JACINTO CONVIT (1913-2014): VENEZUELAN PHYSICIAN WHO WORKED INDEFATIGABLY AGAINST LEPROSY AND OTHERS DISEASES.

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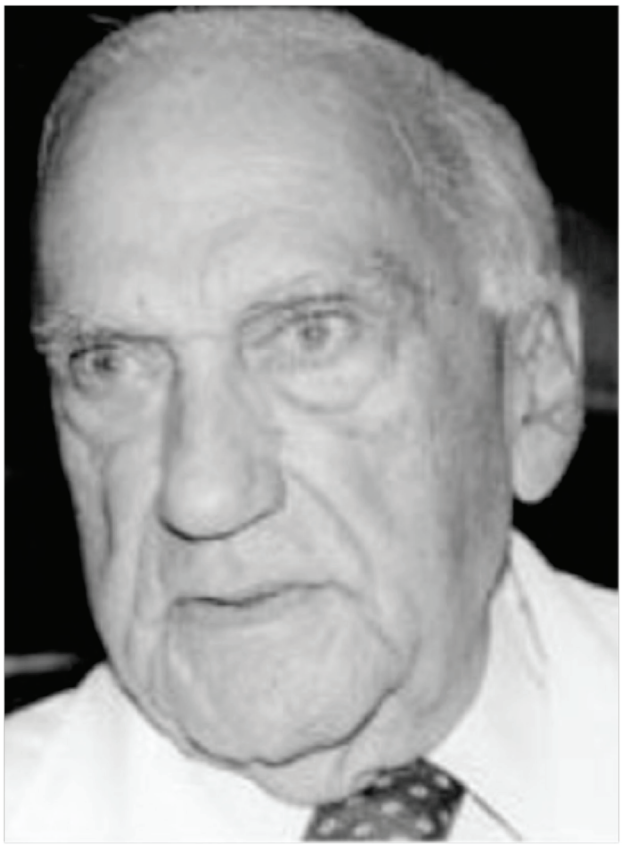

Figure 1. Jacinto Convit (1913-2014).

Jacinto Convit (1913-2014): Venezuelan physician who worked indefatigably against Leprosy and others diseases.

SUMMARY

Jacinto Convit M.D. (1913-2014): one of the leading scientists in the fields of Leprosy. The aim of this paper is to introduce his life, works, and contributions to Dermatology. Convit and his colleagues reached the goal of elimination of Leprosy as a public health problem in Venezuela.

Jacinto Convit García was born on September 11, 1913, in Caracas, Venezuela. His mother was Flora García Marrero and his father was Francesc Convit y Martí. Jacinto Convit began his primary studies in the Caracas School and continued his high school in the Andrés Bello School, both in Caracas. He entered the Medical school at Central University of Venezuela in 1932. He obtained his title as a Medical Science Doctor in 1938.

While studying for his medical degree, Jacinto Convit accompanied his Dermatology professor Dr. Martin Vega, to work at the Cabo Blanco Hospital, where patients with leprosy were treated. At the time, victims of Leprosy had essentially no hope. The conditions there were poor. The only treatments were analgesics and chaulmoogra oil, a therapy of unconvinced value.[1] In 1940, it a was discovered a compound, sulfone, that blocked *Mycobacterium leprae*, the bacteria responsible for Leprosy. Dr. Convit used this compound to treat Leprosy patients successfully, for the first time. Jacinto Convit inoculated bacilli of Leprosy in armadillos of Dasypodidae family, obtaining the Mycobacterium leprae, which mixed with

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BCG (Tuberculosis vaccine) produced immunization against Leprosy.[2] This achievement allowed for the treatment of over 14,000 patients in Venezuela, which also, meant effectively, their release from medical imprisonment. Following this success came the development, by Dr. Convit and his team, of a experimental vaccine, aimed at both treating and preventing Leprosy.[3] Due to the similarity between the bacteria that cause Leprosy and Tuberculosis, the BCG vaccine was used as a base, mixed with *Mycobacterium leprae*. The first results were hailed as a great success in treating Leprosy, although the efficacy of the vaccine has since been disputed.[4,5] A vaccine for Leishmaniasis was later developed using Convit's method.

In 1946, Jacinto Convit married Rafaela D'Onofrio Marotta. They had four children.

Between 1950 and 1951 he obtained the degrees of Bachelor and MSc in Chemistry at the University of Delaware. In 1954, he received a Ph.D. in Chemistry from the Tulane University in Louisiana. He worked as an Assistant instructor in Organic Chemistry (1951-1954), being awarded the Merit of Teaching and the American Cyanamid Fellowship Award.

Dr. Jacinto Convit came back to Venezuela and later became a Dermatology professor in the School of Medicine at the Central University of Venezuela. Then, he began training staff to run the Public Health Dermatology Division of the Ministry of Health and Public Welfare. Although set up primarily for Leprosy, these services later undertook other diseases, including Leishmaniasis and Onchocerciasis.[6]

In the 1960s, Dr. Convit presented in London, at the WHO (World Health Organization) a report on the results of his research on Leprosy. This presentation earned him the use of the data of his research. by the WHO, as basis Polychemotherapy program, released by the organization in endemic countries. Dr. Jacinto Convit took charge of the implementation of a drug testing program in the treatment of some parasitic diseases. He also directed the Cooperative Center for Drug Evaluation of the Americas. He also was appointed Member of the Committee of Experts of the World Health Organization, helping to draft the Report of the Expert Committee 1962-1967 and 1972.

The subsequent integration by Convit, of Leishmaniasis, Onchocerciasis and Mycoses into programs, created more interest from international agencies for works developed in Venezuela.

In 1965, his work as Dermatology was recognized by the US Board of Dermatology. At the same time, he worked for the Ministry of Health and Social Welfare in Venezuela. He subsequently played a major role in founding the National Institute of Dermatology (now the National Institute of Biomedicine), Caracas, in 1972. Dr. Convit knew the importance of integrating research, training and treatment. The Institute of Biomedicine successfully brought together major Venezuelan health institutions to operate in concert. "These institutions," Dr. Convit said, "have functioned as an unified, flexible structure that gives priority to experimental innovations, with the formation of groups of researchers, professors, and supporting health personnel. Activities are carried out through a participatory process, which strengthens strategies to fight endemic diseases".[7]

Dr. Jacinto Convit organized Leprosy national control with staff training and structuring of the State Authority Health Services Dermatology. It was thanks to this initiative that was was possible to know the magnitude of the problem of Leprosy in Venezuela, after examining million persons, puting under control around 30,000 contacts and detecting some 17,000 patients, proceeding with the control of treatment and outpatients, and changing the totally orientation of Leprosy control. He also replaced the compulsory isolation of the sick with outpatient treatment and with control and protection of their contacts. This radical orientation in Leprosy control, made Venezuela a center of international training for Leprosy control managering programs.

In 1968, Dr. Convit was elected President of the International Leprosy Association (ILA) and was re-elected in 1973. In 1971, Convit was named by the WHO as Director of the Co-operative Centre for the Study and Histological Classification of Leprosy. In 1976, Convit was elected Director of the Pan American Research and Training in Leprosy and Tropical Diseases. He was also President of the *International Journal of Leprosy.* [8]

The use of his Leprosy vaccine was gradually replaced, for the most part, by a multidrug treatment. Its use in Venezuela, starting in 1982, allowed Dr. Jacinto Convit and colleagues to reduce the nation's Leprosy rate even further; the disease was now no longer a public health concern.[9]

In 1987, Convit added killed *Mycobacterium leprae* to the BCG vaccine. The combined vaccine was tested worldwide, but was not more effective than regular BCG. Convit knew that more intensive research was needed to obtain a preventive vaccine, to eradicate the disease.[10]

Dr. Convit (Figure 1) had reached a great level of international scientific recognition, with over 300 scientific papers published: his last paper was published at age of 100 year in 2013. He was the recipient of 47 Venezuelan degrees and awards and 33 international awards, including the Gaspar Vianna Cultural Medal,

conferred by the Ministry of Health of Brazil in 1961, the Prince of Asturias Award in the Scientific and Technical Research category, in 1987.

He also obtained the medal "Health for All by the Year 2000" by the Pan American Health Organization, and the French Legion of Honor in 2011.

He was recognized as full member of the Venezuelan Academy of Medicine in 1980.[11]

Dr. Jacinto Convit belonged to 20 dermatological societies including: the Royal Society of Tropical Medicine and Hygiene, the International Association of Allergology, the Societas Internationalis Dermatologiae Tropicae, the American Dermatological Association, the International Leprosy Association, the Academy American Dermatology, the Society for Investigative Dermatology, the Israélica Dermatological Society, and the American Society of Tropical Medicine and Hygiene.

Jacinto Convit was a physician whose commitment to fight Leprosy was enough to overcome his disappointment at the failure of developing successful vaccines against it.[12] Nevertheless his work brought greater integration of services to Venezuela's health system, it advanced the understanding of several parasitic diseases, and it eliminated Leprosy as a public health problem in Venezuela.

Dr. Jacinto Convit died on May 12, 2014, in Caracas, Venezuela.

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