness and deaths from plague in their homes because they feared the anti-epidemic measures that would follow if they did report them. The official reports noted that rodent killing campaigns were not very popular either: "As soon as the epidemic appeared, we organized a rodent hunt," but despite the elevated price per rat killed, the "natives pursued their destruction with little zeal."[209] Their unpopularity was due to fear of anti-epidemic measures, as well: "Despite a payment of 25 centimes per rat killed, the natives, fearful that the discovery of a pestilent animal would bring on the incineration of their hut, showed little enthusiasm."[210]

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[207] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 52.
[208] ANOM, 14 Mi 1141, H, Letter from Antonetti, November 18, 1914.
[209] Collomb, Huot, and Lecomte, "Note sur l'Épidémie de Peste au Sénégal en 1914." p. 66.
[210] Marcandier, "Hygiène et Épidémiologie: La Peste à Dakar (1914-1915)." p. 194.

The harsh and invasive nature of anti-epidemic measures put a crippling limit on the effectiveness of those measures.

Dakar and Plague Politics

> You are aware of the huge disarray that the appearance of one of these diseases [plague or yellow fever] brings to the economic life of a region and the enormous losses that result; the colony of Senegal especially proved this sad fact several times in the last few years. [211] – Circular from Governor General Clozel to his Lieutenant Governors in 1917

Diagne's Position

The position of *originaires* of the four communes meant that they could vote in local elections even though their status as full French citizens was contested.[212] In 1914, Blaise Diagne was elected the first African representative to parliament.[213] He began his career as an advocate for the rights of Africans, especially for the rights of *originaires* to be treated as full French citizens. He bargained with the French parliament to get citizenship in return for military service by *originaires*. Later, in 1918, he toured French West Africa as the Commissioner General of Native Recruitment. His political affiliations changed as his career advanced, though, and by 1931 he spoke in defense of

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[211] ANOM, 14 Mi 1141, H 55, Circular – "Application Stricte des Règlements d'Hygiène pendant l'Hivernage," From Governor General Clozel to the Lieutenant Governors of the colonies and the commissioners of the Government General of Afrique Occidentale Française, Dakar, April 16, 1917.

[212] Further reading on the contested status of *originaires*: Crowder, *Senegal: A Study in French Assimilation Policy*, John Hargreaves, "Assimilation in Eighteenth-Century Senegal," *The Journal of African History* 6, no. 2 (1965), H. Oludare Idowu, "Assimilation in 19th Century Senegal," *Cahiers d'Études Africaines* 9, no. 34 (1969).

[213] Amady Aly Dieng, *Blaise Diange, Premier Député Africain* (Paris: Éditions Chaka, 1990).

France's use of forced labor in French West Africa at the conference of the International Labor Organization.[214]

Diagne and Governor General William Ponty (March 1908 – June 1915) exchanged letters regarding the administration's response to the plague outbreak, and specifically the expropriation of Lebou land. French officials constructed opposition to sanitary or hygiene measures as resistance to French colonialism. Diagne's tactic for criticizing the administration was to position himself as more loyal and more dedicated to what he called "real" French colonialism than his opponents. In the correspondence, both Diagne and Ponty employed repeated appeals to "the desire to serve the cause of true and just colonialism."[215] Diagne described the expropriation of Lebou lands as: "illegal and uncalled for, only serving speculators - be they African or European."[216] Diagne emphasized that the "pretext of hygiene fails to hide the motives of the elected officials who subsequently undermined the good faith of the Administration."[217] He warned that further expropriations would inspire "deplorable but legitimate" resistance from the Lebou.[218]

Part of Diagne's protest was that anti-plague measures were being used to take land belonging to Africans without recompense.[219]

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[214] See Catherine Atlan and Jean-Hervé Jézéquel, "Alienation or Political Strategy? The Colonised Defend the Empire," in *Promoting the Colonial Idea: Propaganda and visions of Empire in France*, ed. Sackur (New York: Palgrave, 2002).

[215] ANOM 14 Mi 1141, Blaise Diagne to William Ponty, August 11, 1914.

[216] ANOM 14 Mi 1141, Blaise Diagne to William Ponty, August 11, 1914.

[217] ANOM 14 Mi 1141, Blaise Diagne to William Ponty, August 11, 1914.

[218] ANOM 14 Mi 1141, Blaise Diagne to William Ponty, August 11, 1914.

[219] While it is true that French officials did not present a monolithic front of uniform opinions on colonial administration and the rights of citizens and subjects, Diagne's position was well outside the "normal" range of French officials' attitudes.

> Since the outbreak of plague and the vexatious methods employed by both the municipality of Dakar and the delegation from the government of Senegal - that only made the situation worse and left the Native with negative feelings – it is clear that even though the Administration has a duty to use all possible means to end the pestilence, its role ends there. It would be against the law to expropriate land from Native collectives in order to enrich speculators, who, moreover, are hiding behind elected mandates or even important social standing.[220]

Diagne went on to outline what the municipalities (which, he pointed out, derived their authority from the African citizens) had done up to that point to control the plague outbreak:

> They moved the native neighborhoods farther out, re-establishing them mostly without light, water, sewers or latrines. The harmful nonchalance of sworn native agents, who care no more about hygiene than the people they are supposed to educate about it; tendentious racial opposition between the native agents and the people they serve; amateur European oversight as bad as the native agents – we can see how the plague that even doctors overlooked began – this is what they [the municipalities] have done so far. It a matter of course that, yet again, the unhappy natives can do nothing but tolerate the anarchy and incoherence of such a system.[221]

Diagne suggested an alternative to making the segregation camp into a permanent "native village," putting forward the idea for the municipalities to build low-cost housing in the neighborhoods where the African citizens already lived.[222] The African tenants would then have the option to buy back the buildings. Instead, the French administration spent money building more and better accommodations for their own officials and administrators, not the poor African population that was in a worse state of overcrowding and quality of dwellings.

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[220] ANOM 14 Mi 1141, Correspondence of Diagne and Ponty, August 11, 1914.
[221] ANOM 1141 Correspondence, Letter From D to P, 8-11-1914.
[222] Betts, "The Establishment of the Medina in Dakar, Senegal, 1914."

In his reply to Diagne's letter, Ponty pointed out that the decree of July 1914 protected the rights of landowners. He assured Diagne that after the Lebou neighborhoods (and other Dakar neighborhoods) had been cleared of unsanitary dwelling, the previous occupants could move back onto their land - provided that they built their homes according to French sanitation requirements. The sanitation requirements stipulated that new construction use materials that were more expensive than traditional ones and unattainable for many Africans.[223] Ponty again assured Diagne that he had asked the City of Dakar to consider ways they could help the "natives" afford these materials. However, there was no official decree or promise that any specific amount would be allotted to help rebuild.[224]

Ponty claimed in his letter that public health was more important than the rights of groups or individuals:

> We must face reality. It was no longer only a question of respecting indigenous rights or of safeguarding indigenous interests, our most immediate and pressing concern – superseding any other – was to save the blacks and to protect them from the terrible epidemic that had just broken out and had been confirmed by doctors.[225]

Ponty explained that the Lebou, traditional inhabitants and owners of land in Dakar, were a relatively small portion of the people being rounded up and moved to the segregation camp and eventually relocated to the Medina. The primary targets were the "several thousand natives who came from all over French West Africa when the port was under

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[223] Buildings had to be "en dur," meaning brick or masonry, not wood or straw.

[224] ANOM, 14 Mi 1141, Series H, Letter from Governor General Ponty to Deputy Diagne, September 15, 1914.

[225] ANOM, 14 Mi 1141, Series H, Letter from Ponty to Diagne. 1914.

construction and who have since stayed in Dakar."[226] He argued that this "floating population" crowded into the homes of the Lebou and had no other place to stay. He argued that, in effect, the administration had to sweep everybody out of the Lebou neighborhoods – even the landowners and long-time residents – in order to rid Dakar of the unhealthy and generally undesirable floating population. Ponty argued that the removal was really only aimed at the "*afflux désordonné*" of people from outside Dakar that administrators had been trying to round up and segregate from European parts of town for years. The floating population continued to be the subject of efforts at segregation or removal from the cities, and was often a scapegoat for whatever planning and public health problems were intractable.

In the end, about 2,900 people moved to the Medina. Although this did not represent a sweeping residential segregation of Dakar, it was a blow to the rights of *originaires* as citizens of France. The government did not differentiate between *originaires* and the "floating population" when it forced people from their homes. Despite this disregard for rights of *originaires*, the colonial government was unable to implement its segregation agenda to the extent that it wanted to. In 1914, people not only resisted anti-epidemic public health measures, but also coercive recruitment campaigns across French West Africa.[227] In the context of the First World War, France's representatives in West Africa decided not to push their subjects too far.

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[226] ANOM, 14 Mi 1141, Series H, Letter from Ponty to Diagne, 1914.

[227] Marc Michel, *Les Africains et la Grande Geurre: L'Appel a l'Afrique (1914-1918)* (Paris: Éditions Karthala, 2003). See chapter two.

Chapter 4 : The Dakar Medical School and the Training of Technicians for Health

> Blacks do not synthesize [information] as we do; they gather impressions haphazardly, without a care for coordination.[228] Rapport Annuel, 1930.

Despite their belief that their African subjects were intellectually inferior, the French colonial ministry decided to create a corps of African medical workers. Accordingly, the École Africaine de Médecine et de Pharmacie (Dakar Medical School) was founded in 1918 in Dakar. The Dakar Medical School was part of the growing public health and medical systems in French West Africa. Medical and health services were one means that the colonial state used to extend its authority over the hinterlands.[229] Although holding humble positions, the colonial medical workers were crucial to the French colonial mission both in developing the human and economic potential of African colonial subjects and the colonies, and in extending French control over the hinterlands, as well as over the hearts and minds of France's African subjects.

The French believed that education, both primary and at the higher technical level, would develop West Africa's human potential while French business interests

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[228] ANS, I H 98 v. 163, L. Couvy, Rapport Annuel EAMP, 1930.

[229] Young explains the use of the colonial state as a meaningful term by arguing that "The high degree of hegemony and autonomy that the African colonial state enjoyed at its zenith makes it a particularly fit subject for analysis as actor. Because its behavior was relatively uninhibited by constraints imposed by subject society, the polity had unusual freedom to chart a course by reason of state. After the initial moment of conquest, the colonial state also acquired substantial autonomy from metropolitan oversight. The colonial elite that staffed its structures enjoyed broad latitude in applying the six imperatives of state behavior in the management of its destinies." p. 45. The six imperatives of state behavior are: Hegemony, Autonomy, Security, Legitimacy, Revenue, and Accumulation. pp. 35-39. Crawford

would help to develop the economy of the area, benefiting both Africans and French. The Dakar Medical School was meant to further human development through both its status as an educational institution and the work its students did to better the health of the African population. A healthier African population would be able to provide more laborers for French projects.

Figure 4 Dakar Medical School Class of 1921[230]

The French colonial government extended its medical services to its African subjects in the cities and hinterlands by relying heavily on African medical workers, some with minimal training provided by the military, and some with medical degrees

Young, *The African Colonial State in Comparative Perspective* (New Haven: Yale University Press, 1994).

[230] From http://www.asnom.org/image/320_ecole_medecine/4_5_promo_1921/jpg.

from the Dakar Medical School. When students finished their medical training at Dakar, they emerged thinking of themselves as medical doctors, nurses, and midwives – medical professionals – and not as hygiene agents or social workers, which conflicted on a profound ideological level with what the Native Medical Services expected of them.

French Understandings of African Civilization and Intellectual Capacity

While the French desperately needed competent medical workers, they also needed loyal subjects that were content with being subjects. This difficult-to-accommodate requirement caused anxiety and much speculation regarding the best way to go about colonial education. Generally, Africans were considered intellectually inferior to the French. Some thought that sufficient education would allow Africans to understand French concepts and absorb French civilization (the degree to which, or whether at all, Africans should absorb French civilization was another story – that is where the careful cultivation of traditional culture comes in).[231] Some thought that African civilization lagged behind that of France and that France could use education and development to bring Africans up to a level of civilization that the French deemed appropriate; this was the school of thought wherein there was a single path to civilization. These two ways of looking at the situation complemented each other. Still others thought that the supposedly unhealthy tropical environment had produced a sort of degraded type of human that was biologically inferior in intelligence, moral fiber, and health. Some took this belief so far as to argue that Africans were a different species than Europeans,

[231] See Mahmood Mamdani, *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism* (Princeton, NJ: Princeton University Press, 1996).

and that each had evolved separately.[232] Some, like Gustave Le Bon and Louis Vignon, thought that, regardless of why Africans were inferior, it was a mistake to educate them.[233]

Discussions about what Africans were capable of learning, whether to provide education in the colonies at all, and if so what sort of education that should be, were central to French colonial policy. Pseudo-evolutionary thinking had a strong influence on French assumptions regarding African intellectual capacity.[234] African intelligence and ability to learn was often conflated with "level" of civilization, lack of "culture", and weak moral fiber. R. Robin, the Director of the William Ponty School, described the lowly state of what he understood to be African traditional culture: "Being methodical, having a strong work ethic, responsibility, respect for knowledge, true desire for progress; these are moral and intellectual qualities that are often contrary to the individual character traits that traditional society needs."[235] The moral and intellectual qualities Robin mentioned were precisely those that French schools aimed to inculcate in their students. When writing to the Minister of Colonies in 1918, Governor-General Angoulvant said: "Students that I have admitted to the Faidherbe School in 1916 to acquire sufficient general culture to fruitfully take medical classes should, in fact, spend

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[232] Independent multiple human origins, or the anthropological "Out of Africa" debate as to whether modern humans evolved from an African ancestor or whether groups of *homo erectus* migrated to different areas of the world and independently evolved into *homo sapiens*. This is related to the "Hamitic Myth" that argues that Egyptian civilization was founded by immigrant "Hamites" who were not black Africans.

[233] Gustave Le Bon, *Lois Psychologiques de l'Évolution des Peuples* (Paris: Félix Alcan, 1907), Louis Vignon, *Un Programme de Politique Coloniale: Les Questions Indigènes* (Paris: Plon-Nourrit et Compagnie, 1919).

[234] For an example of this internationally: Nathaniel Weyl and Stephan T. Possony, *The Geography of Intellect* (Chicago: Henry Regnery Company, 1963).

three years there."[236] With this statement he referred to the widespread belief that intelligence was linked to culture, and that Africans had less of both than the French. Also, in that they supposedly needed more exposure to French culture before they could understand medical classes, medical science revealed itself to be informed by cultural values.

Within the French administration, ideas about the ability of African students truly to comprehend French medicine varied.[237] In December of 1930, L. Couvy (Director of the Dakar School at the time) wrote a letter to Governor-General Brévié expressing his lack of confidence in the ability of African medical students to become full-fledged doctors:

> It is clear that, deprived of any general instruction, and without other preparation than the more or less long-term experience of being a nurse, these natives are incapable of assimilating even the most basic and most essential medical ideas. Such a superficial training cannot have anything medical about it except the name; it can only produce excellent nurses, and not doctors.[238]

L. Couvy's opinion that African students were not capable of assimilating the knowledge it would require to be a "real" doctor was widespread. Couvy and others believed that the most the French could do in their medical education of African students was to "impart some concepts about hygiene, prophylaxis, everyday medicine and minor surgery…." These concepts would only be shared with the very elite of the medical

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[235] ANS, I H 98 v. 163, Rapport Annuel au Conseil d'Administration du Fonctionnement de l'École William Ponty 1946-1947. The William Ponty School was primarily a teacher training insitute, but also had the pre-medical training for the Dakar Medical School students.

[236] ANOM, 14 Mi 1126, H 14, Angoulvant to the Colonial Ministry in Paris, 1918.

[237] Claude Marchand, "Idéologie Coloniale et Enseignement en Afrique Noire Francophone." *Canadian Journal of African Studies* 5, no. 3 (1971): 349-358.

[238] ANS, I H 98 v. 163, L. Couvy, Dakar School Annual Report, 1930.

students, the future Assistant Doctors. Unlike some others, Couvy specifically attributed African inability to learn metropolitan medicine to lack of sufficient primary education and not to genetic or other inescapable hindrances. [239]

In French West Africa, the colonized peoples existed at various levels of "civilization," according to the dominant evolutionary thinking. At the top were the *évolués* ("evolved"), usually citizens of France via their birth in one of the four *communes*, known as *originiaires*.[240] *Évolués* were frequently *métis*, or of mixed race, and came from French-speaking homes. Usually among the most wealthy and influential people in the urban centers, the *évolués* were the closest to embodying the idea of the "black Frenchman." They were privileged, but the French official mind distrusted them. Many French in the ranks of administrators and colonial thinkers considered them dangerously over-educated and ambitious, aspiring to rights that profoundly troubled the French with implications of equality and independence.

Adapted Medical Education

Adapting French metropolitan education to be appropriate for the Dakar Medical School was an ongoing process. Even though the school had been opened in 1918, it worked on adjusting its classes continually. One of the subjects of the International Colonial Exposition of 1931 in Paris was adapting education to what the French thought of as "native" needs and ability. At the Exposition the French took pains to dispel the

[239] ANS, I H 98 v. 163, L. Couvy, "L'École de Médecine Indigène de l'AOF" Report to the Gouvernement-Général, December 18, 1930.

[240] The four *communes de plein exercice* were Dakar, Saint Louis, Rufisque, and Gorée; the four cities in Senegal where those born there (called *originaires*) had the right to vote and nominal French citizenship.

myth that their colonial subjects read the history of France as their own history. Paul Crozet was the President of the conference and in a speech he noted: "[O]f all the unknown things about teaching material in the colonies, the adaptations we have made are perhaps the most difficult to detect … the legend persists that all the students of color continue to read in their text books about 'our ancestors the Gauls."[241] Adapted education was supposed to engender loyalty to France while avoiding *déracinement* of the African students.[242] It would also be set to an appropriate level for what William Ponty called the "evolutionary stage" of the people.[243]

In the Annual Report for the 1933 - 1934 school year, Dakar Medical School Director Blanchard assessed that: "Medical education appears to be current, with the caveat that the material is simplified." Providing an explanation, or maybe an excuse, for the simplified education, Blanchard went on: "We must first make sure that the basic elements are understood and known before moving on to exceptional cases which will

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[241] Quoted in Denise Bouche, "Autrefois, Notre Pays S'appelait la Gaule... Remarques sur l'Adaptation de l'Enseignement au Sénégal de 1817 à 1960," *Présence Africaine*, no. 124 (1982).

[242] See Lugard, "Education and Race Relations.", G. P. Kelly, "Interwar Schools and the Development of African History in French West Africa," *History in Africa* 10 (1983). Lugard contrasts the British style of adapted education with what he understands to be the French style of assimilationist education: "If the aim of education is to lead Native thought through such channels as it is capable of following, adaptation is a better principle than super-imposition. The pupil who has understood the reason for each forward step, and adjusted it to his own mentality, will not readily discard the new teaching. It will survive, for he will pass on to his children his own enlarged conceptions. And he will remain an African-not a déraciné and pseudo-European." Kelly contrasts the metropolitan French school system with the system of schools in French West Africa: "In the eyes of most pedagogues -- as well as most Europeans -- African children were not the same as French children. Their capabilities and learning styles were presumed to be different, as were the societies in which they were raised and to which they were expected to return after schooling. European education was deemed inappropriate and a waste of time and energy. African children would not be able to master such a curriculum; even if they could assimilate the same knowledge as their French peers, it would not equip Africans to live in AOF or in their own societies. The French-educated African was, pedagogues argued, a déraciné, a malcontent of no use to himself, the French, or his native society."

[243] Quoted in Bouche, "Notre Pays S'appelait la Gaule."

only be understood by the elite of each class."[244] Adapted curricula in even the highest levels of education available in French West Africa belied claims of observers like Mumford, a British colonial official on a tour of French West African colonies, who believed the French had an enlightened goal of creating "Black Frenchmen."[245]

Adapted education served to produce much-needed health workers while ensuring that the African students would not develop any dangerous pretensions to being as civilized as the French, and claiming similar rights and privileges. The French strove to achieve this delicate balance in all the education they offered in West Africa, but the technical schools presented the most difficulty. The Dakar Medical School's purpose was not to produce doctors in the French tradition; it was to produce technicians for health services. They were called doctors primarily out of convenience; the addition of "Assistant" or "African" to the term doctor indicated that they were not actually doctors at all. Although prestige was extremely important in French culture, French Africans were expected to make do with relative prestige. That is, they could have a prestigious education and career in relation to other Africans, but could not aspire to the prestige a French person could expect.

Georges Hardy began his term as Inspector of Education in French West Africa in 1912. Simplifying intellectual content was among his principles of "moral conquest" through education, as was adapted education and careful avoidance of *déracinement*. Moral guidance was key, along with perspicacious selection of instructors. He insisted on giving African students practical knowledge by requiring that a vocational section be

[244] ANOM, 14 Mi 1758, 2 G 34/17, Blanchard, Dakar Medical School Annual Report 1933 – 1934.

added to every school. For urban schools it would be training in a trade (such as woodworking or ironworking) while rural schools had either gardens or full-scale farms. Perhaps surprisingly, Hardy was among the progressive thinkers in education for Africans. Opponents to education for Africans included Gustave Le Bon and Louis Vignon, who thought respectively that any education for Africans would be either useless or dangerous politically.

At the Dakar Medical School, the Administrative Council was continually trying to alter the courses to fit better the needs and learning styles of the students.[246] For example, the midwifery students were separated from the medical students for obstetrics because the midwifery students were "not as receptive" as the medical students. The obstetrics classes for midwives were continually simplified as the instructors tried to find the right level of teaching. The (all female) visiting nurses were the most disappointing group in 1934: "the exams showed that they assimilated very little of what was taught." The council proposed to amend the exams so that they would be either entirely practical or so that there would be a practical element along with the theoretical. Apparently, some of the difficulty for the female students was that they had less educational preparation upon entering the school, and their French suffered.[247]

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[245] Mumford, *Africans Learn to be French; A Review of Educational Activities in the Seven Federated Colonies of French West Africa, Based upon a Tour of French West Africa Undertaken in 1935*.

[246] The Administrative Council was responsible for making administrative and budgetary decisions. The Doctor Inspector-General presided over the council, which was made up of the Comptroller, the Director (of the school), and representatives from French West Africa, French Equatorial Africa, Cameroon, and Togo.

[247] ANOM, 14 Mi 1747, 2 G 32/36 Blanchard, Rapport Annuel EAMP, 1932.

Comparative Medical Education

Medical education across colonies of different metropolitan powers was also similar. The organization of medical education differed more between European countries than between their colonies.[248] Also, colonial medical schools exhibited strong similarities, even across different colonizing powers. The biggest difference between French metropolitan medical schools and French colonial medical schools was the sophistication of the material. At the 1931 Colonial Exposition, French officials and colonial representatives tried to answer questions similar to these, as well as varying opinions on the advisability of education, while also explaining the French philosophy of colonial education, as mentioned earlier. Scholars today also understand French colonial education in a variety of ways. [249]

Education and medical care in French West Africa may have been organized along similar lines to that of France, but they were not identical. Important differences for medical education in French West Africa lay in the fact that it was not a department of France; the military was important and highly involved in government; and the medical schools were technical schools run by the colonial health services. In addition, the diseases and other health issues that African doctors had to deal with were far

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[248] See: Gail P. Kelly, "The Relation between Colonial and Metropolitan Schools: A Structural Analysis," *Comparative Education* (1979). Thomas Neville Bonner, *Becoming a Physician: Medical Education in Britain, France, Germany, and the United States, 1750-1945* (New York: Oxford University Press, 1995).

[249] Kelly, "The Relation between Colonial and Metropolitan Schools: A Structural Analysis." Gail P. Kelly argues that French colonial education differed, not in sophistication alone (or most importantly), but structurally. Kelly's argument, though, does not hold up when applied to medical education. Especially in the case of France, colonial medical schools shared the essential characteristics of metropolitan medical schools, with a difference in quality and complexity that resulted in the phenomenon of African "doctors" who did not have the status of full doctors.

removed from those that were important in France itself. The population in Africa was also more spread out and less accessible to the French than it was at home, and there was a greater instance of reliance on traditional medicine in French West Africa. These differences gave support to the contemporary idea that there was only one track to civilization and all societies traveled it at different rates, making the French "advanced" and the African cultures "primitive."

Some of the difference between French metropolitan and colonial medical schools occurred along similar lines to the differences between Facultés de Médecine and Écoles de Médecine (only Facultés led to the state diploma), with the important exception that in France there were two levels of medical education, and in French West Africa there was only one level and it was lower than either of the levels taught in France. The Dakar School, the only medical school in French West Africa, did not award medical degrees that would allow the bearer to test for a "state diploma," which allowed him to practice medicine anywhere in France or its territories; but neither did many medical schools in France.[250] In some ways this condition could be described as a result of French distrust of provincials, with colonial populations being even more provincial than the most isolated French peasants. It hearkened back to the days when distinct regional languages existed within France, meaning that many French citizens did not speak French. Thus, even in some areas of France the problem of instructing students who did not understand French proved very prickly through the 1890s.[251] French West Africa had a similar

[250] In 1890, there were 16 secondary medical schools and 7 university medical schools in France. Bonner, *Becoming a Physician*.

[251] For a discussion of the consolidation of French national culture, see Eugen Weber, *Peasants into Frenchmen: the modernization of rural France, 1870-1914* (1977). Also, Graham Robb, *The Discovery*

problem with language. One of the most common reasons administrators gave for what they believed to be the near-impossibility of instructing African medical students with the same complexity and depth as French students was the African students' lesser facility with the French language.

Differences in medical education between France, Britain, and Germany included the regulation of licensing practitioners, where doctors were trained, types of training offered, and the balance of theoretical versus practical education. In England, for example, anyone could practice medicine, but only those doctors who were listed in the Medical Register were protected under the Medical Acts; all others worked at their own (and their patients') risk.[252] Medical education in France was more complex. A student would obtain either a secondary medical degree (at an École) or a university degree (at a Faculté). Only the university degree fulfilled the requirements for a license to practice in France and its colonies. The French provided more practical experience for their medical students than the British or the Germans. This hands-on training was not, however, evenly distributed to all medical students. There was intense competition for the most prestigious internships, which gave the maximum amount of preparation and led to the most job opportunities. Unlike Germany, where medical training was standardized to a point where students could go from school to school during their education, France's medical schools competed with each other. The rivalry between the doctors trained in

of France: A Historical Geography from the Revolution to the First World War (New York: Norton, 2007).

[252] The 1858 Medical Act created the General Medical Council and Medical Register. This was the first time that there was a way to separate the licensed practitioners from the unlicensed.

Paris and the doctors trained in Montpellier, for example, has a long history.[253] The French medical student also took examinations more frequently than other European medical students. The aspiring English doctor, on the other hand, had only to pass the licensing examinations in order to practice under the protection of English law. It was not necessary that he go to medical school first.[254] Despite these differences in European medical education, the colonial medical schools that European colonizers founded used adapted education to avoid creating "uprooted" Africans and because of supposed intellectual inferiority of colonized peoples.

Founding the School - Reasons and Process

The French were acutely aware that they needed more medical personnel in French West Africa if their plans for improving the health of their African subjects were to come to fruition. They were having difficulty filling the ranks of French colonial personnel, and were conducting broad campaigns against epidemic disease, such as yellow fever, plague, and malaria as were other colonial and national powers the world over.[255] The French were also very interested in protecting the current numbers of the African population and encouraging its growth. They needed workers for manual labor projects and agriculture, especially to boost the economic output of the colonies, which

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[253] James William Barlow, *Doctors at War: Studies of the French Medical Profession circa the 17th Century* (London: D. Nutt, 1914).

[254] W. C. Rappleye, "Medical Education in Europe," *The Journal of Higher Education* 2, no. 1 (1931).

[255] For further reading see Nancy Elizabeth Gallagher, *Egypt's Other Wars: Epidemics and the Politics of Public Health* (Syracuse, NY: Syracuse University Press, 1990), Winslow, *The Conquest of Epidemic Disease: A Chapter in the History of Ideas*.

were not living up to what France saw as the colonies' duty to pay for themselves, not to mention making a profit.[256]

There were other conditions conspiring to make the need for medical workers urgent. Troop augmentation and the winter rainy season, when pulmonary illnesses were particularly bothersome, increased the numbers of *Tirailleurs Sénégalais* that needed medical treatment or hospitalization, but the hospitals of Dakar did not have enough beds for them.[257] The Colonial Hospital, where the *Tirailleurs* were customarily taken, did not have the capacity to accommodate them. In 1913 the Colonial Hospital had 218 beds. There were 150 beds for Europeans and 68 beds for Africans. The Civil Hospital, which had just expanded with two new buildings, was the only hospital with sufficient room. In the new Civil Hospital there were 120 beds planned, with 30 for Europeans and 90 for Africans.

Aggravating the problem of lack of doctors and beds were the policies of both racial and civilian versus military segregation. Writing in May 1913, Jean-Marie Collomb, Inspector of Civil Sanitary Services, suggested that the multi-storied Colonial Hospital be reserved to Europeans while the Civil (or Native) Hospital would be used by any sick African, civilian or military, suggesting that it was necessary to segregate Europeans and Africans in hospitals as much as, if not more, than in the cities.[258] He had argued that the only quick and permanent solution to the lack of beds and cost of treating the *Tirailleurs* at the Colonial Hospital would be to transform the Civil Hospital into a

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[256] Sarraut, *La Mise en Valeur des Colonies Françaises*.
[257] The *Tirailleurs Sénégalais* were the subject troops in the French African Army.

mixed-use institution.[259] He saw this as both financially sound and a good permanent change for the Civil Hospital. Collomb added in the last paragraph of his report: "[T]o further the convenience and diversity of services, it will be very easy to create a school for native nurses, midwives, and doctors' assistants from which, after several years of instruction, the students could usefully spread out in all the colonies of the group."[260]

In the Native Medical Service, the European doctors were a very small group, the members of which led the sanitary districts and directed the work of the African medical personnel. At the end of the First World War, French colonies and mandates needed more doctors than the existing military medical corps could furnish. The French tried to fill in the gaps by advertising, pushing through candidates at the Bordeaux school, and pressuring recruiters for faster enrollments.[261] Until 1926, there were barely enough European doctors to outfit the larger cities of French West Africa, and even after that year the shortage of doctors remained a problem. A decree issued on June 26, 1928 raised the number of doctors in the colonial troops to 736, but that was not sufficient to permanently solve the problem. The call for more doctors was "justified by the urgent needs which are directly linked to the development of the French colonial empire."[262] That is, the empire would be at a disadvantage regarding both human and economic development without enough doctors to improve the general health of people.

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[258] For further discussion of segregation in African cities see Philip D. Curtin, "Medical Knowledge and Urban Planning in Tropical Africa," *The American Historical Review* 90, no. 3 (1985), Cell, "Anglo-Indian Medical Theory and the Origins of Segregation in West Africa."

[259] "Mixed use" refers to use by both civilian and military patients.

[260] ANOM, 14 Mi 1129, H 23/8, Report on the Hospitals of Dakar, May 25, 1913.

[261] The Bordeaux School was a medical school run by the Navy to train future Navy doctors.

[262] ANS, bi I 4 686, Les Armées Françaises d'Outre-Mer, Le Service de Santé aux Colonies, Exposition Coloniale Internationale de Paris, 1934. p. 28.

Due to the demand for colonial administrative workers, the emphasis in urban African education during the colonial period was on preparation of a class of loyal Africans for low-level administrative posts in which the French had difficulty placing men. For the French, training African medical workers had several important advantages over importing more French workers; they were far cheaper, already there, could serve as cultural ambassadors for French culture and language, and would bring more Africans into France's service as loyal subjects. Writing about the William Ponty School in 1934, its Director said:

> First of all, the school has a kind of technical purpose: to train native teachers, candidates for the Medical or Veterinary schools, and civil servants. It is also a more complete and profound education that produces natives who are steeped in French culture, who have a concept of French West Africa, and who, in the spirit of French unity, can fill the role of intermediary in the administrative and social life of the Federation.[263]

African medical workers were not the only technicians that the French trained in West Africa, nor were they alone in having a "social intermediary" role to play. The William Ponty School trained students to be teachers and low-level administrators in addition to providing the preparatory courses for medical students.

Political climate at time of founding of school

Around 1916, the French began to institute massive social programs to spread loyalty to France among Africans, reward them for service during the First World War, improve their lives, and bring "civilization" to them. These programs included better and

[263] ANS, I H 98 v. 163, R. Robin, Annual Report to the Administrative Counsel on William Ponty School during the year 1946-1947.

broader education and public health.[264] French colonial leaders saw the Dakar School as a product of close cooperation between France and the people of France Overseas, as well as part of a moral responsibility of colonizer to the colonized, both for support during the war and as part of the French civilizing mission.[265]

In 1917, Governor-General Joost Van Vollenhoven (June 1917 – January 1918) supported a development policy that relied on a base of healthy colonial subjects. Van Vollenhoven was killed in the war in France, and Gabriel Angoulvant (January 1918 – July 1919) succeeded him as Governor-General and issued the decree creating the medical school in Dakar. Angoulvant worked to garner support for an African medical school by appealing to both the humanitarian aspect of the civilizing mission and what he thought of as the French tradition of showing appropriate gratitude for service to the mother country. In a 1918 letter to the Lieutenant-Governors of the colonies of French West Africa, Angoulvant broached the subject of medical education for Africans by lamenting that German aggression had forced the French to drain their reservoir of African troops completely by calling them all up at once instead of slowly building them up as they had planned to do when they began recruiting before the First World War, he concluded: "How could France fail to recognize the value of such sacrifices and how could it fail to keep its promise to the natives of French West Africa not only of civilization, the glory of which France always celebrates, but also of gratitude?" Arguing that this debt of gratitude could not be repaid using just money, he proposed to create programs promoting social progress that would benefit generations to come and would

[264] Claude Marchand, "Idéologie Coloniale et Enseignement en Afrique Noire Francophone," *Canadian Journal of African Studies* 5, no. 3 (1971).

"provide the native with a better future."[266] This, he claimed, was the recompense that the Africans wanted, especially those who had fought in Europe. He emphasized that education for Africans must above all be practical, and asked the Lieutenant Governors for their support. Echoing the Governor General in his 1921 report, the director of the Dakar School, Alphonse Le Dantec (1918 – 1925), billed the school as a humanitarian effort "in the great French colonial tradition," and something that would support the economy of an area that he believed had been held back due to lack of manual labor.[267]

Educational Programs at the Dakar Medical School

The goal of the Dakar School was to "train practitioners who would work under the direction of European doctors, and who would keep a European medical mind-set while working among the natives."[268] In order to ensure that their students would adopt and fully understand the European medical mentality, the program at the Dakar Medical School was both practical and theoretical. It incorporated the scientific concepts deemed necessary for the students to develop a deep understanding of European medicine (given their supposed intellectual limitations) into a heavily practical regime involving much clinical work. In his 1921 Annual Report of the Medical School, Le Dantec argued that some theoretical instruction was critical for "intelligent doctors," but maintained that practical education was much more important, as "…the first priority is to furnish French West Africa with good workers for the Native Medical Service." He went on to describe

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[265] ANS, I H 98 v. 163, L. Couvy, Dakar Medical School Annual Report, 1930.
[266] ANOM, 14 Mi 1147, J 16, Letter from Governor General Angoulvant to the Lieutenant Governors of French West Africa, 1918.
[267] ANOM, 14 Mi 2616, 2 G 21/33, A. Le Dantec, "Rapport sur le Fonctionnement de L'Ecole de Médecine de l'Afrique Occidentale Française depuis 1 Juillet 1919", 1921.

how the practical side of education received much more attention and energy than the theoretical side: "Each morning is dedicated to technical instruction at the hospital or the polyclinic. The future African doctors study the sick and care for them according to their observations, the future midwives have similar training in the maternity wards."[269] The emphasis on practical medicine differentiated adapted African medical education from French medical education in that, despite the trend towards giving more practical experience to French medical students, French doctors were expected to be highly conversant in the more theoretical aspects of medicine.

The programs at Dakar consisted of medicine, midwifery, nursing, and pharmacy. The medical program was significantly more complex than the Pharmacy, Midwifery, or Nursing programs. Official requirements, as stated in Annual Reports, say that medical students took a full complement of physiology, anatomy, surgery, pathology, epidemiology, obstetrics, microbiology, chemistry, and practical internships. The internships took place in the capital of each colony in the hospital there. The doctors at the hospital were responsible for facilitating the practical training of the interns.[270]

Pharmacy students took courses in Galenic pharmacy, *materia medica*, and analytical chemistry, with a practical lab in chemistry.[271] Midwifery students took specialized courses in obstetrics, infant care, an introduction to anatomy and physiology, hygiene, practical home hygiene visits, and general instruction in writing and math. The

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[268] ANOM, 14 Mi 2616, 2 G 21/33, A. Le Dantec, 1921.

[269] ANOM, 14 Mi 2616, 2 G 21/33, A. Le Dantec, 1921. On contemporary debate over how much practical experience was necessary for a European medical student, see: Bonner, *Becoming a Physician*.

[270] ANOM, 14 Mi 1758, 2 G 34/17, Blanchard, Annual Report, 1934.

[271] Galenic pharmacy is defined as "that branch of pharmacy which relates to the preparation of medicines by infusion, decoction, etc., as distinguished from those which are chemically prepared." www.thefreedictionary.com.

visiting nurse students studied elementary anatomy and physiology, hygiene and social diseases, infant care, general instruction in writing and math, and practical home hygiene visits.[272]

Obstacles to starting the school

There were, however, some obstacles in the process of developing and starting the school. Setting up the medical school not only required finding buildings and money, but training future students to the point where they would be able to follow the French-language medical instruction. The French saw this as one of the biggest problems. Recruiting students was another formidable obstacle during the school's early years, but officials were confident that once they convinced the first group of students (and their families) to trust them and enroll in the school, that those students would go out into communities and show others how well they did, how much French culture they had acquired, and how prestigious their education was. After building this reputation, it would no longer be difficult to recruit students:

> [I]t will take much long effort to ask young blacks to aspire to a career that is such an unknown for them. For midwives there are even more serious problems; there is very little education for women in Africa, and the relatives show an understandable repugnance for sending their daughters to Dakar for three years… The families are slowly gaining confidence that every moral guaranty has been given to them. Our students quickly learn to love their school, and most of them are passionate about their studies: they will be our best agents of recruitment.[273]

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[272] ANOM, 14 Mi 1827, 1844, 1869, 1871, 1879, and 1889, 2 G, Dakar Medical School Annual Reports, 1941 – 1947.

[273] ANOM, 14 Mi 2616, 2 G 21/33, A. Le Dantec, 1921.

The Dakar School took the moral element of its education seriously. After all, they were trying to produce cultural ambassadors, not just medical workers!

In many cases, a position in the colonial government was desirable in that it meant prestige, access to power, and an escape from agricultural or manual labor. These jobs typically went to the few who were able to attend schools such as William Ponty and Pinet-Laprade.[274] The medical school, however, was not training white-collar workers: these students would be technical workers. The health service sent its workers throughout French West Africa to guard lazarettos; catch rats; sanitize roads and houses; and vaccinate people as well as to work in hospitals, dispensaries, clinics, and on mobile hygiene teams. They were exposed to diseases, were still subject to military conscription, and had poor prospects for advancement.

The problem of finding buildings to house the school arose because of lack of manual labor and expense of building materials; in 1919 the school started in borrowed and under-utilized buildings. Two new buildings were added to the Central Hospital, where the school was temporarily housed, in 1920 and 1921. They were constructed so that when the school moved on to its permanent location, the buildings could immediately be transformed into sick rooms for paying patients. In November of 1931 the school moved to buildings meant especially for it at Rond-Point de l'Étoile. Governors-General Jules Carde (1923–1930) and Jules Brévié (1930-1935) orchestrated the move.[275] Supplying the medical school could also be challenging, and it was noted as late as 1946 that although the local market had become better equipped to supply the

[274] The Pinet-Laprade and William Ponty Schools were two of the training schools that represented the highest level of education available in French West Africa.

technical material for instruction and labs, it was still difficult to acquire these materials in sufficient amounts.[276]

The Personnel of the Dakar Medical School

The Director

While planning the medical school, Governor-General Angoulvant and the Minister of Colonies (Henri Simon, November 1917 - January 1920) wanted different men for the job. The Minister supported Alphonse Le Dantec for the job, while Angoulvant was in favor of M. Dupont, who was eventually named as the Assistant Director.[277] Simon prevailed and Le Dantec became the first Director of the Dakar Medical School, but not without reservations from Angoulvant, who sent a disgusted letter to the Minister of Colonies in April 1918, saying:

> In the end, Le Dantec's excessive initial expenses do not bode well for a partnership, which, experience decrees, will grow increasingly intransigent. The pecuniary situation created by Le Dantec will certainly require numerous large payments both retroactively and in the future. Also [his] … violent and excessive criticism of the administration of French West Africa over four years regarding the matter of handling indemnities remains inexcusable; permit me, please, in this special case to obey your orders without requiring my consent beforehand, which will catch up with me one day, both here and in France.[278]

[275] ANOM, 14 Mi 2616, 2 G 21/33, A. Le Dantec, 1921.
[276] ANOM, 14 Mi 1844, 2 G 43/8 Assali, Dakar Medical School Annual Report, 1943.
[277] ANOM, 14 Mi 1126, H 14, Angoulvant, Telegram to Minister of Colonies, 1918.
[278] ANOM, 14 Mi 1141, J, Angoulvant, Telegram to Minister of Colonies, June 1918.

Simon named Le Dantec to the directorship in June 1918. He was to study the installation of sanatoria in French West Africa and plan the function of the medical school.[279] The school was set to open in October 1918.

Faculty

Teachers at the Dakar Medical School (Europeans) were originally drawn from the ranks of the civil and military doctors of Dakar, for their experience with African diseases. After 1932, the school focused on recruiting former professors of the naval medical school in Marseille (le Pharo). The number of teachers at the school tended to be in the low- to mid- 20s. The full professors would be European, while the technical instructors and supervisors could be African. If a teacher had been recruited from the military, he would usually be placed *hors cadres* (detached from his unit) before beginning at the Dakar School. Two thirds of teachers were detached, the remaining third were assigned to specific units. All the instructors at the Dakar School also had duties in the Native Hospital or the Polyclinic in Dakar. The Director of the school also ran the Native Hospital.[280]

Students

At its founding in 1918, the school only had programs for Assistant (or African) Doctors and Midwives. October 1919 saw the opening of a veterinary program and in November 1920 a pharmacy program opened. There were 116 students in the first class,

[279] McCarthy, "The Key to the Sanatoria."
[280] ANOM, 14 Mi 1758, 2 G 34/17, and 14 Mi 1879, 2 G 47/9, and 14 Mi 1889, 2 G 48/16, Dakar Medical School Annual Reports, 1934 – 1948.

split between veterinary, pharmacy, medical, and midwifery sections. In January of 1922, 15 midwives were assigned to posts throughout French West Africa. The first class of pharmacists and doctors graduated in August of 1922, and the first class of veterinarians followed in 1923.[281] Annual reports show that each year between 50 and 80 new students were admitted and 40 to 50 graduated. The number of students enrolled at any one time hovered around 170 to 180, although in the 1946 – 1947 school year there were 211 students enrolled.

Students at the Dakar School came from all over French West Africa, but also from French Equatorial Africa and Cameroon. As of the 1942-1943 school year, the colony of Dahomey had the most students to graduate from the Dakar School, at 225.[282] 121 of those students were midwives. Behind Dahomey, Soudan had 137 graduates, Ivory Coast had 135 graduates, and Senegal had 125 graduates. Ivory Coast had the most medical doctor graduates, at 76, with Senegal at 70, and Dahomey at 69 (329 total). Ivory Coast also had the most pharmacy graduates, at 8, followed by Guinea at 7, and both Dahomey and Soudan at 6 (34 total). By far the largest number of midwifery students were from Dahomey (121), followed by Soudan with 65, and Senegal with 46

[281] ANOM, 14 Mi 2616, 2 G 21/33, A. Le Dantec, 1921.

[282] Dahomey had an educational advantage throughout the colonial era, according to Jean Capelle, because they kept their religious schools when the rest of French West Africa conformed to the Metropolitan decision to discontinue supporting religious education. See Jean Capelle, *L'Éducation en Afrique Noire à la Veille des Indépendances (1946-1958)* (Paris: Éditions Karthala, 1990).

(319 total).[283] The largest fraction of the visiting nurse students were also from Dahomey, at 29 out of 62 total.[284]

Annual Reports, prepared by the Director and submitted to the Governor General, vary widely in the type and specificity of information they contain, especially regarding the students. Student evaluations were usually very positive, although the cases where students failed to live up to the school's standards were fastidiously noted and followed. Students who spent their breaks working in the dispensaries, as they were encouraged to do, elicited high praise. The 1943 report is typical, being scanty with evaluations of the students. There are simply numbers of students who had to repeat the year they had just finished and those who were expelled for failing their end of year exams. For the end-of-program exams, there are numbers of students who passed, those who had to repeat a year, and those who failed and were expelled. After the end-of-program exams, only certain students were allowed to do a *stage de perfectionnement* (clinical internship), which preceded the *principalat*, or final exam for the professional classification. In 1943, 13 out of 26 medical students, 2 of 3 pharmacy students, 5 of 15 midwifery students, and 0 of 2 visiting nursing students were admitted to the internship (*stage*) phase of their education. All of the students admitted to intern passed the *principalat*.[285] The 1946 report contains still less information: there is no mention of the students' general performance, and end-of-year exams are also absent. For the *principalat*, 9 of 11 medical

[283] 1943 populations of French West African countries: Senegal 1,909,000; Ivory Coast 4,124,000; Mali (former French Soudan) 3,875,000; Benin (former Dahomey) 1,436,000; 1941 population of Guinea 2,117,700. From "Population Statistics", www.populstat.info/populhome.html, accessed on September 17, 2007.
[284] ANOM, 14 Mi 1844, 2 G 43/8, Annual Report, 1943.
[285] ANOM, 14 Mi 1844, 2 G 43/8 Assali, 1943.

students, 7 of 7 midwifery students, and 2 of 2 visiting nursing students passed. There is no mention of Pharmacy students.[286] Although the Dakar School was small with regard the region its students were meant to serve, it did not try to compensate by passing all of its students; instead, its final exams were demanding and winnowing.

Figure 5 Dakar Medical School 1930[287]

Medical Schools in Other Colonies

The schools in Madagascar, Hanoi, and Uganda provide points of reference for the evaluation of the Dakar Medical School. The Dakar Medical School was not an independent institution of higher learning as many medical schools in France would be,

[286] ANOM, 14 Mi 1871, 2 G 46/10, Dejou, Dakar Medical School, 1946.
[287] From http://www.asnom.org/image/320_ecole_medecine/4_5_promo_1921.jpg.

but an arm of the colonial state that fed directly into the colonial health service, which was deeply entwined with the French military.[288] A medical student who graduated from the Dakar School would be addressed as African doctor or Assistant doctor, and would have to work under a European doctor. He could practice only in French West Africa, because a medical degree from the Dakar Medical School was considered to be inferior to a degree from a metropolitan school. An African doctor could not go into private practice; because his education had been subsidized and directed by the Native Medical Services, he had to work for them.

Joseph Gallieni had moved quickly to create a medical school in Antananarivo (1896) after being named Resident General of Madagascar. He then attached the Native Hospital to the school as its clinic. The Antananarivo school was the second French colonial medical school (the first had been started in Pondicherry in 1863). After Antananarivo, the French opened a medical school in Hanoi in 1902. The Dakar Medical School followed in 1918.

In Antananarivo, the medical school began with 56 students and experienced some of the same difficulties as the Dakar Medical School would experience later. The primary education system available to the students left them unprepared for medical coursework and the students needed interpreters to understand their professors. The school started to admit female students in 1928. The best known professor at the

[288] John Iliffe, "Makerere and its Students, 1923 - 1949," in *East African Doctors: A History of the Modern Medical Profession* (Cambridge: Cambridge University Press, 1998). John Iliffe argues that since the professors in Makerere did not run a teaching hospital, "medical professionalization centered to an unusual degree around government service." However, even when the professors did run teaching hospitals, as was the case in Antananarivo and Dakar, medical careers for colonial students were consistently centered upon government service.

Antananarivo school was Antoine Lasnet, a colonial doctor who went on to help found the Native Medical Service in 1899, which would become responsible for the health of the populations of the African and Asian colonies. The school in Antananarivo was to train the "native doctors" who would make up the "native doctors of colonization" corps.

The Faculté de Médecine in Montpellier was the model for the Antananarivo school (which was in turn the model for the Dakar school). The program of study lasted five years and led to a diploma for a Health Services Doctor. After graduating, students were required to work for the Health Services for five years, as opposed to the ten that would be required of Dakar students.[289]

In 1902, Alexandre Yersin was the first Director of the Indo-China Medical School in Hanoi, serving until 1904. The faculty was composed of members of the Colonial Medical Corps. Training for auxiliary physicians, pharmacists, and midwives were the most important and longest-lasting programs at the school. The Hanoi school became a university medical school in 1936, with the Paris medical school granting the degrees until 1941, when the Hanoi school began to grant its own degrees.[290]

In 1927 a British government committee created a Mulango Medical School, based in the Mulango hospital in Uganda, to continue and to develop the medical program that had started with four students in an African Native Medical Corps (ANMC) program. The medical training was originally organized so that the students would take a preparatory course at Makerere College and then transfer to Mulango Hospital to

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[289] P. Aubry and P. Rakotobe, "La Formation Médicale à Madagascar de 1870 à Nos Jours," *Médecine Tropicale* 60 (2000).

[290] Association Amicale Santé Navale et d'Outre-Mer, "L'Assistance Médicale Indigène," http://asnom.org/.

complete their practical education. Unlike the Dakar School, surgery, hygiene, and sanitation were largely not included in the medical students' training. A section for midwifery was added in 1928. The Medical Assistants were originally supposed to have a medical competency similar to Indian Sub-Assistant Surgeons, although eventually their training would surpass the latter. Similar to the programs in Antananarivo and Dakar, this original plan would simplify European medical training to fit the supposedly lesser need for highly skilled doctors in Africa and the much lower standard of primary education. Thirty-four students had graduated from the Makerere medical school by 1936, compared to 403 Dakar graduates by 1934.[291]

Before the transformation of the Uganda Technical School into Makerere College in 1924, many East African students had pursued higher education abroad. At first, students were suspicious that Makerere would not be up to the standard of education in Britain or the United States. Soon, though, the most promising students were going to Makerere, where the medical program was especially prestigious.[292] Britain was reluctant to recognize the Makerere degree from the beginning. In 1945, Makerere began offering a diploma instead of a simple certificate. The struggle to have the medical degree recognized by the British continued, although the teachers at Makerere preferred to keep their own degree instead of trying to win the right to grant a British one. By 1949, Makerere was totally in control of its medical school and still granting independent diplomas.

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[291] ANOM, 14 Mi 1758, 2 G 34/17, Blanchard, 1934.
[292] Iliffe, "Makerere and its Students, 1923 - 1949." p. 62-63.

Medical students at Makerere tended to be the best and the brightest, often also of high social status. Students were usually not the children of traditional healers, as they tended to come from families where the father was also educated. The students at the William Ponty school (which provided future Dakar School students with preparatory training), however, were "almost all from non-evolved families."[293] Another characteristic of the students at Makerere was that as a group, they were very ethnically diverse. Most medical students were on scholarship, with their last two years (of clinical work) being free.[294]

The Dakar School was re-organized in 1944, because of the widely felt repercussions of the beginnings of the Fourth Republic in France. In 1950 the Dakar School was absorbed into the French university system, then partnered with a French medical school through 1958, during which time the medical students did their first three years in Dakar, and transferred to a French university to finish. Dakar finally started granting its own medical degrees, valid in France, in 1960.

How much difference did subject versus citizen status make to medical education?[295] It was acceptable to require subject medical students to sign contracts binding them to colonial service as a prerequisite to medical school. This was not practiced with the citizen students of France. On a more general educational level only French and *assimilés* had access to programs offering the equivalent of metropolitan programs and degrees.

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[293] ANS, I H 98 v. 163, R. Robin, Annual Report of the William Ponty School during the year 1945 - 1946", 1946.
[294] Iliffe, *East African Doctors*.
[295] Mamdani, *Citizen and Subject*.

By negotiating cultural differences, perceived differences in intellectual ability, fears of *déracinés*, and distrust of *évolués*, the French strove to overcome their lack of medical personnel and get closer to their goal of better health and more civilization for France's African subjects by creating an institution to train highly competent medical workers. The Dakar School was relatively prestigious; it would confer prestige upon its African students vis-à-vis other Africans, but would not be on the level of French education, in order to maintain the colonial hierarchy. They tailored the medical training to produce loyal subordinates and to avoid producing *déracinés*. The fear of *déracinés* shows a perceived weakness in their own colonial capabilities on the part of the French, a fear that if Africans were given the educational opportunities of Europeans, that they would not be content to serve their colonial overlords.

Chapter 5: The Plague Outbreaks of 1929 and 1944

This chapter compares the plague outbreaks based on methods employed to combat the epidemic, popular resistance to those methods, non-health related uses for public health measures, and the effectiveness of the health measures. It also considers the constraints on the effectiveness of the health services, both during and between the outbreaks of plague. Issues that were important during the 1914 outbreak, such as segregation, overcrowding, and resistance to sanitary measures, continued to be important from the 1920s through the 1940s. The contrasts between the responses to the 1914, 1929, and 1944 outbreaks of plague show the effects of changing ideas about the nature of plague, the continued use of public health measures that originated with the 1900 yellow fever outbreak, and the limits of the possible in combating plague outbreaks without effective insecticide.

Limits to the Native Medical Service

French efforts to make West Africa a healthier place often ran into obstacles. The French understanding of these limiting issues was that "[p]rophylaxis always runs up against apathy and ill will, as does declaring deaths and illnesses, which is even more dangerous." [296] A more revealing categorization of the obstacles to the effectiveness of the Native Medical Service includes: personnel and funding, public health measures, living conditions, public relations (both communicating goals to the public and failure to

[296] ANOM, 14 Mi 1769, 2 G 35/35, Medical and Sanitary Services General Inspection Annual Report, 1935.

understand the perspective of the population the Medical Service was meant to serve), and segregation.

The lack of personnel and funding presented a problem on the most general level: "The only real prophylaxis against malaria would be a plan of works, the size of which surpasses the capabilities of the Medical Service."[297] Likewise for trypanosomiasis: "1939 has only been a year of beginnings, of organization, held up by numerous things; in particular by the lack of personnel and transportation – this lack being due to the state of war."[298] Although these quotes address the endemic diseases of malaria and trypanosomiasis, the Medical Service was not substantially better equipped to deal with epidemic diseases like plague.

The plague epidemics exposed multiple limits to the effectiveness of the health services. The African "patients" often believed differently than the official philosophy of the health services dictated and did not accept their instructions. The failure of the European ideas that guided the Medical Service to align with the ideas of the African public produced the sort of dissonance that prompted the African "patients" to resist some public health measures.

The 1929 Plague Outbreak

Similar to the 1914 outbreak, Africans were wary of declaring any members of their households who might be sick with plague and those who had died of it due to the response that information would elicit from the Medical Service. Unlike the 1914

[297] ANOM, 14 Mi 1776, 2 G 36/22, Senegal Health Service Annual Report, 1936.
[298] ANOM, 14 Mi 1806, 2 G 39/14.

outbreak, though, resistance was limited to quieter forms of hiding the sick, burying the dead in secret, unwillingness to undergo vaccination, and little zeal for killing rats.

Origin and Progress of the Outbreak

The 1929 plague outbreak was first noticed in Taiba N'Diaye village in the Tivaouane District. It spread regionally via the railroads. In order, it affected: Saint-Louis, Thiès District, Louga Circle, Tivaouane District, and Baol Circle. The outbreak started in February 1929 and was declared over on December 4th, 1929. There were 2,579 known cases and of those 1,477 died. Officials noted in their reports that it was impossible to know with any certainty the numbers affected and dead in this outbreak due to the "zone of silence that the native cultivates with what amounts to open complicity of the canton chiefs."[299] Dr. Marque noted in his report concerning Dakar and the surrounding areas that although the first case appeared in late February, the outbreak did not become epidemic until May.[300]

The Director of Central Native Hospital, Doctor General Couvy, had 145 plague patients in 1929. The first entered February 27th and the last entered October 22nd. The period of March to mid-June included 39 sick with 17 deaths. From mid-June to the end of August there were 86 sick with 60 deaths, and after September 1st there were 20 sick with 10 deaths. As the epidemic grew more virulent, Dr. Couvy saw more patients dying within 48 hours of entering the hospital: during the period from mid-June to late August,

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[299] D. C. Fulconis, "Mémoires Originaux: La Peste au Sénégal en 1929," *Annales de Médecine et de Pharmacie Coloniales*, no. 29 (1931). p. 289. Colonel Dr. Fulconis was attached to the Health Service.

[300] D. L. Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel," *Annales de Médecine et de Pharmacie Coloniales*, no. 29 (1931). Lieutenant-Colonel Dr. Marque was attached to the Health Service.

49 of the 60 deaths were within 48 hours of admittance. Couvy also believed that people became more reluctant to approach the hospital for treatment during this period, instead the families and neighbors of those with plague hid the disease in an effort to avoid quarantine.[301] Couvy observed that the anti-plague vaccine seemed to be ineffective – he believed that the instance of vaccinated people getting plague was the same as non-vaccinated people. Dr. Fulconis reported 2,569 total cases of plague in Senegal in 1929.[302]

Table 7 Deaths at Dakar Native Hospital, 1929[303]

Date	Cases	Deaths
March - June 15	39	17
June 16 - August 31	86	60
September 1 - December	20	10

Table 8 Vaccinated Patients at Dakar Native Hospital, 1929[304]

	Cases	Deaths	Mortality
Vaccinated 15 days +	74	45	60.81%
Not vaccinated	57	31	54.38%
Unknown	14	11	78.57%

In 1929, there were plague outbreaks in Madagascar, Indochina, and French West Africa. According to Doctor Lieutenant-Colonel Ledentu's report, mortality of plague victims was 95% in Madagascar, 92% in Indochina, and 60% in French West Africa.[305]

[301] Couvy, "La Peste à l'Hôpital Central Indigène de Dakar en 1929, Extrait du Rapport Annuel," *Annales de Médecine et de Pharmacie Coloniales* 29 (1931). p. 320.
[302] Fulconis, "Mémoires Originaux: La Peste au Sénégal en 1929." p. 295.
[303] Couvy, "La Peste à l'Hôpital Central Indigène de Dakar en 1929, Extrait du Rapport Annuel." p. 319.
[304] Couvy, "La Peste à l'Hôpital Central Indigène de Dakar en 1929, Extrait du Rapport Annuel." p. 320.

Table 9 Plague in Senegal, 1929[306]

Circles	Cases	Deaths	Mortality by cases	Mortality by population
Tivaouane	1,025	568	55.40%	1.70%
Louga	519	316	60.80%	0.60%
Saint Louis	503	300	60%	2.10%
Diourbel	264	119	45%	0.15%
Thiès	255	168	64.90%	0.13%
Total	2,566	1,471		

Table 10 Dakar District Totals, 1929[307]

	Cases	Deaths	Mortality
Dakar	224	182	81.25%
Surrounding	120	62	51.66%

Table 11 Dakar District, Plague Zenith, 1929[308]

Area	Month	Cases	Deaths	Mortality
Dakar	August	63	55	87.30%
Medina	July	24	20	83.33%
Ouakam	June	13	6	46.15%
Tiaroye	November	17	5	29.41%

[305] Ledentu, "Les Maladies Transmissibles Observées dans les Colonies Françaises et Territoires sous Mandat pendant l'Année 1929," *Annales de Médecine et de Pharmacie Coloniales* 29 (1931). Dr. Ledentu was a Lieutenant-Colonel.

[306] Ledentu, "Maladies Transmisibles aux Colonies." p. 666.

[307] Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel." p. 313.

[308] Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel." p. 313.

Public Health Measures

According to Fulconis's official report, knowing the real numbers of people affected by plague was difficult not only in the interior villages, but also in the cities. The "zone of silence" existed there too, despite the "beginnings of popular consent to rudimentary collective hygiene."[309] Officials routinely criticized the African population for hiding their sick in the attempt to avoid what appeared to many Africans to be public health harassment. The French, however, did not see it as harassment, but as a benefit of colonization for the colonized.

There were some areas that had been hit very hard by plague in 1928 that were only light affected in 1929. Some areas, though, like Dakar and Saint Louis, were infected with plague despite the lines of sanitary guards posted around their peripheries. Fulconis observed that, in a place where the population was very mobile, the roads and paths were many, and there was only a French outpost to enforce health measures, "If sanitary discipline is vexatious or police-like, then it is impossible [to enforce]. Given these general conditions, we can at best obtain relative protection for large population centers against exogenous contamination."[310] Relative protection for large population centers meant trying to prevent people or objects infected with plague from entering.

Fulconis believed that, once the epidemic was declared, whatever was accomplished in the way of collective hygiene or individual treatment was due partly to the example of Africans who accepted French public health measures and partly to the persuasiveness of the doctors:

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[309] Fulconis, "Mémoires Originaux: La Peste au Sénégal en 1929." p. 289.
[310] Fulconis, "Mémoires Originaux: La Peste au Sénégal en 1929." p. 291.

> [T]he example given by those few who, in accepting our methods, have begun to liberate themselves from ancestral beliefs about disease and superstitions about its treatment. The technical quality, the persuasiveness of the doctors, and the moral authority and firmness of the administrators did the rest. Given the current state of evolution of ideas among the natives and the current political situation of Senegal, everything that could be done was done.[311]

The "moral authority" of the doctors and administrators allowed them to "firmly" persuade Africans to accept health measures, but from Fulconis's point of view, the cultural and "evolutionary" shortcomings of the Africans themselves were to blame for many of the problems the Medical Service had in reaching its goals.

Fulconis noted that the measures taken to combat the plague in 1929 were no different from those of previous years, except that "the web of surveillance posts was more tightly woven, sanitary discipline was more strict, and the flea hunt was better organized."[312] This quote from Fulconis's report signals a hope that the same old measures would prove to be more effective if workers were more diligent in their application. Marque's report outlines the local measures in Dakar as: immediate inquest into each new case, sealing contaminated houses, isolation of the sick, quick burial of the dead, screening the windows of neighboring houses, isolation in the lazaretto of anyone in contact with a sick person, disinfection of contaminated houses, destruction of belongings that could not be disinfected, and capture of rats to test for plague.

Disinfecting homes using the method of fumigation with sulfuric gas was ineffective. Experiments showed than the fumigation did not kill rats or their fleas. Marque recommended that this method of disinfection be discontinued. He also

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[311] Fulconis, "Mémoires Originaux: La Peste au Sénégal en 1929." p. 291.
[312] Fulconis, "Mémoires Originaux: La Peste au Sénégal en 1929." p. 304.

recommended that the efforts at exterminating rats be discontinued due to their ineffectiveness in significantly reducing rat numbers, suggesting instead that defensive measures focused on depriving rats of food sources near human homes would be more effective.[313] Killing rodents remained a standard part of sanitary action throughout the era, despite the minimal difference it made in the anti-plague efforts, the widespread belief among French doctors and administrators that the plague outbreaks between 1914 and 1924 had largely not been preceded by epizootics, and the lack of popular interest in participating in the extermination.[314] Doctors did not think rats had started the epidemic, but they were cautious because they knew that rats could perpetuate it.

Table 12 Saint Louis Lazaretto, 1929[315]

Month	Entering Patients	Deaths
June	59	
July	183	
August	38	
September	9	
Total	289	122
Vaccinated	266	
Not vaccinated	23	

A total of 1,250 people were isolated at the lazaretto for being exposed to an infected person. Marque noted that "the population accepted these measures fairly easily. Transport and stay at the lazaretto did not cause any incident."[316]

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[313] Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel."

[314] Marcel Leger, "La Peste au Sénégal de 1914 à 1924," *Annales de Médecine et de Pharmacie Coloniales* 24 (1926).

[315] Moreau, "Note sur le Service Médical du Lazaret de Saint-Louis (Sénégal) pendant l'Épidémie de Peste de 1929," *Annales de Médecine et de Pharmacie Coloniales* 28 (1930). p. 219.

In a departure from the usual goals of sanitary cordons, Lieutenant-Colonel Dr. Marque, Chief of Health Services explained that the purpose of the six-day sanitary cordon around Dakar was not supposed "to attain the illusory goal of stopping the spread of the disease, but to keep the inhabitants in one place in order to vaccinate the entire population."[317] The lack of resistance to the health measures is another change from the 1914 epidemic, and according to Marque it extended to vaccination efforts in the Dakar area: "the natives were not as reluctant to present themselves as they used to be." He recorded 25,543 people as being vaccinated in 1929.[318] Marque was careful to warn that vaccinations should be given before an epidemic outbreak and added that the vaccine only provided temporary immunity. In his estimation, half of the people hospitalized for plague had already been vaccinated. He urged further experimentation to improve the effectiveness of the vaccine.

Many examples of direct resistance to public health measures were of resistance to vaccination. Doctor Legendre of Upper Volta reported that vaccination campaigns still had a lot of work to do:

> Despite the significant number of inoculations we have given, we must not dissimulate about the large number of natives who still have not been vaccinated. Recently in a city of Upper Volta, we found 60 children from 10 to 30 months old. Thirty-eight of these had never been vaccinated. Moreover, this circle has a vaccination station with plenty of fresh and effective vaccine. This is proof that in some areas, natives still flee from the vaccinator and that they succeed in hiding cases of smallpox to avoid vaccination.[319]

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316 Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel." p. 314.

317 Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel." p. 311.

318 Marque, "La Peste dans la Circonscription de Dakar et Dépendances en 1929, Extrait du Rapport Annuel." p. 314.

319 ANOM, 14 Mi 1717, 2 G 27/39, AOF Sanitary and Medical General Inspection, 1927.

Living conditions

Outside of the larger towns, where some Africans lived in masonry homes, the great majority African homes were straw "huts" or wooden "shacks." The French believed that these types of homes were inherently unhealthy: window screens to keep mosquitoes out were prohibitively expensive, the floors were most often sand and infested with fleas, in the larger towns overcrowding was a serious problem, and finally, French health officials believed that the straw or wood that the homes were made of could be contaminated with disease.[320] It was not only the construction of the homes that exposed the inhabitants to diseases like malaria, yellow fever, and plague. The high cost of screens and lack of available housing in the urban centers cannot be attributed to the construction materials of the houses. The belief that inanimate objects like wood, straw, or personal belongings could be "contaminated" with plague persisted into the early 1950s.[321]

Public Relations

The colonial administration unconsciously limited the health service's effectiveness primarily due to failure to understand why Africans resisted, but also due to failure to communicate what the Health Service was doing and why. At the heart of the problem were French racial and cultural assumptions that Africans did not cooperate with the public health measures because they were stubborn, backwards, and did not

[320] ANOM, 14 Mi 1779, 2 G 36/43, AOF Sanitary and Medical General Inspection, 1936 -1938.
[321] See R. Pollitzer, "Plague Studies, 9. Epidemiology," *Bulletin of the World Health Organization* 9 (1953).

understand public health. This attitude blinded the French administration, making their job even harder than it had to be.

Africans were not the only people to be labeled ignorant and backwards by the Medical Service. Blending backwardness, refusal to comply, and insufficient mosquito protection, the Syrians, as far as the French were concerned, had no better grasp of hygiene and sanitation than the Africans:

> The inevitable and irrepressible movements of populations, surveillance of which is illusory, multiplies the dangers of propagating and spreading yellow fever. The presence of numerous Syrians in the territory (651 in Sine-Saloum last December) adds to this indigenous peril…They [Syrians] almost always live in deplorable conditions of hygiene, without protection against mosquitoes, and particularly when exposed to yellow fever they hide their sick. These undesirables represent worrisome reservoirs of future viruses.[322]

Refusal to comply with often-intrusive sanitary requirements was fairly common; not only Africans, but Syrians and Europeans also resented and ignored public health requirements. When Africans did not comply, they were labeled "atavistic" and "superstitious," but when whites (Syrians and Europeans) did not comply they were labeled "imprudent."

> In several instances, the attitude of the Syrian population and even of some Europeans constituted a serious menace to public health. As soon as the first cases showed up in Saloum, the Syrians panicked and fled to Dakar. One sick person who was trying to get to the hospital managed to get on a train and died, producing bloody sputum, upon arriving at the station in Diourbel. As for the Europeans, they paid with their lives for the imprudence they committed in not protecting themselves against mosquitoes and ignoring the decrees that forbade going out at night in contaminated areas.[323]

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[322] ANOM, 14 Mi 1754, 2 G 33/22, Senegal Health Service Annual Report, 1933.

Africans' incomplete and hesitant acceptance of French medicine was a source of constant lament in annual health reports. The authors of most reports ascribed attitudes toward French medicine, poor and crowded housing, and any number of other problems implementing their public health schemes to what they believed was the basically atavistic nature of Africans.

French sanitation stipulated that waste had to be disposed of in deep holes at least 100 meters from the village. The French persistently tried to stop Africans from using household waste to fertilize their gardens: "The native habit of spreading household waste along with human and animal waste is well known. This practice makes the soil more fertile."[324] Nevertheless, the Health Service said it must stop, engaging hygiene agents, nurses, and doctors to try to force people to stop by going "village to village giving advice and judiciously using their authority…The native understands only with difficulty the simple concepts about hygiene that we teach him." [325]

Bilharzia was widespread on the banks of the Senegal River, where the sick "assured the propagation of the disease" by urinating around the villages and in the pools and swamps.[326] The French did not understand how Africans could become inured to the everyday endemic diseases they lived with, and took resignation for ignorant "nonchalance": "The nonchalance of the native populations, who are indifferent to the ever-present syphilis, to the current malaria, to the everyday diarrheas due to polluted

[323] ANOM, 14 Mi 1717, 2 G 27/39, AOF Sanitary and Medical Services Annual Report, 1927.
[324] ANOM, 14 Mi 1776, 2 G 36/22, Senegal Health Service Annual Report, 1936.
[325] ANOM, 14 Mi 1776, 2 G 36/22, 1936.
[326] ANOM, 14 Mi 1747, 2 G 32/35, 1932. Bilharzia (or Schistosomiasis) is a chronic disease carried by freshwater snails. See Farley, *Bilharzia: A History of Imperial Tropical Medicine*.

water, were troubled by the appearance of yellow fever in Bakel and Saloum."[327] The French saw African alarm at epidemic outbreaks like yellow fever and plague as an opportunity to make a big impression with the efficacy of Western medicine.

Regarding "social diseases" like tuberculosis and syphilis, French medical workers noticed that "natives" had a particular tendency to getting serious respiratory ailments, syphilis, skin ailments, and minor wounds. Africans needing minor surgeries were a source of optimism for the French, though:

> By virtue of example, more and more of the indigenous masses are flocking to our dispensaries, and from this point of view the striking results of surgery do more to increase our clientele than do consultations of a purely medical nature, of which the long-term nature does not impress the native masses who are atavistically enthralled by the authority of the marabouts.[328]

The quick and dramatic results of surgery were impressive enough to convince hesitant people to trust some aspects of Western medicine. The author of the report hoped that African acceptance of surgery would spread, so that more Africans would accept more aspects of Western medicine, but he was skeptical. The preventative medicine that the Native Medical Service and the colonial government believed would have the most widespread impact on African health was not the kind of medicine that Africans wanted. Africans were more interested in the curative medicine that the colonial government and the Native Medical Service had been trying to cut back on since the founding of the Service.

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[327] ANOM, 14 Mi 1754, 2 G 33/22, Senegal Health Service Annual Report, 1933.
[328] ANOM, 14 Mi 1754, 2 G 33/22, Senegal Health Service Annual Report, 1933.

Generally, administrators assumed that their instructions had been clear and compelling, and that failure of their initiatives was attributable either to personnel who did not follow the instructions or to atavistic Africans resisting health measures. In 1938 some of the auxiliary doctors in Côte d'Ivoire were not following instructions as closely as their French superiors would have liked. For cases of yellow fever there was "still some hesitation" among the auxiliary doctors regarding the exact meaning of the words "diagnostic" and prophylactic "isolation": "even though the instructions are clear."[329] At times, both European and African property owners that rented to African tenants refused to apply the hygiene measures despite getting tickets for not doing so, but there was no truly effective way to enforce the hygiene measures: "Thus, construction with forbidden materials in certain areas (shanty towns already in existence or those being built clandestinely) has to be tolerated despite the formal decrees and the clear disdain of all authorities."[330]

A 1933 assessment of the situation could fit into almost any year: "The way of life and defective hygiene of the natives, in addition to the climatic conditions, have not noticeably changed."[331] Because neither the climate, nor the "backwardness" of the African population had changed, the Native Medical Service saw no reason for the familiar epidemics of yellow fever and plague to stop. For the Medical Service, the climate and perceived atavism also excused them from full responsibility for the continued presence of endemic diseases like malaria.

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[329] ANOM, 14 Mi 1806, 2 G 39/14, 1939.
[330] ANOM, 14 Mi 1794, 2 G 38/14, Dakar Health Service Annual Report, 1938.
[331] ANOM, 14 Mi 1754, 2 G 33/22, 1933.

The willingness of people to accept surgery but not preventative measures shows a combination of failure to communicate the principles of how prevention was supposed to work, a tradition of insensitivity to the hardships that preventative measures meant for people, and a lack of trust in the Medical Service. Operating on the assumption that Africans would not or could not understand the principles of French-style sanitation and hygiene, the Medical Service had little incentive to try to fully explain what they were doing. In addition, the general assumption that Africans were less culturally evolved led many to believe that Africans' concerns about preventative measures were not valid.

Segregation

> If the diminution of the floating population of Dakar is desirable from all points of view, segregating native and European neighborhoods cannot be less desirable. Therefore that end should be pursued methodically and persistently for reasons of hygiene as much as for political and social reasons. Moreover, it constitutes an important step toward pushing back undesirable elements.[332] - Services Sanitaires de Dakar, 1934

From the late 1920s through the 1930s, discussions of residential segregation focused on offering reasons for segregation and methods of encouraging Africans to move to the Medina neighborhood. Segregation was cast as being both necessary and desirable for a number of reasons, including what the French though of as different degrees of advancement in civilization; "Segregating natives, who are not yet adapted to our civilization, is a necessity."[333] Public health was not the only concern motivating segregation. The author of the 1927 Annual Medical Report for Dakar thought that the

[332] ANOM, 14 Mi 2111, 3 G 2/9, Dakar Sanitary Services, 1934.
[333] ANOM, 14 Mi 1717, 2 G 27/39, AOF Sanitary and Medical Services General Inspection, 1927.

administration's solution to the problem of how to get property owners off their land might be good for hygiene and would also provide investment opportunities.

> [Segregation] is practiced everywhere that it is possible, but in the four communes of Senegal, where metropolitan legislation exists, native landowners have incontestable rights – the problem becomes singularly complex. The solution offered by the administration that might satisfy both [the need for] hygiene and the aspirations of the interested parties, regarding their investment possibilities, is the creation of a low-cost housing office that was the subject of a decree from June 14, 1926.[334]

The plan called for building clean and healthy houses for Africans "in the measure that the hovels and shacks disappear."[335] The District of Dakar opened the low-cost housing project for bids from private business, but failed to devise a good model for the housing units. Despite the failure to design satisfactory low-cost housing, French administrators hoped that efforts at residential segregation could still make progress in Dakar:

> It is possible that sufficient numbers of natives will voluntarily consent to leave Dakar in order to move to the Medina, the native village of the area, if the administration puts gentle pressure on them and gives them some material aid to rebuild their huts provided that they leave Dakar.[336]

There is no evidence, however, that people forced to move to the Medina received any material support from the colonial government.

The issue of segregation and African French citizens arose again in 1934. Berthet, Acting Director of Political and Administrative Services, wrote to the Governor Secretary General that: "the legal means that the administration may use to counteract the

[334] ANOM, 14 Mi 1717, 2 G 27/39, 1927.
[335] ANOM, 14 Mi 1717, 2 G 27/39, 1927.
[336] ANOM, 14 Mi 1717, 2 G 27/39, 1927.

disorderly influx of the native races into Dakar and to eliminate certain undesirable elements from the urban center" were already in place.[337] Berthet wrote that, as part of his duties, the Administrator of the District of Dakar had police powers (conferred on him by decree November 27, 1924). According to Berthet: "A combination of the powers that the Administration already has should be sufficient, provided a concerted effort is made, to limit and purify the population of Dakar."[338] In Berthet's view they did not need the excuse of extraordinary health measures during an epidemic outbreak to further residential segregation: they could use existing laws creatively to pursue it.

In 1935, the Director of Economic Services proposed solutions to the problem of the "disorderly influx": 1. Apply the *indigénat* to French citizens (*originaires*).[339] 2. Modify the 1923 decree reversing the crime of homelessness. 3. Rigorously apply the laws regulating the movement of "natives." 4. Institute a required sanitary passport for emigrants.[340] Rougier (Director of Political and Administrative Services) responded to the Director after consulting Governor General Brévié (Jules Brévié, October 1930 – September 1936). Rougier reported that, after considering these suggestions Governor General Brévié had replied: "[E]ven if the *indigénat* were legally applicable in this city, [I] would prefer not to go back upon the de facto exemption that has existed for many years."[341] Rougier concluded by telling the Director of Economic Services that the other three suggestions had to be put before the Direction of General Security. In this case, the

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[337] ANOM, 14 Mi 2111, 3 G 2/9, Sanitary Services, Letter from Berthet to Governor Secretary General, October 19, 1934.
[338] ANOM, 14 Mi 2111, 3 G 2/9, 1934.
[339] The *indigénat* was a legal and disciplinary regime that the administrators (not the courts) controlled. It was typically only applied to subjects, not citizens.
[340] ANOM, 14 Mi 2111, 3 G 2/9, 1934.

Governor General was more sensitive to the concerns of *originiaires* than the Director of Economic Services, who would presumably be an ally of European businesses.

Most of the permanent inhabitants of Dakar were exempt from the *indigénat* either because they were French citizens or because they were veterans, government employees, licensed businessmen, or holders of diplomas. The entire female population was likewise exempt (decree of March 13, 1934). However, the male "floating" population was almost exclusively composed of French subjects.[342] With that in mind, there were several laws that applied to them concerning failure to signal change of address or change of district, aiding agitators or malefactors, and disturbing the peace, but apparently those were not very effective. Measures of: "internment and sequestering, obligatory residence, and interdiction to visit are incontestably effective when it comes to neutralizing notorious agitators or particularly dangerous individuals due to their opinions or beliefs, but they [these measures] only apply in exceptional cases and have limited use."[343] Judging by Governor General Brévié's reluctance to withdraw the de facto exemption of Dakar from the *indigénat*, the official will to use existing legislation for the purposes of segregation without an epidemic outbreak did not exist. It is possible that Brévié believed that pushing segregation would be easier to do and easier to excuse during an epidemic.

French officials happily proclaimed that rigorous application of the measures called for by decree of May 31, 1930 from the Administrator of Dakar had effectively

[341] ANOM, 14 Mi 2111, 3 G 2/9, Letter to Directo of Economic Services, from Rougier, Director of Political and Administrative Affairs, August 2, 1935.
[342] ANOM, 14 Mi 2111, 3 G 2/9, Sanitary Services of Dakar, 1934.
[343] ANOM, 14 Mi 2111, 3 G 2/9, Sanitary Services of Dakar, 1934.

eliminated from Dakar: "numerous natives who, by their morals, their lifestyle and their 'standing of life' are not sufficiently Europeanized in their habits and whose presence constitutes a danger for public health."[344] However, in 1938 the "unhealthy lodgings" of Africans still dominated Dakar. [345] Eviction of Africans from their "shacks outside the European city" continued in 1938, but slower than planned: "only 87 transfers into authorized zones have been made."[346] Brévié seems to have been right about segregation efforts being more successful during epidemic outbreaks.

The motivations for segregation were multiple, and there is no evidence that public health was the most important motivation in the 1920s and 1930s. Finding ways to control the population were at the center of the efforts at segregation – by moving Africans to "native villages" or segregated neighborhoods the administration planned to limit the population of Dakar, stifle political dissidents, make the "European city" more hygienic, and give the wealthy a chance to buy and use valuable land in Dakar.

The 1944 Plague Outbreak[347]

From 1937 to 1943 there were no outbreaks of plague in Senegal. It reappeared in 1943 in two villages within the Dakar district. Dr. Durieux attributed the control of the 1943 outbreak to the vaccination efforts and the use of DDT powder.[348] In 1944, plague

[344] ANOM, 14 Mi 2111, 3 G 2/9, 1934.
[345] ANOM, 14 Mi 1794, 2 G 38/14, Dakar Service de Santé Rapport Annuel, 1938.
[346] ANOM, 14 Mi 1794, 2 G 38/14, 1938.
[347] West Africa has been free of plague outbreaks since 1945. Simon Neerinckx, Eric Bertherat, and Herwig Leirs, "Human Plague Occurences in Africa: An Overview from 1877 to 2008," *Transactions of the Royal Society of Tropical Medicine and Hygiene* 104 (2010).
[348] Dr. C. Durieux had the position of Doctor-Colonel at the Pasteur Institute in Dakar. ANOM, 14 Mi 1850, 2 G 44/4, C. Dr. Durieux, "Rapport sur le Fonctionnement Technique de L'Institut Pasteur de L'Afrique Occidentale Française en 1944," ed. ANOM (Dakar1944).

revisited Senegal, but this time it struck Dakar, which it had spared the previous year. The first cases occurred in April and the number of cases rose until September, after which they diminished until December, when the outbreak ended.

The first appearance of plague in 1944 occurred at the Arsenal of the National Navy. The disease then spread to the neighborhoods near the port, followed by the Medina, which bore the brunt of the outbreak. There were 571 known cases and 512 deaths from plague that year. The Pasteur Institute found 66 rats plague positive. Most of the tests for plague were conducted on cadavers, only 143 plague patients entered the hospital and 91 of those died. The African population suffered the most from the 1944 outbreak: 567 Africans caught the disease, and 509 of the victims died.[349] Three Europeans caught plague and all three died from it. One "Libano-Syrian" caught plague, but did not die.[350]

The tests that the Pasteur Institute conducted on rodents indicated that most of the plague-infected animals were in the port area, and not in the Medina. Durieux explained the heavy toll paid by Medina residents by noting that most of the workers in the Arsenal and around the port were recruited from the Medina. He believed that they became infected while working and carried the disease home with them. The Hygiene Service of Dakar captured 8,043 animals to be tested for plague and 69 of them were positive.

Despite the more advanced understanding of plague in 1944, compared to the 1914 or 1929 outbreaks, as late as 1952 the methods of transmission of the disease

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[349] D. H. S. Davis reported 640 plague cases in Senegal in 1944, although these might include cases outside of Dakar that Durieux ignores. D. H. S. Davis, "Plague in Africa from 1935 to 1949: A Survey of Wild Rodents in African Territories," *Bulletin of the World Health Organization* 9 (1953). Davis worked at the Plague Research Laboratory of the Union Department of Health in South Africa.

remained unclear. In 1953, Pollitzer reported on his research the previous year that discredited the belief that plague could be transmitted through the air, through direct contact, or through "contaminated inanimate objects."[351] These discredited beliefs about plague transmission were at the root of some of the ubiquitous forms of epidemic responses: isolation of the infected or people suspected of having been in contact with the infected, and destruction of homes and property. Even in his 1953 article, though, Pollitzer remained adamant that it was possible for a plague epidemic to exist without a rodent epizootic.[352]

Calling attention to the unreliability of demographic statistics, Leo Kartman (2nd Lieutenant, Sanitary Corps, Army of the United States) noted in his report that numbers of plague cases in official reports were "necessarily conservative for it is well known that many fatal plague cases among the Negroes of the Dakar region are never recorded since the bodies are secretly buried by relatives motivated by certain economic and social factors."[353] Kartman theorized that two different species of flea may have been responsible for the spread of plague in Dakar in 1944: *Xenopsylla cheopis* (the most common species of flea found on rats, but not commonly found on people or in homes) being the main vector from rats to humans and *Synosternus palladius* (the most common

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[350] ANOM, 14 Mi 1850, 2 G 44/4, Durieux, "Rapport sur le Fonctionnement Technique de L'Institut Pasteur de L'Afrique Occidentale Française en 1944."

[351] Pollitzer, "Plague Studies." p. 133. Transmission through the air referred to the infection being carried by the wind or lingering in the atmosphere, not being transmitted by a person infected with pneumonic plague.

[352] Pollitzer, "Plague Studies." An epizootic is an epidemic among an animal population. Currently understanding of plague is that a human epidemic cannot happen without a preceding epizootic.

[353] Leo Kartman, "A Note on the Problem of Plague in Dakar, Senegal, French West Africa," *The Journal of Parasitology* 32, no. 1 (1946). p. 30.

species of flea found on people and in homes, also found on rats) serving as a vector from human to human and from rat to human.

Rat destruction came under scrutiny in examinations of the 1944 outbreak. Plague researcher Pollitzer argued that rat destruction could be counter-productive: "One must fear that the procedures employed hitherto for rat destruction play an ambiguous role in the control of urban plague, since they also often act as a stimulus for a high compensatory fertility among the survivors."[354] Georges Girard, Head of the Plague Service at the Paris Pasteur Institute, did not believe that rat destruction campaigns were the best way to combat a plague outbreak:

> The battle against the rat has long been the dominant preoccupation. It retains its importance, but logically gives way, in case of an emergency arising from an epidemic or the menace of an epidemic, to the battle against the vector agent. It has been proven that the systematic killing of insects by modern insecticides brings about a spectacular diminution in the pulicose index, and, by consequence, a rapid cessation of cases of human and murine plague.[355]

The plague vaccination campaign of 1944 went smoothly, according to Durieux. He noted that Europeans especially had frequent reactions to the vaccine, but that the reactions were short-lived. Durieux reported that for a vaccinated population of 142,103 there were 149 cases of plague. For a non-vaccinated population of 15,000 there were 403 cases of plague. Thus, the effectiveness of the vaccination at preventing plague was

[354] Pollitzer, "Plague Studies." p. 141.
[355] Georges Girard, "Plague," *Annual Review of Microbiology* 9 (1955). p. 267.

much improved from 1929. However, among the vaccinated who did catch the disease, the mortality rate was roughly the same as those who had not been vaccinated.[356]

A significant departure in the response to the plague outbreak of 1944 was the presence of DDT-equipped U.S. military forces in Senegal and their cooperation in the effort to stop the outbreak.[357] Reports of the 1944 epidemic generally agree that what stopped the outbreak was the application by American troops of the insecticide DDT (invented in 1939), although Davis postulated that plague might have been declining naturally:

> In Senegal it seems probable that the extensive DDT-campaigns initiated to cope with the epidemic in 1944 played a significant part in the disappearance of plague from Dakar and its environs, although the low incidence recorded during the preceding years (1936-42) could be interpreted as indicating that natural causes were responsible.[358]

The French medical officers were happy to cooperate with the Americans so that Dakar could be treated with DDT, but political officials were resistant to cooperate with the Americans, who they saw as usurpers.[359] Without the Americans and the DDT, the political officials would have had to attempt to deal with the 1944 outbreak as they had dealt with the others, but why did they keep trying the same methods? It is possible that the inability to measure the effectiveness of their methods very precisely, especially regarding morbidity and mortality figures, made it easier to assume that their "tried and

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[356] ANOM, 14 Mi 1850, 2 G 44/4, Durieux, "Rapport sur le Fonctionnement Technique de L'Institut Pasteur de L'Afrique Occidentale Française en 1944."

[357] Kartman, "A Note on the Problem of Plague in Dakar, Senegal, French West Africa."

[358] Davis, "Plague in Africa." p. 668.

[359] See Myron Echenberg, *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914-1945*, ed. Isaacman, Social History of Africa (Portsmouth, NH: Heinemann, 2002). pp. 227-232.

true" methods were effective enough. It is also possible that the Medical Service did not perceive their anti-epidemic measures as the problem, but the people they were trying to protect and the people responsible for implementing the measures.

Comparing the Plague Outbreaks

Most administrators believed that health measures in general and anti-epidemic measures in particular benefited the African population, and were confused when the African population did not agree with them. The public health measures that the Native Medical Service employed to combat the 1929 outbreak and the 1944 outbreak were similar to those used in the 1914 outbreak, based on isolation, destruction, vaccination, and rodent extermination. These anti-plague measures were not very effective – French West Africa experienced cyclical plague outbreaks despite them. It was not until DDT in 1944 that there was any way to effectively stop plague outbreaks.

The political power that residents of the four communes were able to exercise in 1944 was severely constrained compared to that of 1914 or even in 1929, although neither *originaires* nor subjects resisted health measures in 1929 on the scale that they had in 1914. In 1914 *originaires* expected to be treated as French citizens and exercised their franchise, led by a brand new promising black deputy, Blaise Diagne, who was willing to make the rhetorical connection between plague measures and Lebou land rights. In 1944, not only was there no leader willing to make a similar argument, but

Vichy had repressed voting rights in the four communes and there was not anything like the popular resistance to anti-plague measures that there had been in 1914.[360]

Segregation was a popular idea among French administrators throughout the era, although they had more success forcing people to move during epidemic outbreaks than during non-epidemic periods. Controlling the increase of the "floating population" in cities, especially Dakar, also concerned administrators and was related to segregation in that one of the excuses for segregating and relocating the African population out of the city center was that it was an effort to purge elements of the "floating population" from the city. Despite recurring complaints about the "disorderly influx" of people into Dakar, administrators never found an effective way of stemming the tide.

[360] Echenberg argues that there was not much resistance to anti-plague measures in 1944 because people had become resigned to the measures: "Bubonic plague, and the largely futile French control measures that accompanied it, had become a painful fact of life, to be endured in the same manner as drought, malaria, rule by foreigners, and wartime hardships." Echenberg, *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914-1945*. p. 243.

Chapter 6: The Native Medical Service, 1930-1944

> A well-conducted surgical intervention, resulting in an obvious transformation, strikes the black who, in extolling the merits of the operation, is the best propaganda agent of the surgeon, and [afterward] the sick do not hesitate to travel dozens of kilometers to have a curative operation.[361] – A. Sicé, 1943

The Native Medical Service in French West Africa bolstered France's imperial reputation because it represented the best that French colonialism had to offer subject peoples. Many colonial administrators and colonialist thinkers believed that the mutual benefits to both colonized and colonizer showed clearly in the Medical Service. The Medical Service was envisioned as a refutation of the colonial pact, to refer to Sarraut's formulation, or at least as evidence that the nature of the colonial relationship had changed since the early days of French imperialism.

This chapter argues that the Native Medical Services remained largely unchanged through the 1930s and 40s, in that their goals, methods, and problems were similar to those from earlier decades. The goals were to increase population, develop human resources, and to spread French culture. Long-standing specific goals included recruiting more African personnel and shifting the focus of services from treatment to prevention.

Although the Native Medical Service itself changed little, the atmosphere it operated in changed significantly – France found itself defending its cultural and sentimental connections with its colonies to other Western powers as the Second World

[361] A Sicé, "L'Assistance Médicale en Afrique Noire Française," *Africa: Journal of the International African Institute* 14, no. 1 (1943). p. 29-30.

War drew to a close.[362] Still, the best the Medical Service could do to support France's image as a beneficent imperial power was to continue its long struggle to achieve greater effectiveness with its public health measures.

Evaluating the "Sanitary State" of Senegal

In the annual reports, the opening "sanitary state of the colony" summary was generally the place in the report where public health and disease problems would be introduced. In the early 1930s health reports found multiple threats to public health among the African population. These various endemic problems were grouped under the general heading "defective hygiene." Among the types of defective hygiene were what reports referred to as "clothing hygiene," and "nutritional hygiene": "As during preceding years, the native remains subject to trouble resulting from the total lack of clothing hygiene and nutritional hygiene."[363]

> Thus, the problem of water and food cannot be resolved until after a patient education and the beginning of regular school attendance. At the moment, the native drinks what water he can, without treating it first. This practice, as we have seen, causes problems along with the fact that no discrimination is made between water sources regarding the impurities that are dumped in them constantly, even those where people draw their drinking water.[364]

Then there was "habitational hygiene." The French did not approve of the ordinary "huts" and "sleeping pallets" that most Africans lived in and slept on because of their

[362] D. Bruce Marshall, *The French Colonial Myth and Constitution-Making in the Fourth Republic* (New Haven: Yale University Press, 1973).
[363] ANOM, 14 Mi 1738, 2 G 31/16, Annual Report.
[364] ANOM, 14 Mi 1738, 2 G 31/16.

susceptibility to fleas, but the French administration did not provide any alternative homes or different building or sleeping materials for Africans.

> Habitational hygiene brings up similar problems, outside of important posts where a certain proportion of natives live in masonry structures that are sometimes outfitted like European [homes], the vast majority of houses are made up of huts. There can be no question of installing screens [it is impossible], and individual protection with a mosquito net is practically non-existent. Moreover, the native sleeps on a palette on the ground. Because of this, he is particularly exposed to fleabites from fleas that find the sandy floors of the huts to be a favorable environment.[365]

Finally, there was "collective hygiene," which straddled the categories of public health risk and personal health risk: "The application of collective hygiene measures encounters little resistance from the native population whose atavistic customs are too often surprised and troubled by these measures."[366]

> The removal of harmful substances is slowly beginning to undergo an evolution. Due to the constant activity of our medical personnel, and particularly since the mobile groups started working, the visits to doctors, and nurses and hygiene agents are growing in rural villages. Advice is given to notables and village chiefs about burying or burning garbage. The residents were not convinced after the first visit, though. Upon each visit our personnel had to do the work itself and little by little the advantages of our methods became apparent and the natives adopted them.[367]

Despite the picture of pervasive public health problems that the reports painted, they maintained that "The sanitary state of the colony [Senegal] was satisfactory for both Europeans and Natives."[368] Themes of frustration with "backwards" Africans and

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[365] ANOM, 14 Mi 1738, 2 G 31/16.
[366] ANOM, 14 Mi 1746, 2 G 32/24, Central Native Hospital Annual Report.
[367] ANOM, 14 Mi 1746, 2 G 32/24.
[368] ANOM, 14 Mi 1738, 2 G 31/16, Sanitary and Medical Services General Inspection Annual Report.

contempt for their "ignorance" run through the reports: "In effect, when we try to ameliorate the native's quality of life, we generally have to impose our own methods on him. He does not understand the use of many of these measures by himself, as they are too far beyond his frustrated epidemiological knowledge."[369]

Native Medical Service Facilities

Native Medical Service posts were concentrated in population centers, and although this was a strategy to reach the most people possible, it ran counter to the Service's goal of focusing its work on public health and preventive medicine. Many of these facilities concentrated their energy on dispensing medical treatment (i.e., curative medicine) and doctors and other medical workers generally did not want to leave their posts to make tours of their area or be assigned to rural posts.

Health services focused on "urban agglomerations" for four reasons. First, it was easier to reach people in a denser settlement. Second, public health ideology held that cities were most in need of clean up because they were inherently dirty. Third, the Europeans generally lived there and expected medical attention to be at hand, even though the Native Medical Service was not meant to serve them. Fourth, medical services concentrated on urban areas not because the state did not care about rural areas, but because they did not have the resources to reach them, which was a limitation that they never overcame.[370]

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[369] ANOM 14 Mi 1738 2 G 31/16

[370] Catherine Boone, in *African Distinguished Lecture Series* (Austin, TX: African Studies Center, University of Texas, 2010). Boone made the point that African states did not (and do not) ignore rural areas because they are unimportant, on the contrary she argued that rural areas are very important to central governments.

In the interest of preventing epidemic disease, though, some services were most effective in urban areas, like the District Hygiene Service in Dakar. It worked to prevent epidemic disease outbreaks by carrying out vaccinations, disinfections, killing rats and larvae, monitoring deaths, and inspecting new construction, "These services being specially reserved for the urban agglomeration."[371] As personnel, it had 3 doctors, 10 European gendarmes, 5 auxiliary gendarmes, 55 hygiene guards and a team of 40 laborers.

Mobile hygiene teams had been a popular idea for some time, but always had trouble getting off the ground, and 1939 was a particularly bad year for them. Of Dakar's three mobile hygiene service teams, only one was working in 1939. It did anti-larval rounds daily as well as "hygienic surveillance" of Dakar and the surrounding villages. The team was made up of one European gendarme, one hygiene agent, and two African laborers.[372]

There were not many lazarettos in French West Africa, and those that did exist were typically located near urban areas. In 1933 the Native Medical Service began to organize a rural lazaretto for plague outbreaks. It was called a Medical Assistance Section and was designed to go to villages nearby in the instance of an epidemic outbreak or to treat rural patients. It was "in a position to become a veritable *Lazaret de campagne*, established under tents for treatment on the spot of pestilential affections."[373]

Although the Native Medical Service wanted to expand lazarettos into rural areas, they remained overwhelmingly urban. There were two lazarettos in the Dakar area in

[371] ANOM, 14 Mi 1754, 2 G 33/9, Dakar Health Service Annual Report.
[372] ANOM, 14 Mi 1804, 2 G 39/9.

1939. One near Ouakam that consisted of 8 hospital buildings, 2 disinfection buildings, 1 visiting building, a guard building, and a store. The second lazaretto was in Rufisque and had 1 hospital building and 1 disinfection building.[374]

By 1945, the Native Medical Service was still in the early stages of establishing rural lazarettos and motivating medical workers to do tours of their assigned regions. In Thiès, a meningitis outbreak from November 1945 to May 1946 was the catalyst for making rural lazarettos near the different areas affected by the outbreak and for having a nurse make rounds to the villages of his assigned sector.[375] A single nurse ran each rural lazaretto, sometimes with the assistance of one hygiene worker.[376]

In addition to developing mobile hygiene teams and rural lazarettos, the Native Medical Service was constantly striving to open more medical centers and bring in more patients. In 1932, the number of new consultations in Native Medical Service dispensaries had risen considerably: to 348,070 from 243,613 in 1931. The annual report stated that: "The higher number of consultations is not an indication of a bad year; instead it is the result of increased activity in the medical services: opening new dispensaries, extending the work of the protection of infancy, [and] organizing regular

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373 ANOM, 14 Mi 1754, 2 G 33/9.

374 ANOM, 14 Mi 1804, 2 G 33/9.

375 Facilities in 1946: 1. Hospitals: Principal Hospital, Central African Hospital (Dakar), Colonial Hospital (Saint Louis). 2. Medical Centers: military formations comprised of hospitalization facilities and run, in principle, by a European or African Doctor. There were 5 principal medical centers and 26 secondary medical centers. 3. Dispensaries: formations without hospitalization facilities. Some dispensaries, however, had small buildings where the acutely or chronically sick could stay, as well as buildings for contagious patients. 4. Maternities: all attached to medical centers, but some centers did not have maternities yet (Kédougou, Linguère, M'Backé, Bambey, Bakel, Foundiougne, Sokone, Cossas, Kaffrine, Podor, Kolda). 5. Peuriculture Dispensaries: "The only dispensaries that merit the name are those of Saint Louis (N'Dar-Toute Goutte de Lait) et de Ziguinchor (Boucotte)." 6. Leproseries: Peycouck (Thiès)150 beds, Sovane (Fatick) 90 beds, Fadiga (Kédougou) 15, Djibeler (Ziguinchor) 50, Sedhiou 20, Bignona 24, total 349 beds. ANOM, 14 Mi 1871, 2 G 46/11, 1946 – Senegal, Service de Santé Rapport Annuel.

consultations outside of medical centers."[377] Still, even though the report labeled 1932 a satisfactory year for public health, the problems of malnutrition and the effects of the international depression could not be ignored: "The greater morbidity of certain under-nourished populations due to the economic crisis makes it necessary to create new sanitary posts, in order to reinforce the activity of the facilities that already exist to further the social evolution of indigenous [people]."[378]

In 1935 the Colonial Ministry sent out a Circular trying to establish more effective rules for doctors to make tours of their areas and to track patients better by keeping a medical register.[379] Still, a problem for the Native Medical Service was that both European doctors and Africans trained at the Dakar School saw themselves as medical professionals, not public health agents. The state and the Service itself, however, expected them to fulfill both roles of medical professional and public health agent, and did not differentiate much between these roles in its rhetoric, aside from stressing the importance of preventive medicine as a general principle. The problem was that most medical workers were not interested in being public health agents.

Native Medical Service Personnel Evaluations

Personnel evaluations reveal both what qualities were desirable in European and African medical workers and what the main problems were with the performance of the medical workers. European doctors were supposed to set a good example for their underlings, and direct their work appropriately. On the other hand, African doctors were

[376] ANOM, 14 Mi 1871, 2 G 46/11.
[377] ANOM, 14 Mi 1738, 2 G 31/16, Annual Medical Report.
[378] ANOM, 14 Mi 1746, 2 G 32/24, Annual Medical Report.

meant to be "capable auxiliaries," "intermediary interpreters," "aides for everyday service," and "substitutes in need for centers too far to be visited daily" – but that was just the medical side of their job, which had an equally important (to the civilizing mission of France, at least) component of the "social role." African doctors, and other African medical workers, were evaluated based on their fulfillment of both parts of the job.

European Evaluations

After completing their medical training in France, the young doctors still had to adjust successfully to their new environment and prove themselves to be dedicated as they began work in West Africa. Their academic records did not consistently correspond to their success in the field. In 1936 the Governor General remarked "it isn't always the top students who give the best practical results on the job, are the most active, and are the most devoted in the bush. The poor students often turn out to be perfectly capable doctors at their posts or on the prospecting teams; showing levels of activity, of devotion, and of vigor that are worthy of praise."[380] Their laxness during medical school did hold them back, though: "Some of the less successful students have incomplete professional knowledge. They are the first to admit their insufficiency in certain materials; once in the middle of their professional responsibilities, they regret having taken school too lightly… and would like to be able to do an internship at Marseille."[381]

[379] ANOM, 14 Mi 1769, 2 G 35/35, Medial and Sanitary Services General Inspection Annual Report.
[380] ANOM, 14 Mi 1779, 2 G 36/43, Medical and Sanitary Services General Inspection Annual Report.
[381] ANOM, 14 Mi 1779, 2 G 36/43.

Also essential to a positive evaluation as a doctor was an ability to communicate well in French. In 1938 the Governor General had assessed the foreign doctors that had been recruited from Austrian and German immigrants as not acceptable: "their rudimentary knowledge of French was the main obstacle to their success in the native milieu."[382] The Russian Hygienists, though, were apparently demonstrating adequate ability in French language:

> The detached military doctors showed themselves to be overall up to the tasks that the circumstances brought. The foreign doctors are of much lesser value. What is more, some of them have far too little knowledge of the French language, which makes their service less effective. This is only regarding recent hires. The Russian hygienists have done satisfactory work for several years in West Africa and their contracts were renewed.[383]

Criticisms of facility either with spoken or written French are the most common in negative evaluations of all medical personnel, not just doctors.

"The contractual doctors have given uneven performances, according to their previous specialization. Generally, they had difficulty adapting to a new environment. One must recognize that the circumstances, the material conditions, and the continually rising cost of living haven't made their acclimation easier."[384] This evaluation, while acknowledging the less than ideal working and living conditions for doctors, gives little indication of whether the heads of the Native Medical Service thought these conditions affected the resentment of doctors (and other medical personnel) about being expected to perform the duties of a hygienist.

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[382] ANOM, 14 Mi 1804, 2 G 39/9.
[383] ANOM, 14 Mi 1804, 2 G 39/9.
[384] ANOM, 14 Mi 1871, 2 G 46/11.

African Evaluations

In the 1930s and 1940s, the social role was still important and a source of complaints in evaluations of African medical workers. The other important areas of negative evaluations were in dedication to the job and in education.

Dedication

The nature of complaints about African medical workers' dedication centered on insufficient enthusiasm about the preventative (as opposed to curative) orientation of the Service: "[M]idwives and visiting nurses … only adapt slowly to the new orientation of the Native Medical Service: aside from not working hard enough, they have too great a tendency to ask for time off for personal reasons."[385] Not all of the criticisms of African personnel were devoid of admission to official responsibility, though. This criticism of professional laziness: "Possessing sufficient professional knowledge, those [African midwives] belonging to younger graduating classes have very vague notions of their professional responsibilities," was followed directly by an explanation of the role of the Service in the problems for medical workers: "On the other hand, from a technical point of view, it doesn't seem like a good idea to assign young midwives to posts without a Maternity ward. To do deliveries without a worktable, and track the growth of infants without a baby scale cannot, in the area of obstetrics and childcare, facilitate the work of our young propagandists. Material progress must, here as in other areas, accompany the cultural and scientific evolution if we don't want to give the Medical Service an

[385] ANOM, 14 Mi 1776, 2 G 36/22, Senegal Health Service Annual Report.

anachronistic and retrograde image."[386] The reference to midwives as "propagandists" was indicative of the extent to which the social role of medical workers was still important.

The hesitation on the part of the nurses to perform as the French supervisors expected them to reveals a gap between what the nurses believed their duties to be and what their duties were as the French defined them to be: "Several of these young people were convinced that being a nurse consisted of wearing an impeccably clean shirt, like those the doctors wore, and primarily performing writing tasks while avoiding interaction with the sick as much as possible."[387] The gulf that separated the visions of the recently graduated medical students of their jobs and the expectations of their European supervisors probably reflected a failure in the education and training of the young workers – being instructed in curative medicine and practicing with patients in hospital and clinic settings contrasted with what the Service wanted them to do as professionals.

Like midwives and nurses, young doctors did not want isolated posts:

> The older ones are more disciplined and disinterested than the young ones graduating from the Dakar medical school. The latter too often show little enthusiasm going to their assigned post. Moreover, convinced that they are professionally superior to the older graduates from the Dakar School before 1939, they demand as a right to be assigned to Hospitals or cities … We are trying to maintain cohesion among our African collaborators and to avoid a "schism" that would be harmful to the general interest of the Health Service.[388]

[386] ANOM, 14 Mi 1871, 2 G 46/11. Senegal Health Service Annual Report.
[387] ANOM, 14 Mi 1804, 2 G 39/12.
[388] ANOM, 14 Mi 1871, 2 G 46/11.

In 1940, the pre-medical education offered at the William Ponty school was reorganized so that more advanced classes in medicine could be offered there and students would be better prepared when they entered the Dakar School.[389]

Many of the same complaints Governor General Carde voiced in 1927 reappear throughout the 1930s and 1940s. Despite being aware of some of the problems, the Native Medical Service was unable to resolve them. It was partially due to a misunderstanding on the part of French directors of the Service of the medical workers' own perspective on the point of their jobs. It was a perspective not only formed by personal ambition, but also by the nature of the training the African doctors and nurses received, which was in curative medical care.

Education

In 1933, the Medical Service was actively trying to improve the quality of its nurses, who were one of the most numerous types of medical workers: "Measures have been taken to better the recruitment of native nursing personnel: only those candidates with a diploma or who can offer proof of corresponding general instruction will be admitted."[390] Nurses' educational shortcomings caused a great deal of "disorder" in the execution of the various tasks of the Medical Service. The Governor of Senegal issued a decree October 14, 1938 in an effort to "train real nurses in the district." Eighteen nurses managed to finish the two-year program out of the twenty-one who were admitted.[391]

Even in 1946, though, the quality of nurses was unsatisfactory: "The professional

[389] ANOM, 14 Mi 1820, 2 G 40/27, Dakar Medical School Annual Report.
[390] ANOM, 14 Mi 1754, 2 G 33/19, Dakar Health Services Annual Report.

level of most of the nurses (male and female) currently in service continues to improve slowly but few among them are currently capable of holding an isolated post and it is indispensable that they be directed periodically, and often, by the European or African doctor who oversees them."[392] Male student nurses were supposed to have a Certificate of Primary Studies, and in 1946 six of the nine student nurses had one. Three of the female nursing students had their Certificate.[393]

Shortcomings in the category of dedication amounted to a widespread dislike of being assigned to isolated posts and an equally widespread difference of opinions between African medical workers and their supervisors over what exactly their jobs entailed. Negative evaluations that focused on education point to the severe lack of schools at all levels. Workers with little or no education were hard pressed to meet the demanding standards of the Medical Service.

Native Medical Service Personnel Numbers

The Governor General complained of a severe lack of doctors in 1936, saying that there were far too few European doctors to "carry out all the duties the Assistance requires of them," and too few African medical personnel also.[394] Charting the rise and fall of personnel numbers demonstrates their changeability and their insufficiency for the needs of the Medical Service. From 1931 to 1946, European medical personnel numbers fluctuated significantly, but started and ended close to the same number. Similarly, the numbers of European doctors fluctuated dramatically, but ended slightly up in 1946, by

[391] ANOM, 14 Mi 1805, 2 G 39/12, Dakar and Surrounding Areas.
[392] ANOM, 14 Mi 1871, 2 G 46/11, Senegal Health Services Annual Report.
[393] ANOM, 14 Mi 1871, 2 G 46/11.

16. African medical personnel and African doctors both had dramatic gains over the period.[395]

[394] ANOM, 14 Mi 1779, 2 G 36/43, AOF Sanitary and Medical Services Inspection Annual Report.

[395] Numbers of both European and African personnel declined from 1931 to 1936, from 216 Europeans to 179 and from 287 Africans to 185. Then, numbers of European personnel increased until 1942, up to 378, but by 1946 European personnel numbers had not increased over the 1938 numbers – with 214 in 1946. African personnel numbers continued to increase until 1944, to 669, with a small hiccup in 1943, a loss of 20 people resulted in 589 remaining, and then declined until 1946 to 617. The 617 African medical personnel in 1946 were still many more than the 204 African medical personnel in 1938. Between 1940 and 1941, European medical personnel went from 305 to 250 while African medical personnel went from 544 to 505. The number of European doctors, however, increased from 228 to 273. African doctors increased slightly, from 229 to 232. From 1942 to 1943 there were significant increases in the numbers of European and African medical personnel, from 250 to 378 for Europeans and from 505 to 609 for Africans. The numbers of doctors also increased: from 273 to 306 for Europeans and 232 to 251 for Africans. In 1943 the numbers of European medical personnel declined again almost as dramatically as they rose in the previous year: they dropped from 378 to 270. The numbers of European doctors were similarly affected, dropping from 306 to 198. African doctors made a small gain, going from 251 to 254. European medical personnel sustained a much smaller los in 1944, going from 270 to 261. African medical personnel made up for the European loss to some extent that year, growing from 589 to 669. European doctors decreased by 10 to 188, but African doctors rose from 254 to 302. European medical personnel declined by 19 in 1945, to 242. The next year European medical personnel lost 28 to end at 214 in 1946. African medical personnel lost 15 people in 1945 and 37 more in 1946 to end with 617. Between 1944 and 1946, Europeans lost 3 doctors the first year and 19 the second to end in 1946 with 166. African doctors lost 5 the first year and 32 the second to end in 1946 with 265.

Table 13 Medical Service Personnel (not including subordinate personnel)[396]

	European Medical Personnel	African Medical Personnel	European Doctors	African Doctors
1931	216	287	150	94
1932		313		107
1933				
1934				
1935	209			
1936	179	185	133	167
1937				
1938	226	204	180	183
1939	282	244	212	221
1940	305	544	228	229
1941	250	505	273	232
1942	378	609	306	251
1943	270	589	198	254
1944	261	669	188	302
1945	242	654	185	297
1946	214	617	166	265

Ricou and the Native Medical Service in the 1940s

In the early 1940s the Native Medical Service was reorganized in an attempt to correct longstanding problems and inefficiencies. Doctor Ricou, Inspector General of Sanitary and Medical Services of French West Africa, oversaw this reorganization in 1942. He wrote two reports describing the changes to the Native Medical Services in 1942: the first in January and the Second in August. The changes that he described in these reports were meant to address problems of uneven service across urban versus rural areas, redundant and over-compartmentalized services, and persistent urban health problems.

[396] ANOM, 14 Mi 1738, 2 G 31/16; 1746 2 G 32/24; 1779 2 G 36/43; 1794 2 G 38/11; 1804 2 G 39/9; 1816 2 G 40/12; 1826 2 G 41/5; 1835 2 G 42/7; 1849 2 G 43/57; 1850 2 G 44/4; 1866 2 G 45/49; 1870 2 G 46/6.

Figure 6 Roume Polyclinic, Dakar[397]

Uneven medical service

The problem of medical care being concentrated in urban areas and spread very thinly over rural ones was met by reorganizing the assignment of medical personnel and relying more heavily than before on Mutual Aid Societies (Native Provident, Aid, and Agricultural Mutual Aid Societies). Three changes comprised this reorganization. First, there would be two doctors instead of one per circle or medical region. One would stay at the medical center in the capital of the circle and the other would travel around. Second, the health services would create more mobile groups to fight against "dominant

[397] From http://www.asnom.org/image/620_ami/88_17_polycli_dakar.jpg.

African pathologies." Third, there would be "Medical Sectors" added to the Mutual Aid Societies.[398]

Mutual Aid Societies supported themselves with subscription fees from farmers and pastoralists (who were required to belong). They carried out small-scale public works such as building dams and schools, as well as helping farmers secure seed stock in lean times.[399] The Mutual Aid Societies were responsible for the social action needed to preserve public health, including overseeing issues related to dwellings, nutrition, drinking water, clothing, evacuation of waste water, decontamination, and clearing undergrowth: "in a word, everything regarding the general hygiene of the village and its inhabitants."[400] The Mutual Aid Societies were also supposed to establish rural "Provident Houses for Mother and Child" which would provide education for mothers, daycare for children, and care for the poor and orphans. Midwives or auxiliary nurses ran these provident houses under the supervision of the European Social Assistance and in collaboration with the Native Medical Service.

Ricou warned the Mutual Aid Societies to avoid the primary problems for medical posts in the hinterlands. These problems centered on the quality of the nurses staffing the posts and the isolated condition of rural posts: recruiting poorly trained nurses, failing to coordinate medical services with regional bodies, and insufficient oversight of nurses that would leave them to act on their own judgment, "which is rarely sound in general."[401]

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[398] ANOM, 14 Mi 1826, 2 G 42/7, "De la Réorganisation des Services Sanitaires et Médicaux de l'Afrique Occidentale Française" 1942 – August 14, 1942 by the Inspector General of Sanitary and Medical Services of AOF, Dr. Ricou.

[399] See K. E. Robinson, "French West Africa," *African Affairs* 50, no. 199 (1951), Daphne Trevor, "Native Provident Societies in French West Africa," *The South African Journal of Economics* 5, no. 3 (1937).

[400] Ricou, p. 51.

[401] Ricou, p. 51.

Finally, Ricou stressed that the surveillance and screening activities of the medical sectors in the Mutual Aid Societies were not to be confused with the actions of the dispensaries and maternities. The strictly medical part would remain the domain of the Native Medical Service.

Poorly organized services

To address the problem of redundant and otherwise poorly organized services, Ricou called for an overhaul of existing services to standardize them across the West African region. First, there would be a unified *Direction Générale de la Santé Publique en Afrique Occidentale Française* for the entire French West African region. The Director General of Public Health would take over the functions of the Inspector General of Medical and Sanitary Services. He would serve as the technical counselor to the High Commission on questions regarding public health. He also was the head of the Maritime Sanitary Police, anti-endemic and epidemic disease campaigns, the Native Medical Service, and Hygiene and Public Health in French West Africa. He was directly responsible to the High Commission, and in charge of all personnel of the health services. He was also the technical and administrative authority over the Dakar Medical School.

Ricou wanted to integrate the Leprosy and Trypanosomiasis Services into the Autonomous General Trypanosomiasis Service. Even though the existing organization of separate services had some advantages for its quick and effective action, there were also drawbacks, like over-specialization and the fact that the services were only minimally supervised. He brought these services into the new federal system so that they could be put under the same sort of supervision and control as other services. The resulting to

Autonomous General Trypanosomiasis Service needed to adapt to "contemporary conditions." Larger numbers of people with sleeping sickness had to seek treatment in hospitals because there was little to no fuel for vehicles, rendering the mobile sleeping sickness services practically non-operational, thus sending more of the afflicted to medical centers. The Native Medical Service closed centers in areas where sleeping sickness was not as widespread and redistributed those personnel and materials.

Urban Hygiene Services would also be reorganized along the lines of the decree for the city of Bamako, Soudan (modern-day Mali) of April 25, 1941 from the study by the General Inspection of Sanitary and Medical Services in December 1941. Ricou insisted upon two points: establishing an urban hygiene team and having one such team for every 10,000 inhabitants. He strongly encouraged other colonies to follow Soudan's example. Urban hygiene in Dakar was of particular importance in the new federal system, since it was the capital and a showpiece of the accomplishments of French colonial rule in West Africa.

Persistent urban health problems

The proposed solutions to this problem both dealt specifically with Dakar. The "Medina Clean-up" was headed by the Chief Doctor of Dakar's Hygiene Services. Its main goals were to improve the evacuation of wastewater and to build 42 new public restrooms. There was a budget of 18 million francs for the restroom project. In addition, Dakar proper was slated to receive 15 new public restrooms with a budget of 1,750,000 francs. The second proposal was for a Social Hygiene Institute of Dakar, a role that would be filled by the Roume Polyclinic.

The Roume Polyclinic

As it stood when Ricou wrote his report, the Polyclinic in the Medina was a big multipurpose dispensary for doctor visits and treatment. It was a two-story building with the second story entirely reserved for mother and child healthcare of all sorts. Other medical functions took place on the ground floor. African patients made extensive use of the Polyclinic, with hundreds of patients coming through each day. Patient numbers from 1937 – 1941 were from 60,000 to 71,000 and visits were from 217,000 to 328,000, an estimated 800 visits per day. Ricou wanted to build two new buildings in the immediate vicinity of the Polyclinic: the Mother and Child building and the Offices for the Municipal Hygiene Service building. The entire complex would be called the Social Hygiene Institute. This Institute would be a model for other social hygiene institutes in other capitals of the French West African colonies.

There were plenty of subordinate workers at the Polyclinic, such as students doing internships, and male and female nurses, but there were very few European doctors: "There are one or two doctors, who already have hospital duties, which take up most of their time, who take care of eyes and ear-nose-throat at the Polyclinic as often as they are able, and always on the run."[402] They ran those services mostly theoretically, in fact the ear-nose-throat specialist was totally engaged at the hospital and had cancelled his visits at the Polyclinic a while before Ricou wrote the report. Ricou lamented that there was only one doctor who was really assigned to the Polyclinic, and he had other responsibilities as well. Aside from those, there was one other doctor, who was also an

[402] Ricou, p. 41.

assistant to a Chief of Services at the Central Native Hospital and who taught at the Medical School. He saw patients every morning, ran the administration of the Polyclinic, and guided the auxiliary personnel. In short, Ricou concluded, no matter how good or how dedicated the doctors were, there were too many patients for them. He argued that a larger establishment was urgently needed and added that the Polyclinic was an invaluable teaching tool.

In addition to building the new buildings, Ricou wanted to reorganize the Polyclinic to be more efficient. It would no longer be open to treat "just anything." Instead, it would offer four specialized services: anti-venereal, anti-malarial, ear-nose-throat and eyes. These consultations would take place on the ground floor. The second floor would house a bacteria and blood laboratory and the Medical Inspection of Schools service.

The Municipal Hygiene Service and Offices would be moved to a building next to the Polyclinic, while the stores and supplies needed for the service would be put in the *Lazaret de la Ville et du Port*, which had not yet been built. Ricou thought it a shame that a proper lazaretto did not exist in Dakar, and suggested that they could build one with isolation huts as well as a lot of storage. He wanted a "truly modern sanitary installation, something worthy of an imperial capital and that responds to the requirements of international law and the Sanitary and Maritime Police."[403] With Dakar being the federal capital of French West Africa, it was important that it be a showcase of French civilization and accomplishment in every way possible.

[403] Ricou, p. 46.

During the 1930s and 40s the Native Medical Service made progress in attracting more patients and improving the services it was able to offer in urban locations, especially Dakar. Medical officials cooperated with the American military to secure DDT in order to bring a decisive end to the 1944 plague epidemic. Despite this progress, the Service was still enmeshed in a losing struggle to bring medical service to all of French West Africa. With the United States and the Soviet Union expressing their opposition to colonial empires, France clung to its record of dedication to improving the health of the people in its colonies.

Epilogue: France's International Reputation as a Colonial Power

From 1930-1944, the French increased the energy they spent on massaging the international reputation of France as an imperial power. The relationship between France and its West African colonies was strained by the pressures of the Second World War, which made France's international reputation more important and also highlighted the importance of the loyalty of France's African citizens and subjects. After the war, France scrambled to gain international support for the indissolubility of Greater France.

France's imperial reputation encompassed both its international reputation with other European countries, the United States, and the Soviets, and its relationship with its West African colonies and the people living there. Both the 1931 Colonial Exposition in Paris and the 1944 Brazzaville Conference demonstrate that France's international reputation was bound up with its colonial policies.

The 1931 Exposition showed that colonial France valued the people of its colonies even more than it valued the colonies' potential as markets or sources of raw materials. French politicians wanted to coopt the millions of people living under colonial oppression into Greater France to inflate the importance of continental France, but they did not want these colonial populations to have a real voice in French government. Brochures and descriptions of the Exposition billed it as a sort of multi-cultural celebration.

> The admirable Vincennes Exposition, which was the last great feat of Lyautey, allows visitors to appreciate the prodigious diversity [of the colonies]. Every

> stage of humanity, every type of economy, all religions and philosophies are represented. All races, too.[404]

Hubert Lyautey served in the Army under Gallieni in Indochina from 1894 – 1897 and then went to Madagascar (where Gallieni had recently become Governor General) from 1897 – 1900, where he played an important role in the pacification of the island. He served as the Military Governor of Morocco from 1907 – 1912, and then as the Resident General after Morocco became a protectorate, from 1912 – 1925. From 1927 - 1931 he organized and prepared the Colonial Exposition to publicize France's accomplishments in its colonies: "The organizers of the AOF Section planned to present to visitors the country, the native peoples and civilizations, economic and social life, the conditions of the *mise en valeur* and above all, to show the oeuvre that France has accomplished."[405] It was also an opportunity to show how the cultural and racial diversity of France's subject peoples made "Greater France" an admirable collection. An official summary of the Exposition presented a list of the many peoples of the French colonies, some of whom would be on display:

> Annamites familiar with the ancient customs of China. Cambodians, inheritors of the great Khmer Empire. Hindus who participate in French life while also inhabiting the world that is India. Nomadic tribes of Somalia. Muslim Berbers, descendants of the former rulers of the Maghreb. Arabs, sons of those who, with a scimitar in their fists, conquered Christian Africa all the way to Poitiers. Peoples of Black Africa and Madagascar of whom ethnologists have yet to determine the ancient origins.[406]

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[404] Daniel Boisdon, *Les Institutions de l'Union Française* (Paris: Berger-Levrault, 1949). p. 20.
[405] Exposition Coloniale Internationale de Paris, "Rapport Général," (Paris: Imprimerie Nationale, 1932).
[406] Boisdon, *Les Institutions de l'Union Française*. p. 20.

From the perspective of the Exposition, all these peoples had the good fortune to reap the benefits of French rule.

The Brazzaville Conference

The Brazzaville Conference is the quintessential example of France's international concerns reflecting in its colonial policies. It represents an instance of international concerns catalyzing a show of changing colonial policy more than it does a case of those concerns substantively changing colonial policy.

Due to the growing American pressure during the Second World War to get rid of colonies, France had to change something to preserve its empire, and the French had not articulated any eventual goal of independence for their colonies.[407] French East Africa and Cameroon had rallied to de Gaulle and the Free French in 1940, while French West Africa and Togo had remained loyal to the Vichy regime, and did not support de Gaulle

[407] Ebere Nwaubani, "The United States and the Liquidation of European Colonial Rule in Tropical Africa, 1941-1963," *Cahiers d'Études Africaines* 3, no. 171 (2003). The article offers evidence that it was understood at the time of drafting the Atlantic Charter that article 3 applied to Europe and not to colonies, and that despite Churchill's announcement to the contrary a year later, both he and Roosevelt understood that article 3 was not meant for colonies. He further offers scholarly interpretations that Roosevelt's language might have been anti-colonial, but that the actions of his administration were not, and that his announcement that article 3 was universal was only a rhetorical device to rally the United States for entering the war. Nwaubani argues that Roosevelt's "anti-colonialism" was primarily an extension of the open door policy. Von Albertini dissents from what Nwaubani views as the myth of American anti-colonialism, "The évolués had begun to agitate, while at the same the United States was urging that the colonies should be put under international control and was directing its anti-colonialist attacks with particular vehemence against France." Rudolph Von Albertini, *Decolonization; The Administration and Future of the Colonies, 1919-1960*, trans. Garvie (Garden City, NY: Doubleday, 1970). p.364. The U.S. was ostensibly anti-colonialist, and actually wanted an Open Door, but it is questionable whether it matters if the U.S. was very prepared to back up its stance when the threat was enough to inspire at least a show of reform from France. The reform answered the ostensible reason for the attacks, precisely to avoid the actual loss its protected hunting grounds. France's claims that the *pacte coloniale* was over were not precisely sincere, either. It is unclear how Nwaubani's questioning of whether states "really mean" what they say is a useful point of argument. In addition, the issue of whether France ever derived overall economic benefit from its colonies has been discussed by Jacques Marseille, *Empire Colonial et Capitalisme Français: Histoire d'un Divorce* (Paris: A. Michel, 1984),

until 1942, but the choice of loyalties made little difference to Africans who were not *originaires*.[408]

Charles de Gaulle called the Brazzaville Conference together in January 1944, before France's liberation, as a way to adjust France's international image as an imperial power and in an attempt to stave off the threat of "international trusteeship" which the United States favored and which France saw as tantamount to losing its colonies.[409] In 1987, Jacques Marseille described the Conference as the subject of misleading myths regarding its purpose: "For some, it was a 'negrophile' conference that marked the beginning of a new era. For others, it was a colonial conference that saw the principle of French sovereignty as inviolable. The myth of Brazzaville, in the end, obscures the reality that it was an improvised administrative meeting – planned at the end of July 1943 as a response to foreign criticism."[410]

The 1944 Brazzaville Conference marked what appeared to be a change in the relationship between France and its African colonies – as de Gaulle announced France's intentions to change its policies in its African colonies, not to encourage autonomy or independence, but ostensibly to further the colonies along the path to incorporation with

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Edward Peter Fitzgerald, "Did France's Colonial Empire Make Economic Sense? A Perspective from the Postwar Decade, 1946-1956," *The Journal of Economic History* 48 (1988).

408 "For the majority of African the change of regime [West Africa going to Vichy] made little difference. The same Governors and administrators ruled them through the same *indigénat*. Only the *citoyens*, both Senegalese and naturalized, suffered a major setback when their representative institutions were abolished and they were effectively reduced to the status of *sujets*. In one sense the establishment of the Vichy regime was positively beneficial, since its policy of non-involvement brought an end to recruiting for the army."Michael Crowder, *West Africa Under Colonial Rule* (Evanston, IL: Northwestern University Press, 1968). p. 487.

409 On the Brazzaville Conference: Joseph Roger de Benoist, "The Brazzaville Conference, or Involuntary Decolonization," *Africana Journal* 15 (1990). Raymond-Marin Lemesle, *La Conférence de Brazzaville de 1944: Contexte et Repères* (Paris: CHEAM 1994), James I. Lewis, "The French Colonial Service and the Issues of Reform, 1944-8," *Contemporary European History* 4, no. 2 (1995), Jacques Marseille, "La Coférence de Brazzaville et son Mythe," *Vingtième Siécle Revue d'Histoire*, no. 16 (1987).

France – what would become the *Union Française*. That is, the ostensible purpose of the conference was to institute political and legal changes to bring the rest of French African colonies more into line with how the "four communes" operated. Two of the most notable proposed changes were suppression of the *indigénat* and more opportunities for both political participation by Africans and representation of Africans in the French parliament. For the most part, though, these changes were delayed until the end of the war and were subject to very strict limitations.[411] Public health was an often-touted example of the positive good that the French did in their colonies, and the Brazzaville Conference addressed it, but offered very few innovations.[412]

De Gaulle spoke at the Conference, mentioning the importance of Africans participating in running their countries and of developing their own "political personalities." His idea was freedom for Africans to direct their own political affairs: eventually and only under the ultimate power of France. "We believe that, as far as the world of tomorrow is concerned, autonomy would be neither desirable nor possible for anyone. Specifically, we believe that from the point of view of developing resources and communications, the African continent must constitute, largely, a whole. But, in French Africa as in all the other territories where men live under our flag, there would be no

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[410] Marseille, *Vigntième Siècle Revue d'Histoire*, no. 16, Oct-Dec 1987, pp. 109-110.

[411] See Edward Mortimer, *France and the Africans, 1944-1960; A Political History* (New York: Walker, 1969). and Benoist, "The Brazzaville Conference, or Involuntary Decolonization.", William Roger Louis, *Imperialism at Bay: The United States and the Decolonization of the British Empire, 1941 - 1945* (New York: Oxford University Press, 1978). See also, Von Albertini, *Decolonization; The Administration and Future of the Colonies, 1919-1960*. The significance of the Brazzaville Conference is not that it was in itself a source of real reform or that any of it's participants wanted to start a process of decolonization – they did not – it was that the Conference catalyzed discussions about real reform among politically active Africans and agitation for more independence. See Lewis, "The French Colonial Service and the Issues of Reform, 1944-8."

progress that could be called progress if men, in their native lands, did not profit both morally and materially – if they did not elevate themselves little by little to the level where they will be capable of participating in running their own affairs. It is the duty of France to make it so."[413]

Some conference participants, and more recently Michel Roussin in his introduction to Lemesle's 1994 book, believed that "freedom" by absorption into Greater France was the most desirable outcome for African countries as well as for France, and that the Brazzaville Conference marked a true change in Franco-African relations, such that they could no longer be characterized as colonial: "With the Brazzaville Conference … there was without doubt a change of era that showed itself in the relations between Africa and France. Charles de Gaulle, a visionary, had in effect established the outlines of a new world that would succeed colonial logic, that of 'amicable and profitable' cooperation."[414] The Brazzaville conference was certainly not meant to be an opening for decolonization, or for independence.[415] Léopold Senghor, writing in 1954, did not think that Franco-African relations had moved beyond colonialism. He did not even think they had moved beyond the *pacte coloniale* to the more mutually beneficial "development" described by Sarraut in 1923: "Moreover, this *pacte coloniale* is applied by a political

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[412] See especially, Danielle Domergue-Cloarec, "Les Problèmes de Santé à la Conférence de Brazzaville," in *Brazzaville, Janvier-Fevrier 1944: Aux Sources de la Décolonisation: Colloque* (Paris: Plon, 1988).

[413] Charles de Gaulle, speech at Brazzaville, www.charles-de-gaulle.org.

[414] Michel Roussin, 1994 Minister of Cooperation for France, in his introduction to the book: Lemesle, *La Conférence de Brazzaville de 1944: Contexte et Repères*.

[415] Most historians and participants in the conference agree on this, Rene Pleven, quoted by Benoist, "There are peoples whom we intend to lead, step by step, to a state of autonomy and for the most advanced to political franchise, but who do not expect to experience any independence other than the independence of France." p. 47. Benoist sums up the anti-independence purpose of the conference, "the Brazzaville recommendations, audacious though they might have been on certain points, did not come through as a charter of independence – to the contrary. They constituted a program for emancipation

system that permits the current government to represent 43 million citizens in the *métropole* with 39 ministers, whereas the 41 million overseas citizens are not represented at all."[416] Overall, the Conference was part of a French defensive response to critics of colonialism.

As the last chapter revealed, the reorganization of the Native Medical Service and the continuing importance of the social role of medical workers were both examples of areas where French colonial policy reflected French international concerns. The Native Medical Service's reorganization was a response to persistent internal problems affecting the delivery of public health services to Africans, but was also tied to France's international concerns through the critical supporting role it played to cultural ambassadorship, which had direct ties to France's international concerns of being seen by other Western countries as a "good" colonial power and in cementing the idea that the colonies constituted part of a Greater France.

The medical services of French West Africa served as misleading public relations material in France's larger imperial persona. French colonialists believed, and many other Europeans interested in colonial politics and policy agreed with them, that public health and medical services in the colonies highlighted the benefits African colonial subjects derived from French rule. The most important aspect of the public health and medical missions of France in its West African colonies, however, was that they were

through assimilation, strictly in line with the great French left-wing traditions." Benoist, "The Brazzaville Conference, or Involuntary Decolonization." p. 53.

[416] Léopold Senghor, "L'Avenir de la France dans l'Outre-Mer," *Politique Étrangère* Numéro Spécial 4 (1954). p. 420.

undertaken in French self-interest and the French colonialists benefitted most from the medical services offered in West Africa.

Figure 7 Map of Senegal[417]

[417] Image from http://kalamu.com, source of original image unknown.

Appendix: Annual Reports of the Dakar Medical School

This appendix contains the annual reports from the Dakar Medical School for 1919 – 1944. Each report is presented nearly in its entirety. All the reports that are available in the Centre des Archives d'Outre-Mer and in the Senegalese Archives Nationales are included, those being 1919-1921, 1931-1932, 1933-1934, 1939-1940, and 1942-1943. These annual reports support the theme of the importance of the Native Medical Service to the colonial project by offering specific information on the training of African medical workers and some aspects of the educational and colonial philosophy behind that training.

Archives Nationales d'Outre-Mer (ANOM), 14 Mi 2616, 2 G 21/33, Afrique Occidentale Française, Fonds Moderne

Rapport sur le Fonctionnement de l'École de Médecine de l'A.O.F. depuis le 1er Juillet 1919

L'école de Médecine de l'A.O.F. est de fondation récente, elle fut ouverte le 1er novembre 1918. Sous l'énergique impulsion de Monsieur le Gouverneur Général Merlin qui a prêté à l'œuvre nouvelle, avec son haut appui, le plus large concours financier du Budget général, sous la direction féconde de Monsieur le Docteur Le Dantec, dont on connaît les remarquables dons d'organisateur et de réalisateur, la jeune École de Médecine indigène a pris, pendant ces deux dernières années, un développement très rapide. Autour d'elle sont nées et se sont développées de multiples œuvres d'assistance médicale, d'un singulier intérêt, non seulement pour Dakar, mais pour l'Afrique Occidentale toute entière, destinée à avoir, dans un avenir très proche, de nombreuses maternités, des consultations de nourrissons, des gouttes de lait, toutes œuvres d'assistance à créer sur le type de celles qui fonctionnent déjà dans notre ville.

En Juillet 1919, l'École ne comportait que deux sections : une d'élèves médecins et une d'élèves sages-femmes. Elle fût successivement complétée, en octobre 1919, par l'ouverture d'une section d'élèves vétérinaires et d'une section d'élèves pharmaciens : en novembre 1920, par l'adjonction d'un cours préparatoire ou section de P.C.N. où sont

donné, en même temps qu'un complément nécessaire d'instruction générale, les notions de sciences physiques et naturelles indispensables à la compréhension de la médecine.

Actuellement 42 élèves sont répartis dans les 4 années de médecine, 6 dans les 3 années de pharmacie, 11 suivent les cours de médecine vétérinaire, 20 ceux du P.C.N. Enfin 57 jeunes filles apprennent leur futur métier de sages-femmes.

Les premières promotions de médecins et de pharmaciens indigènes sortiront de l'École en Août 1922. Les premiers vétérinaires auxiliaires seront mis en service à la fin de 1923. Dès janvier prochain, 15 sages-femmes formées à Dakar, seront réparties dans les différentes colonies du groupe.

Ce développement ample et régulier ne fut pas sans se heurter à de nombreuses et grosses difficultés : d'abord, malaise commun à toutes les administrations dans les annés d'après-guerre, personnel subalterne trop souvent médiocre et instable, retard et majoration énormes subis par toutes les commandes faites en France. Mais entre tous les problèmes à résoudre, le plus grave était celui du recrutement des élèves.

Plus tard, les médecins et les sages-femmes indigènes établis au milieu de leurs compatriotes, bien payés, entourés d'un certain prestige, feront naître nécessairement autour d'eux de nombreuses vocations. Mais en cette période d'organisation, il fallut que les candidats et leurs parents nous fassent crédit. Or les études comportent 4 années d'enseignement médical auxquelles s'ajoutent 3 ans de préparation préliminaire : 2 ans aux Écoles de Gorée, un au P.C.N. C'était là un effort de bien longue durée à demander à de jeunes noirs pour accéder à une carrière qui comportait pour eux tant d'inconnues. Pour les sages-femmes, inconvénients plus graves encore : l'instruction des femmes est très peu développée en Afrique et d'autre part les parents montaient une répugnance compréhensible à envoyer leurs filles pendant 3 ans à Dakar, c'est-à-dire à une distance exigeant 15 jours, un mois même de voyage.

Le cours d'instruction générale, crée à l'origine, fut développé. Les familles eurent de plus en plus la certitude que toute garantie morale leur était donnée. Nos élèves apprirent vite à aimer leur école, la plupart se passionnèrent pour leurs études : ils furent nos meilleurs agents de recrutement. Enfin le 1er avril 1921 était promulgué le futur statut des médecins, pharmaciens, vétérinaires et sages-femmes indigènes, ouvrant aux candidats des perspectives séduisantes : soldes élevées (pour les premiers de 6.000 à 12.000 frs., pours les dernières de 4.000 à 9.000 frs.) port d'un uniforme seyant, garanties d'avancement et de retraite. La période la plus difficile paraît franchie.

Un second obstacle important s'était dressé dès l'origine de l'école : la difficulté de trouver les locaux indispensables à son fonctionnement. La rareté de la main d'œuvre, le prix exorbitant des matériaux de construction rendaient impossible, en 1919, la construction d'un vaste immeuble. Par un remaniement des services de l'hôpital d'instruction, par le transfert de la Maternité au centre de la ville, le Directeur récupéra quelques locaux que l'on transforma en salles de cours, en études, en dortoirs, mais très vite ils devinrent insuffisants. Deux bâtiments en briques, de construction rapide et relativement peu coûteuses, furent élevés dans l'enceinte de l'Hôpital Indigène, le premier en 1920, le second en 1921, sur un plan tel qu'ils seront immédiatement aménageables en salles de malades payants lorsque la nouvelle École sera construite. Ces solutions de fortune ne sont que effet que des expédients dont le caractère précaire se manifeste de plus en plus au fur et à mesure de l'arrivée des nouvelles promotions.

Le recrutement assuré, les locaux provisoires trouvés, il fut possible de développer normalement le programme d'enseignement conçu en vue de donner aux élèves une excellente formation technique.

Le but de l'école est de former des praticiens qui exerceront sous la direction et le contrôle des médecins Européens, mais avec la garantie qu'ils garderont, dans le milieu indigène, la mentalité médicale européenne. Pour cela il est nécessaire qu'ils en aient saisi les raisons profondes et sachent sur quelles constatations scientifiques elle est fondée.

D'où, deux aspects de l'enseignement : l'un pratique l'autre théorique. Tout a été mis en œuvre pour que l'un et l'autre soient donnés dans les meilleures conditions possibles.

Avec le clairvoyant souci de mettre toujours à leur place les compétences, le Directeur fit appel, pour l'enseignement théorique aux médecins civils et militaires de Dakar, la plupart très bien préparés à leur rôle de professeurs d'une École de Médecine indigène par leur longue pratique de maladies africaines.

A ces maîtres, on demande d'avoir toujours la certitude que l'élève a retenu le fait et non le mot. Aussi leur enseignement, vivifié par le contact permanent avec les malades, est-il le plus possible concret, rendu accessible par de riches collections de moulages anatomiques, de planches murales, de photographies pour projections. Pour ce riche matériel d'instruction, partout nécessaire mais que la forme d'esprit de nos élèves rend ici encore plus indispensable, le Gouvernement Général prévit généreusement des crédits élevés, en 1920 53.000 frs., 57.000 frs. en 1921.

Les laboratoires de physique, de chimie, de bactériologie, et de parasitologie, la salle d'histoire naturelle aménagés à l'ouverture de l'École furent complétés pendant ces deux dernières années. En octobre 1920 y fut adjoint un laboratoire d'histologie et d'anatomie pathologique. Enfin au mois de juillet de la même année était créé un laboratoire d'anthropologie, de nature évidemment paramédicale et que ne fréquentent pas les élèves, mais pourtant d'un grand intérêt pour une École de Médecine africaine, puisque l'homme noir normal y est étudié, et, fait intéressant pour la colonie, ce centre de recherches est doublé d'un laboratoire d'anthropologie et d'expertise judiciaire, embryon du future service anthropométrique de l'A.O.F.

L'enseignement médical est très spécialisé. Ce que l'on apprend avant tout aux élèves, c'est la pathologie des populations africaines, d'où nécessité de récolter sur place, à côté d'un matériel d'enseignement médical d'ordre, si l'on peut dire général, tous les documents intéressants sur les maladies de l'Ouest Africain. En 1920 et en 1921, cette partie du programme de travail fut activement poussée. Les médecins traitants prirent des photographies, parfois des moulages ou des radiographies de tous les cas pathologiques intéressants observés à l'Hôpital et à la policlinique, recueillirent à la salle d'opérations et à la salle d'autopsie, toutes les pièces anatomiques rares. Nos élèves, que nous voulons voir participer à la formation de nos collections, rapportent à chaque rentrée scolaire nombre d'échantillons de la faune de leur pays d'origine.

Aujourd'hui c'est au cinéma que l'on va demander de rendre plus vivant encore cet enseignement, déjà si concret. La question étudiée en 1920 et en 1921, retardée quelques mois par la mauvaise qualité des premiers matériaux de travail reçus, est sur le point d'aboutir. Cette forme d'enseignement, si satisfaisante, sera donnée d'abord à

l'aide des films médicaux et scientifiques édités par les grandes maisons cinématographiques françaises. De plus des films pris au Sénégal par les soins de l'École de Médecine enregistreront les formes cliniques des grandes affections de l'Afrique, la peste, la maladie de sommeil, le paludisme et les moyens employés pour les combattre. Les séries ainsi obtenues sont d'un grand intérêt pour l'éducation médicale de nos élèves. Les Facultés de France y trouveront une documentation sure des affections observables seulement sous les tropiques. Certains films, de caractère vulgarisateur, montrant le rôle dangereux des rats, des moustiques, mes mouches tsé-tsé pourront être utilement projetés devant les indigènes et ainsi aider puissamment le Service de Santé à convaincre les populations noires de la nécessité de mesures d'hygiène qui leur sont imposées.

Bien qu'il s'agisse d'un organisme indépendant de l'École de Médecine, il convient de constater ici, pour les bases solides qu'il fournit à notre enseignement de la pathologie africaine, le développement de la Société Médico-chirurgicale de l'Ouest Africain fondée le 8 février 1919 par le Docteur Le Dantec et subvention née par le Gouvernement Général et les différentes colonies du groupe. Le nombre des adhérents qui en 1919 était de 44, est monté en janvier 1921 à 84.11 suffit de feuilleter la collection des numéros déjà parus pour voir l'essor que la jeune Société a donné aux études médicales en A.O.F., la riche documentation qu'elle a déjà recueillie sur la peste, la trypanosomiase, la tuberculose africaine, certaines maladies inconnues ou encore peu connues en A.O.F., telles que la fièvre récurrente, la porocéphélose, les affections cutanées à mycèto[illisible]. On notera le vif intérêt des séances où furent exposés des traitements nouveaux d'une grande importance thérapeutique : l'abcés de fixation dans la peste, la transfusion du sang dans des anémies très graves, suite de fièvre bilieuse hémglobimurique.

Par tous les moyens, on le voit, on s'efforce de rendre accessible aux élèves, l'enseignement fécond, éducateur de l'esprit d'observation et du sens critique, toujours près de la vie. Mais s'il demeure l'indispensable base d'une formation médicale intelligente, on n'a garde d'oublier qu'il faut avant tout doter l'Afrique Occidentale de bons ouvriers de l'Assistance. Aussi l'instruction pratique des élèves, partie essentielle de leur éducation professionnelle, est-elle l'objet de soins plus grands encore. La matinée entière lui est chaque jour consacrée : dans les salles de l'Hôpital, à la policlinique, les futurs médecins indigènes étudient les malades, les soignent rédigent leur observations, à la Maternité, à la Crèche, aux consultations de femmes enceintes et ne nourrissons, les élèves sages-femmes s'initient à leur rôle futur.

Or à l'ouverture de l'école, seul l'Hôpital Indigène de Dakar existait commen centre d'instruction pratique. Dès novembre 1918 le Docteur Le Dantec le doublait d'une policlinique gratuite. En juillet 1919 était inaugurée une Maternité indigène avec consultations de femmes enceintes, en juillet 1921 un Crèche avec consultations de nourrissons. Enfin en 1922, cette œuvre d'hygiène sociale sera parachevée par la fondation d'un dispensaire antituberculeux.

Nous allons étudier successivement le développement de ces différents organismes durant ces deux dernières années.

L'hôpital indigène a été complété en 1919 par l'ouverture d'un service de fractures, en 1920 par celle d'un service de radiographie et d'électrothérapie pourvu d'un matériel très moderne.

De plus en plus, les malades de Dakar et la plupart des malades chroniques de la région environnante ont appris à connaître le chemin de la policlinique, où malgré l'éloignement du centre de la ville 56.000 consultations gratuites ont été données du 1er juillet 1919 au 1er septembre 1921. L'enseignement pratique qu'y reçoivent les étudiants est pour eux des plus profitables, car plus tard et ce sera un des côtés les plus utiles de leur activité médicale, ils soigneront des malades dans dispensaires du type de cette policlinique. Très prochainement ce service de consultations est appelé à prendre un essor plus grand encor, il sera en effet, transféré dans un local bâti sur un terrain proche de celui à la Maternité c'est-à-dire au milieu des groupement indigènes les plus importants de Dakar.

En Afrique Occidentale, la lutte contre la mortinatalité et la mortalité infantile s'avère particulièrement urgente. En 1919 20 femmes indigènes, interrogées à Dakar, donnaient les renseignements suivants : elles avaient eu en tout 109 grossesses, dont 30 avaient avorté, sur les 79 enfants qui étaient nés, 47 étaient morts en bas âge dont un grand nombre par tétanos ombilical. Le tiers seulement avait survécu. La création à Dakar d'une Maternité, puis celle d'une Goutte de lait furent les premières étapes de la lutte engagés contre les différents fléaux frappant la race à la naissance.

Le 3 juillet 1919 était inaugurée une Maternité indigène de 20 lits. Le choix du local avait été heureux, situé au milieu de la ville, près des quartier indigènes, consitué par un vaste immeuble aux quatre bâtiments à étage se coupant à angle droit, il forme un tout bien fermé, d'aspect coquet aves ses arcades d'allure mauresque et les couleurs rouge vif de son revêtement de brique. Il fallut déployer beaucoup de tact, beaucoup de patience pour apprivoiser les mères. Nos pratiques d'asepsie se heurtaient à tant de coutumes et de préjugés locaux : les matrones faisaient courir sur la nouvelle fondation, les bruits les plus fâcheux, la prétendant fréquentée par les sorcières et les n'deums, la peste entrava aussi son essor. Puis le succès s'affirma très franc. Mises en confiance par la consultation de femmes enceintes et de nourrissons, peu à peu les parturientes affluèrent. Très vite, il fallut songer à agrandir l'immeuble actuel, devenu insuffisant et engager des pourparlers pour l'achat des terrains qui l'avoisinent. Succès de bon augure pour les Maternités du même genre qui bientôt écloront dans toute l'Afrique Occidentale, à mesure que les sages-femmes indigènes entreront en service.

Du 1er juillet 1919 au 1er décembre 1921, 581 femmes ont accouché à la Maternité de Dakar. Pendant la même période, à la consultation des femmes enceintes et des nourrissons, ont été données plus de 23.000 consultations. Monsieur le Docteur Heckenroth, Directeur du service d'hygiène de l'A.O.F., pouvait écrire en mars dernier dans un travail sur la démographie de Dakar : « Le taux de la mortinatalité dans le milieu indigène de Dakar tend à se rapprocher du pourcentage de mortinatalité enregistré dans cette même ville pour les Européens depuis 1899, soit 6,3%. Il est difficile de ne pas reconnaître dans cet incontestable progrès, l'heureuse influence du Médecin Européen qui pénètre chaque jour davantage le milieu indigène, influence considérablement facilitée depuis 1919 par le fonctionnement d'une Maternité. »

L'œuvre de protection de l'enfance restait incomplète tant qu'elle ne s'étendait qu'aux premiers jours de la vie. À Dakar, tout enfant noir privé du sein maternel est nourri avec de mauvais succédanés du lait, donc condamné presque fatalement à l'athrepsie puis à la mort. Aussi en 1921, était décidée la fondation d'une Crèche

pouponnière qu'en juillet dernier Monsieur le Gouverneur Général inaugurait dans un bâtiment contigu à la Maternité. L'œuvre nouvelle placée sus les auspices d'un comité de patronage, comprend une consultation de nourrissons, une goutte de lait, une crèche celle-ci réservée aux enfants abandonnés. 1922 verra vraisemblablement, la création d'un Dispensaire antituberculeux qui avec la Maternité, la Crèche et la Policlinique constituera au centre de la ville un institut complet d'hygiène sociale.

On voit le chemin parcouru en deux ans. Mais ce que l'on ne saurait faire surgir entre les pages sèches de cet exposé, c'est la vie qui anime toute l'œuvre, la transformation qui s'est opéré dans le regard et l'allure des élèves, l'aspect de la policlinique où un étudiant de quatrième année pose correctement un diagnostic de trypanosomiase ou le lèpre, dans les salles de la Maternité la bonne mine des mères qui témoignent des soins excellents des élèves sages-femmes qui les accouchèrent, l'affluence des femmes apportant leurs nourrissons à la consultation de la Crèche.

Lorsqu'on parcourt l'École, l'Hôpital et ses annexes, on a la vision de ce que sera en Afrique Occidentale l'Assistance Médicale élargie, telle que la conçoit pour demain le Gouvernement Général : dans les dispensaires multipliés, dans des maternités, des consultations de nourrissons ouvertes dans tous les grandes centres, se manifestera l'utile activité d'un personnel abondant de médecins et de sages-femmes indigènes. Très avertis de la pathologie locale, ils verront leur action renforcée par leur parfaite connaissance de la langue et des mœurs du pays. Ainsi le médecine Européen, secondé par des auxiliaires instruits et nombreux, pourra engager efficacement la lutte contre les grands fléaux de la race, le paludisme, la syphilis, la maladie du sommeil, la peste, les effroyables mortinatalité et mortalité infantiles, œuvre avant tout humaine, dans les grandes traditions de la France colonisatrice, mais aussi d'un incomparable intérêt économique pour un pays dont l'essor fut jusqu'ici entravé par la rareté de la main d'œuvre.

Dakar le 15 décembre 1921
Le Directeur [illegible] l'École de Médecine
[illegible]

ANOM, 14 Mi 1747, 2 G 32/36, Afrique Occidentale Française, 1931 - 1932

École de Médecine de l'Afrique Occidentale Française Rapport Annuel de l'Année Scolaire 1931-1932

L'École de Médecine qui avait fonctionné depuis sa création dans quatre bâtiment provisoires situés dans l'enceinte de l'Hôpital Indigène, a été transférée le 15 Novembre 1931 dans le Bâtiment neuf du Rond-Point de l'Étoile spécialement aménagé à son usage.

Ce bâtiment en forme d'U comprend dans son corps principal, le Hall d'Entrée, la Bibliothèque, le Hall du Conseil des Professeurs. Les deux Ailes ont été aménagées en 4 Amphithéâtres de cours en gradins avec cabine de projection cinématographique et pièces annexes pour collection d'étude. Deux grands Laboratoires réservés l'un à la Chimie l'autre à la microbio-parasitologie. Enfin, dans le sous-sol se trouve l'amphithéâtre de dissection avec 9 tables et 2 ouvres à cadavres.

Cette création jointe à celle de la nouvelle Maternité Indigène ont grandement développé les moyens d'enseignement.

Le nombre des Élèves admis à l'École en Novembre 1931 a été de :

23 Élèves-Médecins
2 Élèves-Pharmaciens
17 Élèves-Sages-Femmes
8 Élèves-Infirmières-Visiteuses

Nombre total des Élèves sortis de l'École depuis sa création :

Médecins …….. 120
Pharmaciens…….. 18
Vétérinaires (pour mémoire)…….. 5
Sages-Femmes……173
Infirmières-Visiteuses…… 22

Total…… 338

Répartition des Élèves par Colonie d'Origine [chart, omitted]

Enseignement – La stabilité du personnel enseignant et le choix de son recrutement parme les anciens Professeurs de l'École de Marseille ont été assurés par Décision 1416/P du 23 Juillet 1932 du Gouverneur Général, sur la proposition de l'Inspecteur Général des Services Sanitaires et Médicaux. Cette stabilité a permis d'assurer l'enseignement dans d'excellentes conditions.

Les directives générales du Dr. Couvy sure l'interdiction de la clientèle au personnel médical, la fermeté de la discipline, la forme essentiellement pratique à donner aux conférences, la prépondérance de l'enseignement clinique et pratique ont fait leur preuve et ont été rigoureusement maintenues et développés.

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Résultats des Examens

1. Examens de passage de fin d'année – Ces examens ont montré, dans l'ensemble, un travail satisfaisant. Cependant 5 Élèves-Médecins (dont 3 de seconde année et 2 de troisième année) et 1 Infirmière-Visiteuse de première année, qui n'ont pas obtenu la moyenne et one fait preuve d'une évidente mauvaise volonté ont été exclus de l'École.

2. Examens de fin d'études – Les 12 Élèves-Médecins auxiliaires ont été reçus avec des moyennes s'échelonnant entre 18,41 et 15,44 pour le dernier du classement. L'Élève Pharmacien auxiliaire a été admis avec une moyenne fiable de 11,58. Les 11 Élèves Sages-Femmes ont été reçues avec des moyennes s'échelonnant entre 19,21 et 13,26. Les 4 Élèves Infirmières-Visiteuses ont été reçues avec des moyennes variant de 18,2 à 16,37.

Décisions du Conseil des Professeurs prises à la suite de ces examens

1. Modification de Forme – Malgré toutes les simplifications apportées, d'année en année, aux cours théoriques, les Élèves ne parviennent pas à comprendre l'exposé et les explications du professeur, tout en les transcrivant sur leurs cahiers. Les cours se trouvent ainsi pratiquement réduits à une dictée dont l'Élève apprend ensuite le sens pendant ses heures d'études à l'Internat.

Pour remédier à ce fait, le Directeur propose que chaque Professeur fixe au début de la semaine les matières à apprendre, en étude, dans les livres imprimés ou ronéotypes dont disposent tous les Élèves. Un résumé succinct en serait fait et présenté au Professeur qui consacrait son heure de cours exclusivement à des interrogations et explications sur les matières ainsi apprises. Ces interrogations s'addresseraient à tour de rôle à la totalité des Élèves.

Ce mode d'enseignement permettrait d'apprécier avec exactitude ce que l'Élève a réellement compris. De plus, il développerait chez lui la facilité d'élocution dont la plupart sont dépourvus même en fin d'étude.

Le conseil adopte ces propositions.

2. Modification des coefficients – Outre les modifications de cotation des épreuves déjà adoptées par le conseil, au paragraphe IV de la séance du 11 Juillet 1932, à savoir :

1^{e}) Cotation sur 10 des épreuves « Chimie Générale » pour les Élèves-Médecins de 2^{e} et 3^{e} année.

2^{e}) Cotation sur 10 des épreuves « Interrogation sur l'Hygiène Sociale » pour les Élèves Sages-Femmes de 1ère année.

Le Directeur propose les modifications suivantes des coefficients :

1^{e}) Le coefficient 2 sera attribué aux épreuves de :

- Clinique médicale pour les Élèves-Médecins
- Pharmacie galénique pour les Élèves-Pharmaciens
- Clinique obstétricale pour les Élèves Sages-Femme

2e) Le coefficient 2 sera attribué à l'ensemble des notes d'interrogation.

3e) Le coefficient 1, au stage.

4e) Le coefficient 1, à la conduite.

L'ensemble de cette nouvelle cotation sera appliqué dès maintenant à tous les examens semestriels et annuels de passage, et de fin d'études.

Le conseil adopte ces propositions.

3. Modification du programme d'étude des Élèves Sages-Femmes

Les épreuves des examens de fin d'étude ont montré l'insuffisance des Élèves sure les questions de médecine générale, en particulier sur celles de médecine et de petite chirurgie d'urgence.

Le Directeur propose l'inscription au programme d'une ou deux séances de « Répétitions pratiques » sur ces matières.

M. l'Inspecteur Général des Services Sanitaires et Médicaux estime préférable de limiter pour l'instant les Élèves Sages-Femmes à leur rôle strictement obstétrical, en raison de l'insuffisance de leur instruction de base qui réduit leurs possibilités d'assimilation d'un enseignement déjà chargé.

Le conseil adopte cette dernière proposition de M. l'Inspecteur Général des Services Sanitaires et Médicaux.

4. Modifications du programme d'étude des Infirmières-Visiteuses

Le Directeur fait la même remarque sur l'insuffisance des connaissances pratiques d'Infirmières montrée par les Infirmières-Visiteuses au cours de leurs interrogations. Il propose qu'en des démonstrations pratiques de « Technique Infirmière » soient comprises dans leur enseignement.

Ces démonstrations seront sanctionnées par une épreuve pratique aux examens semestriels, annuels de passage et de fin d'étude, épreuve à laquelle le coefficient 1 sera attribué.

Le conseil adopte cette proposition.

Stages de Perfectionnement et examens d'aptitude au grade de médecin auxiliaire principal

8 Médecins Auxiliaires de 1ère classe

1 Pharmacien auxiliaire de 1ère classe

6 Sages-Femmes auxiliaires de 1ère classe

ont fait à l'École de Médecine le stage de perfectionnement prévu par les Arrêtés en vigeur en vue de l'examen d'aptitude aux grades de Médecin et Sage-Femme auxiliaire principaux.

Ont été déclarés aptes :

6 Médecins-auxiliaires

1 Pharmacien auxiliaire

4 Sages-Femmes auxiliaires

Ces stages et examens ont montré que la plupart des Médecins et Sages-Femmes continuent à travailler après leur sortie de l'École, résistant à l'attirante ornière de la routine et deviennent de bons praticiens.

Dakar, le 15 Novembre 1932

Le Médecin-Colonel Blanchard
Directeur de l'École de Médecine

ANOM, 14 Mi 1758, 2 G 34/17

Rapport Annuel de l'École de Médecine 1933 – 1934

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II Matériel – La dotation en matériel d'enseignement a été ce piétée par l'achat de microscopes. Un grand nombre de cadavres ont pu être conservés permettant un développement complet de l'Anatomie et de la médecine opératoire usuelle.

Au point de vue de l'enseignement clinique, le nombre des malades hospitalisés à l'Hôpital Central Indigène, Hôpital d'instruction, est passé d'une moyenne journalière de 250 à 350 ; de même le nombre des consultations mensuelles de la Polyclinique Roume oscille autour de 30.000, au lieu de là à 15.000 dans l'ancien Dispensaire Thiong – Cette masse de malades fournit chaque jour les cas cliniques les plus divers et les plus intéressants.

III Fonctionnement – En Novembre 1933, l'École a reçu :

24 Élèves-Médecins auxiliaires

2 Élèves-Pharmaciens

18 Élèves-Sages-Femmes

7 Élèves Infirmières-Visiteuses

Penant l'année scolaire 1933-34, l'enseignement a été donné à 151 Élèves, dont :

87 Élèves-Médecins auxiliaires

6 Élèves-Pharmaciens

41 Élèves Sages-Femmes

17 Élèves Infirmières-Visiteuses

Nombre totale des Élèves sortis de l'École depuis sa création :

Médecins 148

Pharmaciens 21

Vétérinaires (pour mémoire) 5

Sages-Femmes 191

Infirmières-Visiteuses 38

Total 403

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Résultat des examens

1. Examens de passage de fin d'année – Ces examens ont montré, dans l'ensemble, un travail très satisfaisant, en particulier en clinique médicale. La présentation complète d'un malade par les Élèves-Médecins de 3ème années et la présentation d'un appareil (pulmonaire, cardiaque, rénal, etc…) par les Élèves-Médecins de 2ème année a permis de constater qu'ils sont tous bien pénétrés de l'esprit de méthode indispensable à l'établissement d'un diagnostic exact et qu'ils ont des connaissances séméiologiques précises.

Il en est de même pour l'Épidémiologie l'Hygiène et la Médecine préventive. Dans toutes ces matières les Élèves ont montré que leurs connaissances étaient bien assimilées et qu'ils étaient capables d'appliquer correctement toutes les mesures pratique de Prophylaxie.

Cependant parmi les Élèves-médecins, 9 en 1ère année et 4 en 2ème année ; pour les sages-femmes, 2 en 1ère année et en 2ème année ; pour les Infirmières-Visiteuses 1 en première année qui n'avait pas obtenu la moyenne en diverses matières (surtout Obstétrique, Anatomie) ont subi à la rentrée de Novembre une nouvelle interrogation sur ces matières déficientes. Ils ont été admis à passer dans l'année suivante, à la suite de cette interrogation.

Au cours de leur congé, beaucoup d'élèves-médecins ont bénévolement travaillé dans les dispensaires de leur résidence et ont rapporté des notes élogieuses de Médecins qui les ont ainsi vu à l'œuvre.

Du point de vue moral, l'impression est également meilleure d'année en année. A force de « piétiner », leur morgue, l'attitude vis-à-vis des malades se fait plus dévouée et la conscience professionnelle progresse.

2. Examens de fin d'études – Les 14 Élèves-Médecins, les 2 Pharmaciens, les 11 Sages-Femmes, les 10 Infirmières-Visiteuses présentés à l'examen ont tous été reçus dans de bonnes conditions.

Les épreuves de ces examens ont donné lieu aux remarques suivantes, formulées par le Conseil des Professeurs.

a) Médecins

La moyenne des notes obtenues par la promotion est très supérieure à celle de l'an passé. C'est ainsi que l'Élève classé dernier a obtenu une moyenne de 16,59, alors qu'en 1933, cinq élèves avaient des moyennes inférieures à cette note.

L'enseignement médical paraît donc actuellement au point, sous réserve de maintenir et même d'accentuer les tendances simplificatrices. On devra d'abord s'assurer que les gros éléments cliniques de base sont compris et sus, avant de passer aux cas d'exception dont la compréhension reste le privilège de l'élite de chaque promotion.

Cette remarque déjà faite l'an dernier, garde cette année encore, toute sa valeur.

Certains élèves sont toujours très handicapés par la difficulté de leur élocution, par leurs fautes de français qui risquent de ternir leur qualités techniques dans leurs rapports avec les européens. Le Conseil demande à M. l'Inspecteur Général de l'Enseignment qu'il soit remédié dans toute la mesure du possible, à cet état de choses.

b) Pharmaciens

Les des Élèves Pharmaciens se sont montrés très supérieurs à celui de l'an dernier dont la moyenne 16,5 est inférieure à celle 17,65 de celui classé cette année second.

Bien à modifier dans la forme de l'enseignement.

c) Sages-Femmes

Les épreuves d'Obstétrique ont montré que la proposition faite l'an dernier de séparer les Élèves-médecins des Élèves sages-femmes dans l'enseignement de cette matière, en raison de la grande différence de leur réceptivité, a été suivie d'excellents résultats dans son application au cours de cette dernière année scolaire. Il y a donc lieu de continuer dans le même sens avec toujours la même tendance simplificatrice.

d) Infirmières-Visiteuses

Leur instruction s'est beaucoup ressentie de l'absence, au cours de cette année, des deux Infirmières-Visiteuses monitrices européennes.

Les épreuves ont montré qu'elles ont assimilé bien peu de l'enseignement qui leur a été fait.

Le Conseil propose que des épreuves pratiques soient substituées ou adjointes aux épreuves théoriques au cours des prochains examens de passage et de sortie.

Vœu : Afin d'améliorer la connaissance du français, peut-être y aurait-il lieu de faire faire aux élèves femmes, une année supplémentaire dans une école de 2ème degré dans leur colonie d'origine.

<u>Stages de Perfectionnement et Examens d'Aptitude au Grade de Médecin Auxiliaire Principal</u>

6 Médecins auxiliaire de 1ère classe
5 Sages-femmes auxiliaires de 1ère classe

ont fait à l'École de Médecine de Juillet à Novembre 1934 le stage de perfectionnement prévu par les Arrêtés en vigueur en vue de l'examen d'aptitude aux grades de Médecins et sages-femmes auxiliaires principaux.

Ont déclarés aptes :
5 Médecins auxiliaires
3 Sages-femmes auxiliaires

Les stages et les examens de ces candidats ont donné lieu aux remarques suivantes :

a/- Les stages accomplis au chef-lieu de chaque colonie ont été beaucoup mieux organisés cette année. Les Médecins chefs des Hôpitaux des ces centres ont pris la peine de faire faire aux candidats de nombreux présentations de malades ; de les entrainer à l'exposé des diverses questions du programme. Ils ont ainsi grandement facilité le stage complémentaire à l'École de Médecine.

b/- Ce dernier a permis d'apprécier exactement le sens clinique, l'esprit d'observation, l'instruction, l'attitude vis-à-vis du malade de chaque candidat.

Les malades choisis pour l'examen étaient tous des cas à symptomologie précise, indiscutable. De même la question d'épidémiologie a porté sur le Paludisme présenté sous la forme d'un cas concret.

Dès l'an prochain, ces examens seront régis par l'Arrêté du 29 Mars 1934 organisant une première sélection par un examen écrit subi après le stage au chef lieu de chaque colonie, seuls les candidats reçus à cet examen du premier degré seront admis au stage à l'École de Médecine de Dakar. La barrière d'accès aux grades supérieurs sera ainsi renforcée pour la plus grand bien du niveau technique de ce corps.

Dakar, le 1 Janvier 1935
Le Directeur de l'École de Médecine, [illegible]

ANOM, 14 Mi 1820, 2 G 40/27

École de Médecine Jules Carde Dakar, Rapport Annuel 1939 – 1940

Personnel

A / - Personnel Enseignant –

1 / - Personnel apparentant à l'École de Médecine

Médecin Colonel Mercier, Directeur
Docteur Rossi, Médecin en Chef de l'A.M.I., Sous-Directeur
Médecin Commandant Fourniais, jusqu'en Aôut 1940, puis
Médecin Commandant Guillermin, à partir d'Aôut 1940
Pharmacien Commandant Trenous
Mlle Sammattei, Sage-femme coloniale
Mme Schock, Infirmière coloniale
Médecins auxiliaires de l'A.M.I. : Mms. Aguesy & Lorofi
Mme Carrera, Surveillante d'Internat, répétitrice
M. Provost, Surveillant d'Internat, répétiteur

2 / - Personnel appartenant à l'Hôpital Central Indigène

Docteur Ralu, Médecin de l'A.M.I.
Médecin Capitaine Clerc
Médecin Capitaine Gallais
Médecin Capitaine Candille, à partir de Septembre 1940
Mme Fouchy, Sage-femme coloniale
Mlle Remy-Zephir, Infirmière coloniale
Mlle Gamin, Infirmière coloniale
Sages-femmes auxiliaires de l'A.M.I. : Mmes Aguessy, Montanary, Montrat, Sow, Correa
Médecins auxiliaires de l'A.M.I. : Mms. Ayite, Diarra Fode, Seydou Tall

3 / - Personnel appartenant à diverses formations de Dakar

Médecin Commandant Gonnet, à partir de Novembre 1939
Médecin Commandant Cheneveau
Médecin Commandant Dezoteux à partir de Mai 1940
Médecin Commandant Dejou
Médecin Capitaine Barbet
Médecin Capitaine Chiozza
Médecin Lieutenant Fossey
Pharmacien Capitaine Laffargue

:- :- :- :- :

II – Élèves

En Novembre 1939 l'École a reçu :

30 élèves médecins
1 élève pharmacien
19 sages-femmes (élève)
0 élève infirmière visiteuse

Total 50 élèves

C'est la plus forte promotion d'élèves médecins qui ait été enregistrée depuis la fondation de l'École. Elle marque le début de l'augmentation du recrutement des médecins auxiliaires de l'Assistance Médicale Indigène qui a été décidée l'an dernier.

Le nombre total des élèves de l'École de Médecine a été pour l'année scolaire de :

Élèves médecins … 30 élèves de 1e année
21 élèves de 2e année
19 élèves de 3e année
19 élèves de 4e année = 88 élèves médecins

Élèves pharmaciens … 1 élève de 1e année
2 élèves de 2e année
1 élève de 3e année = 4 élèves pharmaciens

Élèves Sages-femmes … 19 élèves de 1e année
16 élèves de 2e année
18 élèves de 3e année = 53 élèves sages-femmes

Total général …….145 élèves

<u>Nombre total des Élèves sortis de l'École de Médecine depuis sa fondation</u>

Médecins … 272
Pharmaciens … 30
Sages-femmes … 274
Infirmières-visiteuses … 62

Total … 638

<u>Répartition par Colonie d'origine, des Élèves sortis de l'École depuis sa fondation</u>

	Méd.s	Pharm.s	S-fs	I-Vs	Total
Sénégal	56	3	43	6	108
Soudan	57	6	55	5	123
Guinée	27	6	28	7	68
Haute Volta	5	1	6	2	14
Côte d'Ivoire	60	7	35	13	115
Dahomey	57	5	98	29	189
Niger	2	0	4	0	6
Togo	7	1	3	0	11
Caméroun	0	0	1	0	1
Sierra Léone	0	1	0	0	1
Libéria	1	0	1	0	2
Totaux	272	30	274	62	638

Le Dahomey fournit un nombre proportionnellement élevé de sages-femmes; ce nombre va encore se trouver accru puisque cette année, la promotion sortante de sages-femmes compte sur un total de 16 élèves, 12 Dahoméennes. La promotion de 1e année sur un total de 20 élèves, compte 10 Dahoméennes. Le rendement d'une sage-femme étant en grande partie fonction de la connaissance qu'elle a de la langue et des mœurs du pays dans lequel elle exerce, il apparait que, si l'on n'y vielle, le Dahomey, ne pouvant absorber toutes les sages-femmes qu'il produit, des Dahoméennes vont se trouver être affectées dans des colonies où elles devront subir une période d'adaptation avant de rendre des services.

À la rentrée de Novembre 1939, un élève médecin de 1^{e} année dont l'état de santé était précaire, a été mis en congé de un an. En fin d'année, deux élèves médecins suspects de bacillose pulmonaire, ont été mis en congé de un an. Un élève médecin de la promotion sortante, trouvé atteint de tuberculose pulmonaire en cours d'études, a été traité par pneumothorax artificiel. Immédiatement amélioré, isolé de ses camarades, il a pu continué ses études, passer l'examen de fin d'études et obtenir avec un bon classement, le diplôme de médecine auxiliaire.

L'affection dont il était porteur, le rendant inapte au service de l'Assistance, nous avons pu le faire placer, à titre privé, dans un laboratoire de bactériologie de Dakar, où

des occupations sédentaires lui permettent de gagner sa vie et de continuer à l'Hôpital Indigène, son traitement.
Le cas de cet élève pose un problème auquel une solution, autre que la solution actuelle, devrait être réservée.

En effet, tant qu'un élève n'a pas passé le concours de sortie, obtenu le diplôme de fin d'études et été nommé dans le cadre de l'A.M.I. il n'est pas fonctionnaire et n'a droit à aucun avantage lorsqu'il se trouve atteint d'une affection le rendant inapte au service.

Quand il s'agit d'une affection non imputable au service, on conçoit que le licenciement pur et simple s'ensuive. Mais en matière de tuberculose, il peut être soutenu que l'affection a été contractée en service : le nombre des élèves trouvés porteurs, à leur arrivée à l'École, d'une cuti-réaction négative est grand, et l'expérience montre que, au bout d'une année tous ont une cuti-réaction positive. Ces modifications, rapides et régulières de la cuti-réaction sont évidemment la conséquence des contacts répétés et rapprochés avec des malades. Il apparaît donc que, en matière de tuberculose tout au moins, un élève arrêté dans ses études par cette maladie et obligé de se soigner longuement sans pouvoir travailler devrait pouvoir bénéficier de dispositions spéciales et non pas être purement et simplement licencié comme cela est obligatoire avec les règlements en vigueur.

Parmi les élèves sages-femmes, deux ont été exclues par mesure disciplinaire, une mise en congé puis licenciée pour raison de santé, un est décédée en cours d'études.

En fin d'année, deux élèves de première année, n'ayant pas obtenu la moyenne aux examens de passage, n'ont pas été autorisées à passer en deuxième année de redoublement leur première année d'études.

III Enseignement –

Au cours de l'année 1940, une très importante modification est intervenue dans l'enseignement préparatoire à l'École de Médecine. Le plan d'études de l'École W. Ponty a été remanié et un nouvel arrêté (du 27 Juillet 1940) réorganisant l'École W. Ponty, va pouvoir permettre d'envisager une progression plus rationnelle des études à l'École de Médecine.

On sait que depuis la fondation de l'École de Médecine, les Directeurs signalaient que les principaux inconvénients qu'ils rencontraient dans l'instruction des élèves entrant à l'École, tenaient d'abord au niveau trop bas de l'instruction générale, ensuite au manque de préparation scientifique.

En effet, sans que l'enseignement de l'École puisse se comparer à l'enseignement supérieur des Facultés de France, on n'en est pas moins un enseignement qui nécessite, même pour la compréhension des notions élémentaires, une instruction générale de base atteignant un certain niveau. Or, au début de l'École, ce niveau n'était pas atteint par la totalité des entrants. Il fut donc nécessaire de consacrer quelques heures à des cours d'instruction générale.

Puis, à mesure que l'enseignement progressait en Afrique Occidentale Française, on vit arriver à l'École des élèves plus jeunes et possédant une instruction générale de base suffisante. On put ainsi, il y a quelques années, supprimer, pour les médecins, ces

cours d'instruction générale et consacrer la totalité des heures de cours à l'enseignement médical proprement dit.

Cependant, il y avait encore une lacune. Si les élèves arrivaient avec un connaissance de la langue suffisante pour comprendre et assimiler dès leur entrée, certains concepts trop abstraits pour leurs prédécesseurs, leurs connaissances scientifiques de base (physique, chimie et histoire naturelle) étaient pratiquement inexistantes.

Il fallait donc réserver dans l'enseignement de la première année une partie du temps pour l'étude de la physique et de la chimie. Comme le programme des études est déjà chargé, il s'ensuit qu'il n'était possible de ne réserver qu'une heure par semain à cet enseignement. On conçoit facilement que malgré les efforts simplificateurs du professeur, il ne pouvait en résulter que l'acquisition de notions extrêmement sommaires.

Mais à la rigueur cela aurait pu se supporter si la plupart des autres matières enseignées en première année – et je vise surtout la physiologie et la séméiologie – n'avaient eu besoin, pour être comprises, de supposer déjà acquises des notions élémentaires de physique et de chimie. Malgré les nombreux essais tentés pour synchroniser les deux cours, il y avait toujours des faux temps.

C'est pour parer à cet inconvénient que, ainsi que cela était demandé depuis longtemps, il vient d'être institué à l'École William Ponty une année préparatoire à l'École de Médecine qui aura pour but d'enseigner les notions de physique, de chimie et d'histoire naturelle suffisantes pour permettre aux élèves entrants en première année de se trouver immédiatement aptes à suivre les cours de physiologie, séméiologie, et de pharmacie.

Pour édifier le programme de cette année préparatoire à l'École de Médecine, nous avons étudié les différents programmes de Écoles de Médecine Françaises ou étrangères qui forment des médecins semblables aux nôtres et en définitive nous nous sommes inspirés dans les grandes lignes du programme de Madagascar qui, en vigueur depuis plusieurs années et ayant subi l'épreuve du temps sans être notablement modifié, montrait qu'il devait répondre à ce que nous cherchions.

La question s'est posée de déterminer quels seraient les professeurs chargés de cet enseignement. Il est évident que l'orientation particulière à donner à ces études scientifiques nécessite que cet enseignement soit donné par des médecins et des pharmaciens. Ceci a été spécifiquement prévu dans l'arrêté réorganisant l'École W. Ponty ; malheureusement en raison de la distance relativement grande que sépare cette école de Dakar, en raison aussi des circonstances actuelles, il ne nous a pas été permis d'organiser de suite, comme il devrait l'être, cet enseignement.

Toutefois, il se trouve à l'École W. Ponty un instituteur qui possède son diplôme du P.C.B. Nous avons fait réserver pour l'instant, les cours scientifiques à ce professeur qui connaît l'orientation particulière qui doit être donnée à l'enseignement scientifique de cette année préparatoire. Le programme en a été d'ailleurs élaboré par nous.

De plus, commes les élèves de l'École de Médecine doivent toujours – et à cela il faut tenir – se recruter par concours, nous avons fait inscrire dans l'arrêté réorganisant l'École W. Ponty une disposition spécifiant que l'année préparatoire à l'École de Médecine serait toujours constituée avec des élèves volontaires, choisissant d'après leur classement de fin de deuxième année, et qu'elle comprendrait obligatoirement un effectif

supérieur de 1/5e au nombre d'élèves fixé pour entrer à l'École. Ainsi l'émulation continuera de jouer dans cette année préparatoire déjà antérieurement sélectionnée.

Nous avons également tenu à ce que le recrutement des élèves de l'École de Médecine ne se fasse pas uniquement par l'École W. Ponty. Déjà il était antérieurement spécifié que des élèves provenant de l'extérieur et ayant suivi les cours des Sections préparatoires organisées au Lycée Faidherbe, au cours secondaire de Dakar, pouvaient accéder, pars concours, à l'École. L'expérience a prouvé que ce mode de recrutement n'a donné jusqu'ici que bien peu de candidats sérieux. Aussi, en raison de l'extension que prend l'enseignement secondaire, tant d'État que privé, avons-nous proposé d'ouvrir le concours aux élèves de l'enseignement secondaire, ayant terminé leur classe de troisième. Le concours sera du niveau de l'examen de fin de deuxième année de l'École W. Ponty et les élèves reçus iront accomplir à W. Ponty l'année préparatoire à l'École de Médecine, à l'issue de laquelle ils passeront le concours d'entrée à l'École. C'est à ces élèves provenant de l'extérieur que sera réservé, si leurs notes le méritent, le 1/5e excédentaire prévu pour la constitution de l'année préparatoire. En l'absence de candidats extérieurs, ce 1/5e sera pris parmi les élèves de l'École W. Ponty.

Afin de ne pas restreindre le nombre des volontaires pour la section préparatoire à l'École de Médecine, des situations ont été prévues pour ceux qui ayant suivi le cycle de cette année préparatoire, ne seraient pas, en fin d'année, admis à l'École de Médecine : ils seront pourvus d'emplois administratifs.

Ainsi, peu à peu, en corrélation avec les progrès de l'enseignement en Afrique Occidentale Française et profitant de l'évolution générale de la colonie, l'École de Médecine peut améliorer ses programmes et son rendement.

En ce qui concerne les élèves Sages-femmes, la première promotion qui doit sortir de l'École Normale de Jeunes Filles de Rufisque est attendue en 1941. Pour l'instant, il est toujours nécessaire de continuer aux élèves que nous recevons, habituellement munies d'une instruction générale assez sommaire, les leçons de français et de calcul qui leur sont dispensables pour suivre l'enseignement professionnel (pourtant simple) qui leur est donné à l'École.

En raison des circonstances au milieu desquelles s'est déroulé l'année scolaire 1939-1940 il n'a pas été question d'apporter de modifications aux programmes de l'enseignement intérieur de l'École. Ceux-ci sont demeurés les mêmes que ceux dont l'exposé figure dans notre rapport annuel de l'an dernier. Seule a été jugée opportune l'adjonction de un cours par semaines de syndromes chirurgicaux aux élèves de 4me année. Ce cours complète, comme en pathologie interne, les cours de syndromes médicaux, le cours de pathologie externe.

Par ailleurs, durant tout le cours de l'année tous les efforts ont eu pour but d'assurer, en concordance avec les nécessités de la Défense Nationale, la continuité de l'enseignement aux élèves de l'École.

Les élèves ont montré que leur attachement à la France n'avait pas lieu d'être mis en doute. Au moment de l'attaque anglaise des 23/25 Septembre 1940, tous ceux qui étaient restés à Dakar, se sont dignement conduits ; tous ceux qui étaient en vacances

pendant cette période, durant laquelle ils ont pu se trouver soumis à des influences diverses, ont rejoint l'École sans la moindre hésitation.[418]

À la mobilisation de Septembre 1939, un certain nombre d'élèves en majorité de 4e année, ont été appelés sous les drapeaux. Le mois suivant, quelques autres furent appelés. Comme ces appels par petits paquets risquaient de compromettre gravement la conduite des études, il fut procédé, Janvier-Fevrier 1940, à la suite d'une entente avec la Commandement, à l'appel et à l'incorporation en bloc de tous les élèves aptes au service.

Durant un mois, ils furent envoyés dans les corps de troupes – 7e R.T.S. pour les sujets, 6e R.A.C. pour les originaires – afin d'accomplir leurs classes militaires.

Durant cette période, l'enseignement de l'École, fut interrompu. Puis, leurs classes terminées, les élèves furent versés à la Section des Infirmiers Coloniaux de l'Afrique Occidentale Française et affectés à l'Hôpital Central Indigène qui était devenu, en principe, formation militaire à la mobilisation. Ils purent ainsi, sous le régime militaire, continuer leurs études qui furent poussées jusqu'à la fin de Juillet, au lieu de fin Juin en temps normal, pour compenser le mois qui avait été consacré à l'instruction militaire. En Aout, les élèves des trois premières années qui accomplissaient leur service militaire, furent mis en congé interrupteur d'études, leur présence sous les drapeaux ne s'imposant plus.

De cette façon, le cycle entier des études pût être accompli avec un nombre d'heures de cours et de travaux pratiques sensiblement égal à celui d'une année normale. D'ailleurs, les examens de passage qui eurent lieu selon le protocole habituel, ne révélèrent comme on l'à déjà vu, que deux défaillances chez deux élèves de première année.

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IV. Résultats des Examens de Fin d'Études

Les événements du mois de Juin en France, n'eurent pas un retentissement matériel immédiat à Dakar, de sorte que tous les élèves purent terminer leur scolarité normale et, il fut décidé que l'examen de fin d'études aurait lieu pour les promotions sortantes (médecins et sages-femmes) suivant le mode habituel.

Mais, pour les médecins et pharmaciens, cet examen eut lieu en Aout à la demande de Monsieur le Médecin Général, Inspecteur Général des Service Sanitaires et Médicaux qui, ayant des besoins urgents en médecins auxiliaires, désirait recevoir ces médecins aussitôt leur scolarité terminée.

En temps normal, les élèves de 4me année disposent de quatre mois, de juillet à octobre pour avoir les matières de leur examen de sortie. Cette année les candidats ne disposèrent que de quinze jours pour cette période de révision et de préparation. Le niveau général de l'examen s'en ressentit forcément quelque peu, mais néanmoins, toute la promotion se montra capable d'obtenir le diplôme de fin d'études, et les premiers –

[418] Voir en fin de ce rapport, la citation accordée à l'École de Médecine de Dakar, par Monsieur le Gouverneur Général Boisson.

ceux qui ont l'habitude de travailler tout le temps – furent égaux aux premiers des années normales.

Pour les Sages-femmes, les obligations militaires n'entrant pas en ligne de compte, il fut décidé que l'examen de fin d'études aurait lieu, comme d'habitude, en Octobre.

Mais les événements en décidèrent autrement. Du 23 au 25 Septembre, Dakar fut bombardée et l'Hôpital Indigène reçut l'ordre de se replier sur Sébikotane où il s'installa dans les bâtiments de l'École W. Ponty. Les élèves de l'École de Médecine suivirent leur hôpital d'instruction : leur présence y était d'ailleurs nécessaire pour traiter les nombreux blessés hospitalisés au cours du bombardement.

Malgré que la Maternité eut été maintenue à Dakar, il n'apparaît pas prudent de laisser, exposées aux coups de l'ennemi, les élèves sages-femmes et elles furent repliées sur Sébikotane en même temps que les élèves médecins. Elles rendirent d'ailleurs des services, car il y eut, hospitalisées à Sébikotane en même temps que quelques femmes indigènes des environs de l'Hôpital vinrent accoucher dans la formation.

Mais il ne pouvait, dans ces conditions, être question de faire passer à ces jeunes filles, à Sébikotane l'examen de fin d'études. Comme leur scolarité était entièrement terminée, la mesure prise l'an dernier (attribution du diplôme sans examen en sa basant sure le classement de Mars) fut adoptée cette année encore et la promotion put quitter l'École en Novembre.

V. Principalat

Un grand nombre de médecins auxiliaires se trouvent soit appelés sous les drapeaux, soit immobilisés dans leurs postes par d'impérieuses obligations, le principalat fut supprimé en 1939-1940, pour les médecins et pour les pharmaciens.

Il fut maintenu pour les sages-femmes et deux candidates furent admises au stage de Dakar et à l'examen probatoire. Elles purent accomplir leur stage en entier puisque la Maternité resta à Dakar. Ces deux sages-femmes auxiliaires furent reçues à l'examen probatoire ; l'une d'entre elles avec l'excellente moyenne de 17,8 parfaitement méritée par ses connaissances professionnelles.

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Afrique Occidentale Fraçaise
Le Gouverneur Général
Haut-Commisariat de l'Afrique Française
Cabinet Militaire
No 2.199 C. M.

Citation à l'Ordre du Jour

Le Gouverneur Général Boisson, Haut-Commissaire de l'Afrique Française, Commandeur de la Légion d'Honneur, cite à l'ordre du jour de l'Afrique Française, l'École de Médecine et de Pharmacie de Dakar pour sa belle tenue au cours des journées des 23, 24 & 25 Septembre 1940.

Professeurs et élèves de l'École ont tous donné pendant l'attaque britannique sur Dakar un magnifique exemple de courage, sang-froid et dévouement en collaborant aux soins prodigués aux blessés./.

Dakar, le 15 Novembre 1940
Signé : P. Boisson

Partie Administrative

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En effet, d'abord le repli de l'École de Médecine sur Sébikotane a perturbé l'emploi normal des crédits en ce qui concerne en particulier le blanchissage, l'éclairage et les moyens de transports.

De plus, les envois de la Métropole ont subi, à la suite des événements de Mai-Juin un arrêt à peu près total. Ceci nous a, dans certains cas, fort gêné et nous avons dû faire appel à l'esprit d'abnégation des élèves pour pouvoir continuer d'assurer, dans des conditions quelquefois difficiles, le fonctionnement de l'École.

C'est ainsi que, en ce qui concerne le trousseau, certains objets ont devenus introuvables et ce n'est que grâce à l'économie de vêtements faits par les élèves devenus militaires durant dix mois, période pendant laquelle ils n'usèrent pas leurs vêtement d'école, que la promotion entrant en Novembre 1940 a pu être habillée et surtout chaussée.

En ce qui concerne les livres nécessaires à l'enseignement, nous avons joué de malheur car la presque totalité de notre commande se trouvait sur le « Brazza » qui fut comme on le sait, torpillé. Le soumissionnaire de cette commande fut dans l'impossibilité d'en obtenir en France, le renouvellement. C'est pour cela que, sur une dotation budgétaire de 58.000 Fr. nous avons fait une économie forcée de 44.628 Fr. Il a donc fallu adapter l'enseignement au manque de livres, remettre en circulation des traités anciens d'anatomie et de séméiologie ; néanmoins l'enseignement a pu être assuré avec le fond de roulement de l'École ; ce sont les livres à donner qui nous manquent.

À la rubrique « Matériel d'Enseignement » nous notons également une économie de 41.603 Fr. pour une dotation budgétaire de 50.000 Fr. Les raisons de cette économie forcée sont les mêmes que pour les ouvrages médicaux : commandes non satisfaites en raison des événements ou non emmenées en raison de la quasi certitude de leur non livraison. Les réserves dont nous disposions nous ont néanmoins permis d'assurer l'enseignement.

…

Le Médecin Général Mercier
Directeur de l'École de Médecine J. Carde
Médecin Chef de l'Hôpital Central Indigène de Dakar

ANOM, Fonds Ancien A.O.F., 2 G 43/8

<u>École de Médecine Jules Carde Rapport Annuel Année Scolaire 1942-1943</u>

I. Personnel Enseignant

a) Personnel appartenant à l'École de Médecine Jules Carde –

Médecin-Colonel Assali – Directeur
Médecin en Chef de l'A.M.I. Rossi – Sous-Directeur
Médecin-Commandant Grall
Pharmacien-Commandant Auffret
Mme. Descubes jusqu'au 1-11-43
M. Houessou Médecin Auxiliaire Principal
Mme. Carrera – Directrice – Internat Élèves Sages-femmes

b) Personnel appartenant à l'Hôpital Centrale Indigène

Médecin-Lieutenant Colonel Moreau
Médecin-Commandant Ouary
Médecin-Capitaine Arne
Médecin-Lieutenant Carayon jusqu'au 15 Avril 1943
M. Fourn Léon puis M. Ayitte Étienne – Médecin Auxiliaire
Boubacar Ly Médecin Auxiliaire

c) Personnel appartenant à diverses formations de Dakar

Médecin-Commandant Vaisseau
Médecin-Commandant Moulinard
Médecin-Capitaine Brochen (à compter du 25 Avril 1943)
Médecin-Lieutenant Bermond jusqu'au 25 Avril 1943
Pharmacien-Colonel Ferre
Pharmacien-Capitaine Rivière
Médecin-Capitaine Kervron du 1-11-43

2. Élèves

1) Admissions en 1942

22 Élèves Médecins
3 Élèves Pharmaciens

provenant de l'École W. Ponty

20 Élèves Sages-femmes provenant des différents Colonies de la Féderation

L'étude comparative du nombre des Élèves Sages-femmes chrétiennes d'une part et musulmanes d'autre part permet de constater une augmentation frappante du nombre de ces dernières, au cours de sept années écoulées – ce qui traduit à notre sens, une faveur grandissante de la profession de Sage-femme, dans partie mulusmane de la population, et aussi une confiance accrue dans la discipline et le régime de l'École –

Année Scolaire	Catholiques	Protestantes	Musulmanes
1937-38	43	4	8 - 14,5%
1938-39	38	2	9 – 18,5%
1939-40	42	-	12 – 22,2%
1940-41	44	-	11 – 20%
1941-42	40	-	16 – 28,5%
1942-43	41	2	18 – 29,5%
1943-44	37	2	20 – 33,3%

2) Effectif total et répartition par année scolaire

Élèves	1e année	2e année	3e année	4e année	Total
Médecins	22	27	35	21	105
Pharmaciens	3	2	2	-	7
Sages-femmes	20	20	21	-	61
Totaux	45	49	58	21	173

L'effectif a été réduit au cours d'année scolaire à 164 unités par suite –

a) de licenciement pour raison de santé d'un Élève (Faye Abdoulaye – 4e année)
b) licenciement pour incapacité à poursuivre leurs études de 6 Élèves Médecins : 3 de 3e année, 3 de 2e année, 1 Élève Sage-femme
c) de licenciement par mesure disciplinaire de 1 Élève Pharmacien de 3e année, à l'occasion des examens de fin d'études
d) de la mise en congé de longue durée de deux Élèves Sages-femmes

3) Sortie de l'École

37 Élèves soit : 19 Médecins, 1 Pharmacien, 17 Sages-femmes sont sortis de l'École, à la suite des examens de fin d'études – un Élève Pharmacien a été licencié, une Élève Sage-femme a été admise à redoubler la dernière année –

Le nombre total des Élèves sortis de l'École depuis sa fondation s'éléve à : 744

Médecins : 329
Pharmaciens : 34
Sages-femmes : 319
Infirmières-Visiteuses : 62

744

4) Répartition par Colonie d'origine des Élèves sortis de l'École de Médecine depuis sa fondation

Colonie	Médecins	Pharmaciens	Sages-femmes	Infirmières-V	Total
Dakar	-	-	2	-	2
Sénégal	70	3	46	6	125
Soudan	61	6	65	5	137
Guinée	31	7	31	7	76
Haute Volta	5	1	6	2	14
Côte d'Ivoire	76	8	38	13	135
Dahomey	69	6	121	29	225
Togo	11	2	4	-	17
Niger	5	-	5	-	10
Cameroun	-	-	1	-	1
Sierra Leone	-	1	-	-	1
Liberia	1	-	-	-	1
Total	329	34	319	62	744

…

Culture Physique

Les élèves divisés en deux groupes, bénéficient de 3 séances de culture physique par semaine, sous la conduite de Moniteurs diplômés.

Enseignement Militaire

Tous les élèves (sauf quatre inapte physiquement ou exempté de service militaire) on suivi les cours du Brevet de Préparation Militaire Élémentaire, avec un entrain qu'il est agréable de signaler – 68 élèves ont obtenu le Brevet de B.P.E. malgré la brièveté du temps imparti (deux mois). Les échecs furent dus à une instruction insuffisante dans le pratique du tir.

IV. Examens

Examens Semestriels

Trois Élèves Médecins de 2e année, trois de 3e année sont licenciés –
Un Élève de 4e année, doit redoubler la troisième année –
Deux Élèves Sages-femmes de 3e année sont reclassés en 2e année –

Examens de fin d'année et Examens de Passage

Six Élèves Médecins de 2e année, doivent redoubler cette année –
Une Élève Sage-femme de 1e année est licenciée –

Examens de fin d'études

19 Élèves Médecins ont obtenu le diplôme de fin d'études.
11 avec mention bien
8 avec mention assez bien
1 Élève Pharmacien a obtenu le diplôme de fin d'études avec mention assez bien – un autre est licencié, après échec aux examens de fin d'études.
17 Élèves Sages-femmes obtiennent le diplôme, une est admise à redoubler.
11 ont obtenu la mention bien
6 ont obtenu la mention assez bien

V. Principalat

À la suite des examens probatoires, ont été admis à suivre le stage de perfectionnement :

13 Médecins Auxiliaires sur 26
2 Pharmaciens Auxiliaires sur 3
5 Sages-femmes Auxiliaires sur 15
0 Infirmières-Visiteuses sur 2

La moyenne des notes a été pour les candidats admis :

Médecins : de 11 à 13,25
Pharmaciens : de 16,5 à 18,25
Sages-femmes : de 12,5 à 18

À la suite des examens, en fin de stage (du 3 au 6 Novembre 1943) Médecins et Pharmaciens et (du 8 au 10 Novembre) Sages-femmes.
Ont été déclarés aptes au grade de Médecin, Pharmacien ou Sage-femme Auxiliaire Principale :
13 Médecins – 1 mention bien, 2 mention assez bien, 10 mention passable
2 Pharmaciens – 2 mention bien
6 Sages-femmes – 1 mention bien, 1 mention assez bien, 4 mentions passable

…

Dakar, le 20 Mai 1944
Le Médecin-Colonel Assali
Directeur de l'École de Médecine

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