Yuji K, Yuji W. A Reexamination of Dr. Masanao Goto's Leprosy Treatment in Hawai'i: New Insights from Japanese and Hawaiian Sources. *Hawaii J Health Soc Welf*. 2026;85(8):203-209. doi:10.62547/CTHG4748

A Reexamination of Dr. Masanao Goto's Leprosy Treatment in Hawai'i: New Insights from Japanese and Hawaiian Sources

Koichiro Yuji, MD, PhD[1,2], Wakako Yuji, MD, PhD[2]

[1] Project Division of International Healthcare Innovation Research, University of Tokyo, Institute of Medical Science, [2] Department of Research, Kitasato Institute Hospital

Keywords: History of Medicine, Leprosy, Hawai'i, Masanao Goto, Japanese Medicine, Health and Social Welfare, Patient Empowerment, Person-Centered Care, Patient Experience

https://doi.org/10.62547/CTHG4748

Abstract

Leprosy (Hansen's disease) care in late 19th-century Hawai'i involved complex interactions between Western medicine, traditional practices, and diverse patient experiences. This study re-evaluates the contributions of Dr. Masanao Goto, a Japanese physician whose treatment gained significant patient popularity, by focusing on its health and social welfare implications. Utilizing previously under-examined Japanese sources—including family records and hospital documents—alongside Hawaiian and English archives, this historical research analyzes Goto's work in Hawai'i (1885–1895) and the dynamics of cross-cultural medical encounters. The analysis reveals a three-way dynamic between patients seeking relief, a non-Western practitioner offering a holistic paradigm, and a shifting medical establishment that increasingly prioritized bacteriological cures. Dr. Goto's holistic regimen, centered on chaulmoogra oil integrated with *Kampō* (a system of traditional Japanese medicine adapted from classical Chinese medicine) principles and medicated baths, provided tangible symptomatic relief and profound hope. While initially supported by the Kalākaua administration, his work later clashed with the "reformist" Board of Health following the political upheaval of 1887. Patient support, however, was a powerful force, culminating in an 1894 petition from 861 Kalaupapa residents to appoint him their permanent physician. Dr. Goto's work, embraced by patients, highlights the critical importance of patient-centered perspectives and the agency of non-Western practitioners. The organized patient movement for his care serves as a historical precedent for medical sovereignty, offering valuable insights into integrating diverse medical traditions pertinent to achieving health equity in contemporary Hawai'i.

Introduction

In late 19th-century Hawai'i, the management of Hansen's disease (leprosy) was deeply politicized, shaped by colonial authority and racial discourse. The policy of forced exile to settlements like Kalaupapa disproportionately marginalized Native Hawaiians (*Kānaka Maoli*) through what historian Pennie Moblo terms "defamation by disease."[1] Within this context, the work of Dr. Masanao Goto (1857-1908), a Japanese physician, remains under-examined. While historians like Gavan Daws[2] and Charles S. Judd Jr.[3] acknowledge him, their accounts primarily reflect the Western medical establishment's perspective. Although some scholarship frames Goto as a Meiji-era medical entrepreneur,[4] an analysis of his work from the patient-centered perspective found in Hawaiian sources is absent.

This article re-examines Dr. Goto's work by integrating Japanese primary sources with Hawaiian-language newspapers and official records. The conflict between Goto and the Board of Health represents a microcosm of a larger dynamic involving patients as active agents. Situating this story within the critical historiography of leprosy in Hawai'i,[1,5,6] frames the patients' embrace of Goto's methods not merely as a treatment preference, but as a demand for 'medical sovereignty'—an assertion of self-determination mirroring the broader *Kānaka Maoli* struggle for national sovereignty.[7]

Methods

This historical research employed a rigorous qualitative approach, triangulating diverse primary source materials in Japanese, Hawaiian, and English to reconstruct and interpret the significant yet overlooked work of Dr. Masanao Goto in Hawai'i. This multilingual approach was crucial for overcoming the biases of any single linguistic or cultural archive, aligning with historians like Anwei Skinsnes Law[6] and Noenoe K. Silva[7] who have demonstrated the necessity of non-English sources for a complete history of Hawai'i.

Primary sources were drawn from 3 languages. Japanese-language materials, including Goto family archives, records from his Kihai Hospital, and articles from the *Asahi Shimbun*, were central to understanding Dr. Goto's *Kampō* (a system of traditional Japanese medicine adapted from classical Chinese medicine) background and medical philosophy. Hawaiian-language newspapers, sourced from digital archives like nupepa.org and Chronicling America, provided an indispensable window into local reception and patient perspectives, offering a crucial counter-narrative to official records. English-language materials consisted primarily of official documents, such as the Reports of the Hawaiian Board of Health, and articles from newspapers like *The Hawaiian Star*, which offered insights into the views of the Western-dominated medical establishment.

The analytical process involved a meticulous and iterative cross-referencing of these diverse sources to build a comprehensive narrative, focusing on the period from Goto's initial contact with Hawaiian officials (c. 1878) to

the persistent efforts by patients to secure his return until his death in 1908. Translations of Japanese primary sources were conducted by the authors. For Hawaiian language materials, established scholarly translations were utilized and cross-referenced with contemporary English accounts. As this research is based solely on the analysis of publicly available historical records and involves no direct interaction with human subjects or personal data, it was determined to be exempt from Institutional Review Board (IRB) review.

Results

A Foundation in Japan: Kampō, Chaulmoogra Oil, and the Kihai Hospital

Masanao Goto (**Figure 1**) was born in 1857 into a family of physicians practicing *Kampō*. In a pioneering move, he and his father established the Kihai Hospital (literally "Resurrection Hospital") (**Figure 2**) in Tokyo, dedicated to treating leprosy, a significant social welfare initiative at a time when patients were typically ostracized.[4,8] The Gotos' regimen integrated chaulmoogra oil, a substance used for centuries in traditional Asian medicine and recognized, albeit problematically, in the West for its potential against leprosy. Western medicine struggled with the oil's severe side effects, including intense nausea when taken orally and painful abscesses from injections. The Kihai Hospital's holistic protocol was a sophisticated system designed to mitigate these issues. It included oral medication combining chaulmoogra with other herbs based on *Kampō* pharmacology, medicated baths using chaulmoogra pomace for direct topical application, physical therapy, and dietary guidance. This multi-pronged approach prioritized patient well-being and comfort.[4]

The Hawaiian Connection: Royal Invitation and Patient Advocacy

The Gotos' fame reached Hawai'i, offering hope where the local response to leprosy was forced exile and social death. The connection began as early as 1878, with Hawaiian newspapers reporting on a Dr. Goto in Japan with effective treatments.[8] A pivotal moment occurred during King Kalākaua's 1881 world tour, an ambitious diplomatic effort to secure the kingdom's sovereignty. While in Tokyo, the King met Dr. Masanao Goto and, impressed by his work, extended a personal invitation to visit the Kingdom.[9] This royal endorsement was powerfully reinforced by active political lobbying by patients. Gilbert Waller, a wealthy American businessman from Hawai'i who had sought treatment at the Kihai Hospital in 1883, was so impressed with his recovery that he urged Dr. Goto to come to Hawai'i.[10] After returning to the islands, Waller wrote to the government in 1885, strongly advocating for Goto's methods. This act of direct patient lobbying, combined with the King's prior invitation, resulted in the Hawaiian government officially inviting Dr. Goto to treat leprosy patients.[11] Waller's subsequent long life, with no reported recurrence of the disease, stands as compelling patient-perspective evidence of the treatment's efficacy.[12]

Figure 1. Dr. Masanao Goto.

This photograph is estimated to be from around the time of his work in Hawai'i; the date of the photograph is unknown.

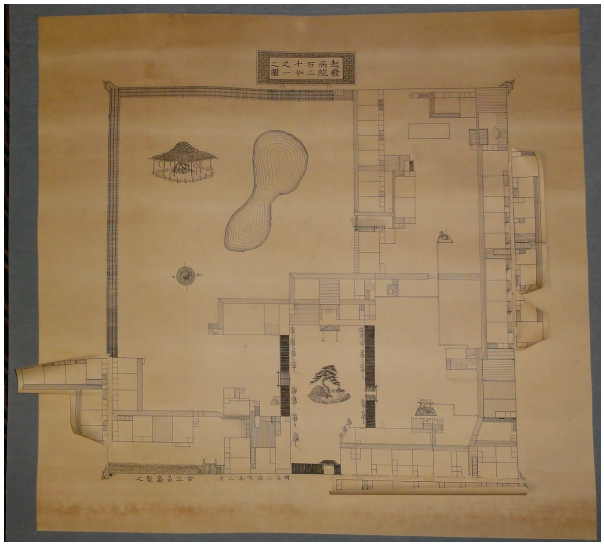

Figure 2. Map of the Kihai Hospital, Tokyo, Japan, created in February 1894.

This patient trust was so profound that it transcended national borders. In 1888, David Keaweamahi, a Native Hawaiian pastor from O'ahu diagnosed with leprosy, rejected the Board of Health's mandate for exile to Moloka'i and instead traveled all the way to Japan to seek treatment at the Goto's Kihai Hospital. Keaweamahi documented his journey and treatment in a series of letters titled *"He Leta*

Mai Iapana Mai" (A Letter from Japan) published in Hawaiian newspapers, serving as a vital link between the two nations.[12,13] He remained in Japan for 12 years to avoid the strict quarantine policy in Hawai'i. He died in Tokyo in July 1900; a contemporary report noted his cause of death as consumption and that "no sign of the disease was visible on his face," powerfully reinforcing community trust in the long-term efficacy of Goto's methods.[13,14] His experience, alongside Waller's, reinforced the deep community trust in Goto's treatment, demonstrating that patients sought not only a cure but also an alternative to forced exile.

First Sojourn in Hawai'i (1885-1887): A Clash of Therapeutic Paradigms

Upon his arrival in Honolulu in October 1885, Dr. Goto began work under contract with the Board of Health, establishing a clinic and treating patients at the Kaka'ako Branch Hospital.[15] This contract, initiated under the administration of Walter Murray Gibson, reflected the Hawaiian Kingdom's openness to alternative medical perspectives prior to the political shifts of 1887. His method, involving medicated hot baths and oral pills, was seen as a significant advance. In an official report to the Board of Health dated March 30, 1886, Dr. Goto provided a detailed description of these treatments for leprosy patients; this document was subsequently included in the legislature's official records.[12] One of his most prominent patients was Father Damien, who sought Goto's care in July 1886.[16] Enthusiastic about the initial results, Damien returned to Kalaupapa and championed the treatment, securing supplies and collaborating with Brother Joseph Dutton to construct a bathhouse for the community.[17] The treatment, particularly the baths, became immensely popular among patients, creating a "mania" for the therapy, as they actively sought a treatment that provided not only symptomatic relief but also a sense of comfort and control.

Significantly, Mother Marianne Cope, who oversaw patient care at the Branch Hospital, observed tangible improvements. In a letter dated August 28, 1886, she wrote to her superior that under Dr. Goto's treatment, "Almost all [patients] have improved significantly... The Doctor has even thoughts of discharging them soon," noting that such progress was "quite unheard of in the history of Leprosy."[18,19] This testimony from a Western observer corroborates the patient perspective that the treatment offered genuine physical relief. However, this period also marked the beginning of tensions with the Western medical establishment. Dr. Arthur Mouritz, the resident physician at the settlement, observed Father Damien's eventual physical decline under the intense regimen of hot baths and concluded the treatment was ineffective. As historian Kerri Inglis notes, Western physicians were increasingly focused on the "microbe medicine" of the newly identified *Mycobacterium leprae*. For them, if a treatment did not halt the bacteria, it was deemed of no value, even if it gave temporary relief.[20] This medical skepticism was compounded by political upheaval. The imposition of the "Bayonet Constitution" in 1887 and the subsequent removal of Walter Murray Gibson shifted the Board of Health's leadership to a "reformist" cabinet that prioritized fiscal austerity and Western scientific authority.[21] Consequently, despite patient petitions, Goto's contract was not renewed, and he returned to Japan in 1887. His service to the kingdom was nonetheless recognized with a royal decoration from King Kalākaua.[22]

*Second Invitation and "*Haukapila o Goto*" (1893-1895)*

Patient demand for Dr. Goto's return remained strong, leading to a second official invitation. He arrived in March 1893, just weeks after the overthrow of the monarchy, a timing that underscores the immense political pressure patients exerted to secure his invitation from the new, skeptical Provisional Government.[23] This time, he focused his efforts squarely on the Kalaupapa settlement.[24,25] American leprologist Albert S. Ashmead recognized Goto as a leading authority, describing him as "the most eminent leprologist in Japan."[26] At Dr. Goto's request, a dedicated facility was established at Kalawao on May 29, 1893, with an initial 30 patients.[12,24] This complex, which became known among patients as "*Haukapila o Goto*" (Goto's Hospital), included a hospital building, dormitories, a kitchen, and a bathhouse, allowing him to oversee the care of approximately 140 patients.[17] He implemented a structured schedule, spending most of his time on Moloka'i providing direct care. While explicit records of their daily interactions in this later period are scarce, earlier correspondence suggests a partnership where Goto provided medical direction while Mother Marianne Cope and her sisters executed the labor-intensive nursing care.[17,19]

This trust was not merely political; it was deeply personal. The children in Goto's hospital, experiencing "respite and true strength," even composed a song in his honor, celebrating the "healing medicine of Dr. Goto" that brought them such joy.[27] This sentiment was shared by the wider patient community, whose overwhelming support was demonstrated in April 1894, when a remarkable 861 out of approximately 1100 residents[25] signed a petition formally requesting that Dr. Goto be appointed as their permanent physician.[12,27,28] This petition represents a highly organized collective action by the patients to assert their choice in medical care. The Board of Health rejected the petition, citing a lack of proof of permanent cures and budgetary constraints—a decision that prioritized institutional metrics over the expressed needs of the patient community. Dr. Goto left Hawai'i again in April 1895.[29]

Anticipating Modern Science: Parallel Innovations in Chaulmoogra Oil Treatment

Decades before Western science developed a viable injectable form of chaulmoogra oil, Dr. Goto's *Kampō*-based regimen offered a patient-centered solution to the same fundamental problem. The challenge with chaulmoogra oil was not its potential efficacy but its severe side effects, which made it intolerable for many patients. Dr. Goto's innovation was a holistic and systemic one: he combined the oil with other herbs in a complex pharmacological formula to buffer its negative effects, and he developed medicated

baths to deliver it topically, bypassing the gastrointestinal issues altogether.[25] This was a sophisticated, complete protocol designed for patient tolerability and relief.

Interestingly, this patient-centered approach to chaulmoogra oil found a parallel in the work of another innovator in Hawai'i, Alice Ball. In 1915, Ball, a young African American chemist at the University of Hawai'i, developed a method to make chaulmoogra oil injectable and absorbable by the body, solving the same problem of side effects that Goto had addressed through *Kampō* formulations and baths.[30] Both practitioners listened to the physiological needs of the patients—one through the lens of traditional East Asian medicine, the other through Western chemistry—and both provided relief where standard Western methods had failed. The key difference was that Ball's success was biochemical and bacteriological, leading to patients testing negative for the bacillus and the first medical releases from isolation, whereas Goto's success was clinical and symptomatic, improving quality of life without eliminating the pathogen.

The Enduring Hope for Goto's Return

Even after his second departure, patients on Moloka'i held onto the hope of his return. In 1903, a representative from the Japanese-language newspaper *Hawaii Shimpo* visited Kalaupapa and reported that belief in the efficacy of Goto's treatment remained widespread.[31] Patients interviewed claimed significant improvements and earnestly desired his return. In response to this persistent patient demand, the Hawai'i legislature, in a significant victory for patient advocacy, appropriated $3000 specifically for Dr. Goto's salary and an additional $3000 for his medicines to return and treat the patients.[32] However, the initiative was once again thwarted by the Board of Health, which, despite resuming the use of his medicines due to patient clamor, decided not to send for Dr. Goto, citing a shortage of funds.[33] The Board maintained its rigid position that the treatment was only of temporary benefit and not a permanent cure. Dr. Goto continued his work in Japan until his death in 1908, but his influence on the patients in Hawai'i endured as a powerful symbol of hope and compassionate care.[34]

Discussion

The Changing Political Landscape

The Kingdom's openness to Dr. Goto's approach was not an anomaly but reflected a sustained commitment to public welfare. This is evidenced by earlier initiatives such as the establishment of Queen's Hospital in 1859 by King Kamehameha IV and Queen Emma, which provided health care at no cost to the Indigenous population. Such policies demonstrate that the Hawaiian government actively sought to protect its citizens through sovereign institutions long before the imposition of Western biomedical hegemony.

Dr. Goto's trajectory must be contextualized within the Kingdom's shifting politics (1885–1895). The initial embrace of Goto under King Kalākaua and Premier Walter Murray Gibson reflected a sovereign nation exercising agency to seek solutions beyond Western orthodoxy. However, the 1887 "Bayonet Constitution" marked a turning point. The subsequent "reformist" cabinet, aligned with White commercial interests, altered Board policies.[5,21,35] Western physicians' dismissal of Goto's treatment coincided with this regime change, which increasingly prioritized Western scientific authority and fiscal austerity over previous inclusive approaches.

Furthermore, the Board's insistence on segregation reflected the prevailing global medical standard following Gerhard Hansen's identification of *M. leprae* in 1873.[36] However, in Hawai'i, this global scientific standard became entangled with colonial politics. Under the post-1887 oligarchy, the rigorous enforcement of isolation and the rejection of "Native" or "Asian" therapeutics became markers of the new regime's claims to "modernity," often at the expense of the Indigenous population.

Restoring Agency: The Power of Non-Western Sources

Finally, Goto's story must be understood within the transnational flow of medical knowledge. His practice was not a static application of Japanese tradition but a dynamic interplay between *Kampō*,[4] his own studies of Western medicine, and the specific needs of his patients in Hawai'i. By re-examining this history with a focus on Japanese and Hawaiian-language sources, this paper challenges the dominant narrative that has privileged the perspective of the Western medical establishment. This approach, advocated by scholars like Noenoe K. Silva[7] and Anwei Skinsnes Law,[6] restores the voices and agency of the *Kānaka Maoli* patients and caregivers who found solace in Goto's methods and illuminates the vital role of non-Western practitioners in the history of Hawai'i. The organized movement to secure Goto's return in 1894 was not merely a request for medication; it was an assertion of medical sovereignty—a community demanding the right to define its own terms of healing against an imposed institutional authority.

Conclusion

While Dr. Masanao Goto did not provide the definitive cure the Hawaiian Board of Health sought, his establishment of *Haukapila o Goto*, his dedication to patient welfare, and the profound trust he earned from the community solidify his historical significance. His legacy is not one of a failed cure, but of a pioneering model of Person-Centered Care that was decades ahead of its time. Crucially, the patient-led movement to secure his services represents a powerful historical precedent for medical sovereignty, demonstrating a community's determination to define its own terms of health and well-being against an imposed institutional authority. The narrative of his work in Hawai'i is ultimately driven by the powerful agency of his patients, whose organized political advocacy brought him to the islands. His story, brought to light through a tri-lingual methodology, serves as a model for uncovering more just histories of cross-cul-

tural medical encounters. For contemporary health systems in Hawai'i, this history serves as a powerful reminder that patient-defined success and the integration of diverse healing traditions are not peripheral concerns, but central to achieving true health equity.

Acknowledgements

The authors wish to thank the Hamilton Library at the University of Hawai'i at Mānoa for their assistance with research materials, and Kristin Barrett-Anderson, Director of the Saint Marianne Cope Shrine & Museum, for her valuable support. We are especially grateful to Dr. George Goto, Professor Emeritus at Nagasaki University and grandson of Dr. Masanao Goto, for graciously providing the crucial historical photographs and maps from the family archives that were essential to this study. Finally, we extend our special thanks to Yayoi Ashikaga.

Conflict of Interest and Disclosures

KY reported institutional support from Tokyu Land Corporation outside the submitted work. WY declares no competing interests. Co-author Wakako Yuji is a great-granddaughter of Dr. Masanao Goto; this relationship provided access to the unpublished Goto Family Archives used in this study.

Submitted: July 20, 2025 PDT. Accepted: May 30, 2026 PDT.
Published: August 03, 2026 PDT.

References

1. Moblo PL. *Defamation by Disease: Leprosy, Myth and Ideology in Nineteenth Century Hawai'i*. PhD dissertation. University of Hawaii; 1996.

2. Daws G. *Holy Man: Father Damien of Molokai*. Harper & Row; 1973.

3. Judd CS Jr. Medical history in the islands: Leprosy in Hawaii, 1889-1976. *Hawaii Med J*. 1984;43(9):328.

4. Yamaguchi J. The achievements of Goto Shōbun and Masanao, father and son, and the Kihai Hospital. *Hansen-byo Shimin Gakkai Nenpo*. 2005;1:115-132.

5. Inglis KA. *Ma'i Lepera: Disease and Displacement in Nineteenth-Century Hawai'i*. University of Hawai'i Press; 2013. doi:10.21313/hawaii/9780824834845.001.0001

6. Law AS. *Kalaupapa: A Collective Memory (Ka Hokuwelowelo)*. University of Hawaii Press; 2012.

7. Silva NK. *Aloha Betrayed: Native Hawaiian Resistance to American Colonialism*. Duke University Press; 2004. doi:10.1215/9780822386223

8. Initial Hawaiian Press Report on Dr. Goto's Reputation for Curing Leprosy in Japan. *Nu hou kuloko [Local news]. Ka Nupepa Kuokoa*. January 26, 1878:3.

9. Armstrong WN. *Around the World with a King. Japanese Edition*. Shogakukan; 1995.

10. A wealthy man named Gilbert from the Hawaiian Kingdom came to Japan for leprosy treatment. *Asahi Shimbun*. February 21, 1883:1.

11. Na nu hou Hawaii [Hawai'i News]. *Ko Hawaii Pae Aina*. October 17, 1885:2.

12. Clark JRK. *Kalaupapa Place Names: Waikolu to Nihoa*. University of Hawai'i Press; 2018. doi:10.1515/9780824873301

13. Furukawa T. He leta mai Iapana mai: A Native Hawaiian Hansen's disease patient leaving for Japan in the late nineteenth century. *Hawaiian J Hist*. 2024;58:49-74. doi:10.1353/hjh.2024.a946412

14. By the Hongkong Maru. *The Independent*. August 14, 1900:3.

15. Kauka Iapana M. Goto [Advertisement]. *Ko Hawaii Pae Aina*. October 17, 1885:2.

16. St Jozef Damien De Veuster (1840-1889) – Biography. Vatican City State. Accessed July 20, 2025. https://www.vatican.va/news_services/liturgy/saints/2009/ns_lit_doc_20091011_de-veuster_en.html

17. Greene LW. *EXILE IN PARADISE: The Isolation of Hawai'i's Leprosy Victims and Development of Kalaupapa Settlement, 1865 to the Present*. U.S. Department of the Interior, National Park Service, Denver Service Center; 1985. Accessed July 20, 2025. https://www.npshistory.com/publications/kala/hrs.pdf

18. Jacks LV. *Mother Marianne of Molokai*. The Macmillan Company; 1935. doi:10.2307/3411457

19. Letter from Mother Marianne Cope to Mother Bernardina Dorn, August 28, 1886.

20. Inglis KA. "Cure the dread disease": 19th century attempts to treat leprosy in the Hawaiian Islands. *Hawaiian J Hist*. 2009;43:101-124.

21. Announcement of Dr. Goto's 1887 Departure for Europe and the Transfer of His Medical Practice. *Kela me keia [Miscellaneous news]. Ka Nupepa Kuokoa*. June 4, 1887:3.

22. Goto Family. Goto Family Genealogy.

23. Mai Iapana mai [From Japan]. *Hawaii Holomua*. March 6, 1893:2.

24. Dr. Goto in Town. *The Hawaiian Star*. https://chroniclingamerica.loc.gov/lccn/sn82015415/1893-06-03/ed-1/seq-5/. June 3, 1893. Accessed July 20, 2025.

25. Dr. Goto's mission. He talks about his treatment of leprosy. *The Hawaiian Star*. https://chroniclingamerica.loc.gov/lccn/sn82015415/1893-04-13/ed-1/seq-3/. April 13, 1893. Accessed July 15, 2025.

26. Ashmead AS. Opinions of a noted Japanese specialist in matters of leprosy. *J Cutan Genitourin Dis*. 1894;12:107-117.

27. An Open Letter from the Kalaupapa Hospital Superintendent Testifying to Dr. Goto's Curative Success and Reporting a Patient Petition for His Permanent Appointment. *Na leta [Letters]. Ka Oiaio*. April 13, 1894:4.

28. Inglis KA. Nā hoa o ka pilikia (friends of affliction): A sense of community in the Molokai leprosy settlement of 19th century Hawai'i. *J Pac Hist*. 2017;52(3):287-301. doi:10.1080/00223344.2017.1371223

29. Announcement of Dr. Goto's Return to Japan Following the Completion of His Government Contract. *Kela me keia [Miscellaneous news]. Ka Makaainana*. April 8, 1895:8.

30. Hollmann HT. The fatty acids of chaulmoogra oil in the treatment of leprosy and other diseases. *Arch Dermatol Syphilol*. 1922;5(1):94-101. doi:10.1001/archderm.1922.02350260097010

31. Leprosy Patients Hope for Japanese Physician's Return: letter from Hawaii. *Asahi Shimbun*. April 24, 1903:3.

32. Leprosy Doctor - Dr. Goto's Invitation - Letter from Hawaii. *Asahi Shimbun*. June 7, 1903:2.

33. Did not send for Dr. Goto. *The Hawaiian Star*. https://chroniclingamerica.loc.gov/lccn/sn82015415/1903-12-12/ed-1/seq-1/. December 12, 1903. Accessed July 15, 2025.

34. Masanao Goto in memoriam – doctors of Hawaii. Hawaii Medical Library. Accessed July 20, 2025. https://web.archive.org/web/20070607023216/http://hml.org/mmhc/mdindex/goto.html

35. Kuykendall RS. *The Hawaiian Kingdom, Vol. 3, 1874-1893, The Kalakaua Dynasty*. University of Hawaii Press; 1967. doi:10.1515/9780824847357

36. Hansen GHA. *The Memories and Reflections of Dr. Gerhard Armauer Hansen*. German Leprosy Relief Association; 1976.