Plantation Medicine in Hawaii
1840 to 1964: A Patient’s Perspective

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The first contract laborers arrived from China in 1852, but little attention was paid to their medical needs. In 1886 a physician from Japan arrived to minister to the health and medical needs of the Japanese immigrants. After 1900 most physicians caring for immigrant plantation workers were Western trained from the Mainland. Many advances in medicine were started on plantations such as the second x-ray machine in Hawaii. The 1950s brought rapid changes in plantation medicine with the closing of plantation facilities on Oahu. The author describes her personal experience as a patient in the plantation medical system.

In high-rise-dominated, tourist-oriented Hawaii, it is sometimes hard to remember that only a little more than a generation ago these isles were dotted with more than 27 self-contained plantations with their own village life complete with housing, schools, stores, community centers, social workers, and medical facilities. The sugar plantations with related industry such as shipping dominated the economic life of the islands for nearly a hundred years. And from the blowing of the start-work whistle at 7 am to curfew at 9 pm, a person’s personal life was dominated by the plantation.

Sugarcane grew wild in Hawaii before European contact and the existence of isolated stone-grinding mills is evidence of the manufacture of sugar by Chinese immigrants as early as 1800. The first sugar plantation organized after Western contact was on Kauai in the 1830s. It did not make a profit. Operation as a profitable industry had to wait until after the passage of the Reciprocity Treaty with the United States in 1876. The disastrously declining native population made the importation of foreign labor of upmost importance to the planters and forced the monarchy government to establish policies and practices regarding the treatment of immigrant laborers including providing for their health and medical care.

The first contract laborers from China arrived in 1852 and were distributed among the planters. They were called coolies, and if any attention were paid to their medical needs, documentation of it could not be found. An indication of their value to the planters can be ascertained by reading the shipping and passenger lists of interisland ships of that time. Haole passengers were listed first, by name, followed by:

- 5 natives
- 3 cows
- 4 Chinamen
- 6 head of hogs

In the early days of immigrant labor, the health and well-being of the imported contract laborers was a matter for the Bureau of Immigration for the Kingdom and later the Territory of Hawaii. An early immigrant ship with arriving Japanese landed in 1868; these people, however, were not laborers and most of them either continued to California or returned to Japan. A pioneer band of 180 Portuguese laborers arrived in 1878. The first large shiploads of Japanese contract laborers arrived in 1885.

In 1886 a physician from Japan arrived to minister to the health and medical needs of the Japanese immigrants. Japanese physicians were supplied before the turn of the century. After 1900 they were largely replaced with Western-trained, English-speaking physicians from the Mainland and a few from Europe. According to the agreement with the Japanese government, the Bureau was required to inspect the plantations every six months as to the quality of housing, food, clothing, and medical attention. Individual complaints could be made at the time of inspection. Early on, one plantation tried to deduct medical costs, but the Bureau of Immigration forbade it ruling that full wages must be paid and sick leave must be granted. Testimony indicates this latter policy was often ignored.

The earliest direct quote about plantation medicine came from a Chinese laborer interviewed in 1882:

...In their little two room house, which was all they were permitted in the early days, 12 children were born without a doctor in attendance. The husband always helped at the births, and three days later went to the plantation doctor to report the birth and get a certificate. It was considered a great shame to have a doctor at the time of birth. Also the plantation doctor lived far away and never came to people’s homes...Conditions in general were much better for him in Hawaii than they would ever have been in China. He had never had regrets about moving here—most bosses were fair, and he doesn’t think there is any place in the world like Hawaii. It gave the children a better chance than they would have had in China.

Turn-of-the-century plantation physicians, quoted 50 years later, had vivid memories of the difficulties of rural practice to match any from the horse-and-buggy period. Dr Fred Irwin who came to Hawaii in 1903 described his experience in the early 1950s:

...The hospital situation during the first three years of my practice on Hawaii could very easily be described because there were no hospitals. The three plantations for which I was physician and surgeon had no hospital, the same being true of the three plantations on either side of my district. The same was true of every other plantation and political district on the island of Hawaii up to as far as I can remember, about 1910 when a hospital was built at Pepeekeo for three plantations, Honomu, Pepeekeo and Onomea...

Dr L.L. Sexton reported from Hilo:

In 1909, fresh from an internship at Queen’s Hospital, and before I learned to speak or drink Scotch [most plantation managers on the Hamakua coast were Scotland born] this pioneering medicine was both an adventure and a challenge...My total lack of experience outside a hospital caused me no end of concern. Transportation was by horse and buggy over muddy, frequently impassable roads. The saddlebag filled with my total armamentarium was always ready in the buggy so that I could mount a mule for a trip into the foothills to see what? —a delivery, ruptured appendix, strangulated hernia, extraction of an aching tooth. Operation a must. How? Easy. A five
gallon oil can, build a fire; instruments sterilized. Local preparation—soap and water—old rags soaked in strong Lysol as drapes. Anesthetic—chloroform, easy to carry. Anesthetist—nana-san, trained on the spot by hand signals...We practiced early ambulation in those days. Manual extraction of a retained placenta, temperature 103°F. "Hoe huna hana" (Back to work) the next day, bowing and kissing her thanks as I passed by. Not my skill but the grace of God.

Plantation doctors were paid a salary called a retainer, and until the strike of 1946, these services were provided free to all plantation employees and their families. After the strike most perquisites were eliminated and the medical plans were negotiated by the International Longshoremen's and Warehousemen's Union (ILWU) and the Hawaiian Sugar Planters' Association (HSPA) on a plantation-to-plantation basis.

From my own experience with Kekaha Sugar Company on Kauai in the mid 1950s where my husband was a luna (supervisor or manager), all medical needs were supplied by the plantation dispensary, which included the offices of two physicians, a 24-bed hospital, laboratory, and pharmacy. All this was free to management. According to the agreement, union members earning more than $100 a month must pay a small fee "not to exceed $5 a month," and will pay $1 for each house call and $2 if the call is made at night.

In my search for material about plantation medicine to supplement my own experience, all of the references agreed on one thing: the care and facilities varied widely. Some plantations had comfortable, well-equipped hospitals with the full-time attendance of physicians and a nursing staff, while a few more-isolated plantations, especially on the Big Island, had only a visiting physician and were 50 miles, over poor roads, to the nearest hospital. By 1910 there was a hospital on the Hamakua coast serving three plantations and boasting a full nursing staff. It was explained, to justify the need, that there was a hospital in Hilo but it was 50 miles away and was operated by the Territory. Whether the latter fact is a plus or minus is only inferred. There are many references to the language barrier as a limit to plantation medical practice after 1900 when the islands were organized as a territory of the U.S. following annexation in 1898. By this time the Japanese laborers had been followed by smaller numbers of Spanish, Germans, and Swedes, and after 1900, Koreans and Filipinos.

That plantation medicine was advanced in general may be indicated by the introduction of the x-ray machine. In 1904 Dr Robert Dingar of Puunene, Maui, received one as a gift from Mrs Martha Cooke Alexander, the widow of Samuel Alexander (1836-1904) who, along with Henry P. Baldwin (1842-1911), established the enduring plantation and business firm of Alexander & Baldwin. It wasn't until two years later that Palama Settlement in Honolulu started to use x-rays, and in 1911 the practice was introduced at Queen's Hospital.

Much of the background information for this essay was gleaned from the pages of the periodical publication *Plantation Health*, published by HSPA from July 1936 to April 1964. The first issue reported 29 doctors in plantation work, 18 plantation hospitals, seven smaller receiving hospitals, and three county or territorial facilities serving plantations.

The range of topics covered in *Plantation Health* is indeed vast, mentioning nearly every aspect of daily life for sugar workers from prenatal care to death. This publication was edited by Dr Nils Larsen and later by Dr Howard Liljestrand, with contributing editors from Maui, Kauai, Molokai, and the Big Island. In addition to technical articles on medical and surgery procedure, topics covered included rats, fleas, alcoholism, family planning, dental health, national meetings and conferences, travel, arsenic poisoning, and many others. A 1954 article was entitled, "Why Women become Nervous."

A 1940 article gives impressive statistics to illustrate the situation of the overworked plantation doctors. In 1951 one reported seeing 700 patients a month or 28 per working day. This, however, brought a rebuttal from a doctor at Olaa (Puna Sugar) who explained why he did not think having an assistant would improve medical services on his plantation. Although 90 patients a day were reported, he says: "...only about 40 are seen by the doctor, most are follow-up visits for injections or medications. Of the remaining 40 seen, about 30 will have colds or minor complaints...plus having a very efficient staff." He finished by observing that if he needed anything in the way of assistance, it was a Filipino interpreter.

A 1951 article on alcoholism observes that it does not seem to be a problem among the workers, but one writer (unidentified) cites: "...[the] sad tragedy of 14 doctors gone completely to pieces on alcohol...some were plantation doctors." My own observation would be that problems with alcohol were more of a concern with the managers than with the physicians or workers.

At Kekaha Drs Bert Wade and Marvin Brennecke took turns with the weekend duty so there was always one on-call. I remember attending a manager's cocktail party where both were present and it was explained, "Dr Wade can't have anything [to drink] because he has the duty this weekend."

Many plantation doctors had second houses on other parts of the islands for brief getaway relief. Dr Brennecke had a beach house at Poipu, halfway round the island, where he entertained frequently including annual Hawaiian Association of Plantation Physicians (HAPP) conferences. Although the house blew away in a hurricane, the area is still referred to as Brennecke Beach. As with all managers, doctors took a three or four month leave every three years when an intern or visiting doctor filled in. If a specialist was required and not available on a visiting basis, the patient was sent directly to Queen's by plane with a plantation nurse in attendance, if needed.

No doubt daily life for plantation physicians was at times lonely and isolated, especially on the Neighbor Islands. Dr Brennecke, on Kauai, had an early type of recording machine he kept on the front passenger seat of his car. He subscribed to a service that mailed him periodic tapes on medical subjects he played while driving, explaining, "It's the only way I can keep up."

In addition to plantation duties, doctors were allowed private practice using the same facilities as appropriate and needed. Hospi-
Health was dedicated to his memory with lengthy memorial letters respected and beloved members of these small autonomous treatment. remembers giving birth in a larger plantation hospital on Oahu with physicians. This was a typical company town situation. All of them used plantation medical facilities and the nuns who operated an elementary school that was larger than the public school. Mothers were encouraged to bring their babies in daily where they health care centers in four of the plantation villages, called camps. of immigrant laborers on Oahu plantations. He established the well-\textit{Plantation Health} was dedicated to his memory with lengthy memorial letters from citizens indicating his status as both a physician and community leader. In assessing plantation health and medical care of the 1920s and 1930s, it would be hard to exaggerate the influence and leadership of Dr Nils P. Larsen (1890-1964) who arrived in the islands in 1921. In 1930 he became official medical advisor to the HSPA, a position he held for more than three decades. On his death the next issue of \textit{Plantation Health} was dedicated to his memory and achievements. Significantly that was to be the last issue. Sometimes later a writer observed that the idealism and leadership seemed to have died with him.

Even before he was appointed to his official position, Dr Larsen was concerned with maternal health and child care among families of immigrant laborers on Oahu plantations. He established the well-baby clinic in Ewa, known as the Queen’s-Ewa project. It opened health care centers in four of the plantation villages, called camps. Mothers were encouraged to bring their babies in daily where they were fed a balanced diet and the mothers were given instruction in care and feeding supervised by Dr Larsen and Martha Jones from Queen’s. Families bore half the cost of the food which was supplied by the plantation. Dr Larsen made dental health a particular interest as the cavity rate among island school children was about two and a half times that of the Mainland. It was not unusual to see elementary school children with an entire set of teeth rotted down to black stumps. With emphasis on diet, mainly through the clinics, he almost single-handedly turned this picture around in one generation.

With improved roads and communication, in 1940 this project was shifted to Aiea where it would be available to a larger plantation population. At this time the positive impact of the Queen’s-Ewa project was made by comparing the children who took part in it to the Aiea school children. The Aiea project was operated by HSPA and Queen’s Hospital with help from Castle Foundation and Atherton Trust funds.

Ewa plantation seems to have been a pioneer and a model in providing for the medical needs of employees and their families. This was probably because of its proximity to Queen’s Hospital, now The Queen’s Medical Center. As an outgrowth of the Well-Baby Clinic, another early concern was contraception and family planning, referred to as proper spacing. Many articles were devoted to this topic. In 1937 and 1938, a survey was made of the effectiveness of two methods of contraception discussed: the foam method and the silver ring method.

During the 1930s even before the formal organization of the Territorial Association of Plantation Physicians (TAPP, later HAPP) in 1941, the physicians met annually in Honolulu for exchange of information and formation of policies. In addition the Big Island had its own organized meetings of plantation physicians. In 1938 Dr Marvin Brennecke of Kauai gave a detailed clinical report of the method he practiced of sterilizing the mother one to four days postpartum. After citing several case histories observed in practice, one plantation physician wrote: "Is it good medicine or protecting a woman’s health to let her have 11 children by age 32? Is it giving the children a good health chance? Are we practicing good preventive medicine when we force 11 children into a crowded cottage?"

In the 1938 gathering of plantation physicians, it was suggested that after the birth of the fourth child in plantation hospitals either of the parents be offered sterilization at the expense of the plantation. Results of a survey of plantation family planning methods and their effectiveness was given as an example of the need. In 1961 a plantation physician who attended a meeting of the National Industrial Medical Association in Puerto Rico observed that on sugar plantations in that territory this option was offered after the birth of the fifth child.

In 1955 it was reported that during the previous 13 years 1,045 sterilizations had been done in plantation hospitals with no deaths or complications. This figure included 298 salpingectomies and 269 vasectomies. These figures confirm my own observation that sterilizations were most often done on the mother even though it was major surgery, while the father’s surgery was only an outpatient operation.

In that same year there was nearly uniform agreement that this family planning program had dramatically lowered the maternal and infant mortality. A graph was given in evidence. Only one plantation doctor did not agree with the policy, he wrote: "...not up to us to decide on artificial means to alter the future of humanity when divine providence seems to have taken care of us for millions of years.” Two others thought it might have been “abused or used too often.”

Immediately after World War II the number of physicians serving the sugar and pineapple plantations increased to 48. Twenty of these had served in the armed forces and were probably lured by the prospect of life on a Pacific island. The TAPP physicians were justly proud of their record. By 1949 they could boast:

- Mortality rates lower than other rural areas nationwide.
- TB rates lower than national average.
- All children vaccinated (100% claimed) against smallpox and diphtheria and TB tested.
- Most plantation hospitals met national standards, even one 60 miles from the nearest town.
- Better distribution of doctors and hospitals than any other rural state or territory.
- Lowered birth rate among Japanese and Filipino workers, while it had stayed the same in the countries of their origin.

At the International Conference on Planned Parenthood in Bombay, India in 1952, Hawaii was cited as an ideal, and the place that had done something about it. An Oahu physician who attended concluded that the birth rate is inversely proportional to knowledge. After this conference the \textit{Plantation News} reported: “...The health
story in Hawaii sparkles more clearly because it is a small, isolated place to which large groups of very different people have come relatively recently..."

My own experience with plantation policies was perhaps typical of the changes taking place in plantation medical practice in the mid-1950s. In the plantation hospital that served four plantations on the west side of Kauai, I gave birth to healthy, full-term, fraternal twin boys weighing in respectively at 6 lb 10 oz and 6 lb. These were my third and fourth children and when asked if I wanted to be sterilized I agreed. However, on the third day when the doctor visited me, he informed me that because I was now both underweight and anemic and had developed a slight fever, I was considered a poor surgery risk. He advised that surgery be postponed until my weight and blood count returned to normal. I was sent home on the seventh day with a large supply of iron and vitamin pills at no cost to me.

It took more than a year for my health to return. In the meantime, the new county hospital in Waimea was completed and the plantation physicians moved their practice to the much-larger and better-equipped facility. Our fondly remembered dispensary, as it was always called, closed completely.

When I finally visited the doctor in his shiny new office, he opened the consultation with, "Have you ever had appendicitis?" Surprised, I replied that I had experienced passing abdominal pain a few times, never lasting or serious enough to require treatment. He then explained that with the opening of the county hospital many changes could be expected but not yet formulated, plantation physicians could no longer expect to have the final word. Policy was to be set by a county hospital board consisting of five members, two of whom were Catholic. Their attitude toward established plantation policies of sterilization was not yet clear.

So, with my permission, he would remove my appendix for the record, while including the sterilization. A short time later he reported that the board had stated there was no intention of interfering with established policies of plantation doctors. If the 40-year-old medical records still exist (which I doubt), it might be interesting to know how the surgery was recorded in the statistics. Plantation doctors kept careful and detailed statistics that were reported in Plantation Health.

In the climate of the last two decades when so much emotional heat can be generated by the mention of the word abortion, it is revealing to read the clinical, matter-of-fact reporting of what is alternately referred to as termination of pregnancy, and therapeutic abortion, apparently performed routinely in plantation hospitals and said to be left to the good faith of the physician.

My own experience in relation to plantation medical practice was a privileged one because of my husband's position, which can be illustrated by two situations. When my husband accepted the position at Kekaha Sugar Company, I inquired about medical services and was told "just go to the dispensary and check in." A few months later I did just that by arriving in a waiting room filled with a handful of laborers. I sat down among them to wait my turn. Shortly the nurse, who was a neighbor, opened the door and seeing me became apologetic. I was immediately ushered in ahead of the others. Shutting the office door, she instructed me to knock on the door and announce my arrival on future visits. Being new to the plantation hierarchy, I evidently had a lot to learn. Months later when I arrived at the dispensary in labor I was kept waiting for a short time then to my surprise was taken to what appeared to be a large private room. I was aware that there was only one private room and the harvesting superintendent's wife had given birth the day before, so I expected to be put in a ward. I found out later that a four-bed ward had been emptied for me. But how was it for the laborers, the so called rank and file? To test this on a small unscientific sample I asked two longtime friends who grew up in small plantation villages, one on Maui and one on Kauai, where their fathers were day laborers. The first one, who had grown up on a Kauai plantation, had only pleasant memories of the medical care received by her family. She recalled a serious illness when she spent three weeks in the plantation hospital as a young woman. She recalls excellent care and best of all, and perhaps more important, it cost her family nothing. The plantation she referred to was well-known as one of the most benevolent in the Islands.

The nursing shortage of a few years ago would not have been new to the plantation physicians. The turnover was high and an ongoing recruitment program attempted to lure nurses not only from the school at Queen's, which supplied the majority, but all across the Mainland. In Minnesota a graduating nurse in the late 1940s responded to a bulletin board ad offering adventure and a job on the far Pacific island of Kauai. She was quickly hired and when her interisland plane landed at Lihue the plantation sent one of its recently hired single managers to escort her back to the nurses' quarters. A few months later she married him and quit the nursing profession for home and family. She was my next-door neighbor. At about this same time another graduate nurse answered a similar ad at her nursing school in Des Moines, Iowa. Not long after arriving she married the recently divorced plantation manager and ended her nursing career. Very few women worked outside the home after marriage. I can remember only two managers' wives who did so.

There were some exceptions. The head nurse in charge at Waimea was a single, dedicated Mainland haole who had been there for many years. Her take-charge manner was appreciated by the physicians who seemed to depend on her for administrative details of the daily operation of the dispensary. She moved to the new county hospital with them. Some plantation hospitals shared nursing services and nurses with the Territorial Board of Health from the start, usually in the more urban areas.

In 1954 a Kekaha resident, Mrs Ogasawara, whose husband was employed in the plantation shop, described the devoted care her husband received after an accident. Soon afterward she spent eight months in Chicago, during which she suffered a serious illness. When she returned home, she wrote an article that appeared in Plantation Health entitled "My Impressions on Hospitals." She compared the frustration of trying to get medical attention in the city, with no previous experience dealing with bureaucratic medicine. She was shunted from place to place by impersonal staff and she particularly resented the charges made for each aspect of the illness. She concludes relating the vast relief of returning home to "our little, old-fashioned, wooden plantation hospital," with the devoted care of Drs Wade and Brennecke, the personal attention of the staff, and the great advantage of having everything in one building and no bills.

During the 1950s the union was increasingly demanding a voice, including a part in the hiring of the physician, traditionally at the discretion of the plantation manager. An outside physician consultant from the Mainland was hired by the union. Interviewed on landing, he said he had always wanted a trip to Hawaii and this was a way of getting here. He followed this by making conflicting recommendations to the TAPP and the union, thus irritating both sides. None of his recommendations were followed, to the satisfaction of TAPP.
One of the union’s points was: “...despite the overwhelming predominance of Oriental groups on the plantation there are very few non-Caucasian plantation doctors.” To refute this, TAPP published a list of the 48 plantation physicians—8 were Oriental—plus a statement that of each 10 applications received only one or two came from physicians of Oriental extraction.

By the time of statehood the days of the plantation hospital were numbered, the rise of the union being only one factor in their demise. Actually the building of company facilities reached a peak by 1920 and with a few notable exceptions, such as the plant at Ewa in 1936, declined and then ceased after World War II.

The impact of the changes brought about with the closing of plantation facilities in the 1950s was felt most strongly on Oahu where it was happening more rapidly than on Neighbor Islands. For some the adjustment was traumatic. In a 1950 article, “When a Plantation Hospital is Discontinued,” Dr. P. Howard Liljestrand chronicles in part the change when Honolulu Plantation at Aiea closed:

On a few days notice, the medical service and hospital of the plantation at Aiea were closed. The sudden loss of livelihood affecting 3,500 people and the extreme uncertainty concerning the future resulted in a stunned community, paralyzed for a time by emotional tension. There was an immediate outcropping of functional complaints like stomach pains.

However, within a few weeks most of the workers had been absorbed by other industries and the community was going again, but under an entirely different routine of living.

As for the hospital itself, one minute after it was closed by the plantation it was reopened as a private enterprise...Gone were the plantation outpatient clinics, the field nurse with her follow-ups, health surveys, health education, and regular physical examinations. A third of the men went to work for the neighboring plantation and thus continued to come under plantation medicine.

For the remainder systematic medical care vanished overnight...That the general health service had disintegrated, however, was continually obvious. Diabetics would show up after a long period of no insulin or urinalysis.

Luetics failed to continue treatment because there was no camp nurse to remind them and check on them when they failed to show up for treatment. The use of tetanus antitoxin rather than tetanus toxoid gradually increased because fewer and fewer of the injured children could show any evidence of having had toxoid immunization, as all had under the plantation. Time and again patients were brought after illness had become serious with the apologetic explanation that since it was now necessary to pay for all visits to the doctor they were avoiding the doctor as much as possible...

All free and personal care was doomed, of course, and not only with the rise of the union. The decline of the sugar industry in favor of tourism was rapid after statehood in 1959. The increased specialization and centralization of medical facilities, the success of HMSA and alternate medical plans surely contributed. After moving to the city and being arbitrarily dropped from two medical plans over the years, I too remember with a pleasant nostalgia.

References