

Guilherme Rodrigues da Silva: the development of the field of collective health in Brazil



Moisés Goldbaum ¹

Abstract *This article describes the academic trajectory of Professor Guilherme Rodrigues da Silva and his contribution in the formation of Collective Health in Brazil. Three key aspects are covered: active participation in medical education, both undergraduate and graduate level; its application in scientific research for the study of neglected diseases and the development of epidemiological methodology; his contribution in establishing health policy with emphasis on the Unique Health System (Sistema Único de Saúde – SUS).*

Key words *Epidemiology, Medical education, Health policy, Collective health*

¹ Departamento de Medicina Preventiva, Faculdade de Medicina, USP, São Paulo SP Brasil. mgoldbau@usp.br

I feel privileged to write about professor Guilherme Rodrigues da Silva (1928-2006). I had the pleasure to share my academic training with this great man and was able to absorb his teachings, which transcended technical aspects. He personified and exuded ethical and moral integrity throughout his professional life, incorporating social responsibility and intellectual honesty into the design, implementation and dissemination of research projects and his political activities related to higher education and health service management.

His successful academic and political career began with an undergraduate course which he took at the Faculty of Medicine of the Federal University of Bahia (UFBA, acronym in Portuguese) which he completed in 1953, along with a graduation in Biomedicine Courses at the Fundação Gonçalo Moniz in 1951. Soon after, satisfying his scientific curiosity and interest in the problems faced by the Brazilian population, he pursued his professional development in the *Hospital das Clínicas* at the Faculty of Medicine of the University of São Paulo where he did his residency in tropical medicine between 1955 and 1956. He completed his academic training at Harvard University, where he presented the study entitled “Solving a community problem: Chagas disease”, and was awarded the title of Master of Science in Hygiene (Preventive Medicine) in 1959. He then returned to Brazil to undertake a doctorate in medicine at the UFBA in 1961 where he obtained the higher title known as *Livre docência* and developed the thesis “Mortality rates in a group of families in the city of Salvador, Bahia”. He began his teaching career as a lecturer in Hygiene and Preventive Medicine at the Faculty of Medicine of the UFBA, where he organised and coordinated the Center for Preventive Medicine at the *Hospital Universitário Professor Edgard Santos* (predecessor of the Institute of Collective Health).

In 1966, he competed for the position of *Professor Catedrático*, the highest rank of teaching at universities in Brazil, at the Faculty of Medicine of the University of São Paulo (FMUSP, acronym in Portuguese) when he presented his seminal work “Chagas disease in families in restricted areas of the city of Salvador”¹. This work offered a number of innovative responses to improve understanding of disease transmission and the evolution of the disease and added to the existing knowledge base regarding the clinical progression of Chagas disease, such as degree and risk of infection as determining factors of clinical status.

Due to the excellence and originality of his work and his notable performance during the application process, he surpassed his excellent competitors and was unanimously elected *Professor Catedrático*, thus promoting the recognition of the intellectual and technical capacity of professionals who received their academic training in institutions from outside São Paulo.

Although he took up the position of *Professor Catedrático*, these chairs were “extinguished” under the Brazilian university reform in 1968 and transformed into departments, and he thus became a full professor. In 1967, he created the Department of Preventive Medicine at the FMUSP whose notoriety attracted highly competent professionals who adopted his proposal and helped to develop this field within the institution. The following list of names is far from exhaustive: Professor Wanderley Nogueira da Silva who, despite having competed against Guilherme for the position of *Professor Catedrático* and, it is said, being preferred by the students, did not withhold his support for the proposal to create a new department; Professor Maria Cecília Ferro Donangelo, known to all, who sadly died suddenly at a young age, bringing her notable contribution to the field of Public Health to an abrupt halt; and Euclides Ayres de Castilho, who followed in Professor Guilherme’s firm footsteps after graduating. Various other academics gradually adopted the proposal, encouraged and guided by the challenges and innovative ideas which were born from the leadership shown by doctor Guilherme, as some people called him.

Up to that point, his research output focussed on contributing to the knowledge of certain public health scourges and the links with current social and political concerns. From a clinical and epidemiological perspective, he worked intensively with diseases endemic to Brazil, focussing on Chagas disease (american trypanosomiasis), schistosomiasis, tuberculosis and smallpox²⁻⁷. As a result of his seminal work mentioned above and his wide range of knowledge of epidemiological methodology and quantitative methods, he was able to describe the factors associated with the different stages of the disease in individuals with Chagas disease. He transposed his lines of research from Bahia to São Paulo, adapting to the reality in both urban areas, such as the capital city São Paulo, and rural areas, at a time when vector-based control of transmission was harvesting good results. With this purpose in mind, together with researchers and other institutions in São Paulo, he organised a research group

which produced valuable knowledge about Chagas disease and analysed the repercussions of the disease in an environment that was different to that of his native state⁸⁻¹⁰. At the same time, he showed a command of a wide variety of epidemiological methodologies, including quantitative methods^{11,12}, which was praised by one of his brilliant students¹³ in 2006, the year in which he passed away.

During the time in which he organised and implemented the Department of Preventive Medicine at the FMUSP he established a number of fruitful nationwide contacts with academics in the field of Preventive Medicine and Public Health, notably in the State of São Paulo. At beginning of the 1970s, he assumed the leading role in debates about the direction of preventive medicine held during the meetings of the Departments of Preventive Medicine in the State of São Paulo. To express his thoughts, he registered his reflections on the nature of the characteristics of the adoption of this approach in Brazil¹⁴, highlighting the peculiarities of comprehensive medicine, community medicine, and preventive medicine originating from and based on North American initiatives. An extract taken from a statement made for the 25th anniversary of the Department of Preventive and Social Medicine of the Faculty of Medical Sciences at the State University of Campinas (UNICAMP) gives a clear idea of his thinking and work: *I remember the initial phase at the University of São Paulo well, when we started to unite various schools with a renewed vision of teaching preventive medicine. At the time, in the middle of the 1960s, few schools were proposing a critical renewal of teaching in this field. This is when the Department of Preventive and Social Medicine effectively emerged in Campinas with a proposal to renew education which converged entirely with what we were trying to do at the University of São Paulo. The purpose of the first meeting of the Departments of Preventive Medicine, organised by the Paulista School of Medicine, was to exchange experiences. The meeting questioned the teaching model for preventative medicine, which originated from the American model of medical education [...] We must effectively adhere to the critical investigation of the problem of formulating health policies, to the critical investigation of the appropriateness or inappropriateness of the health service structure¹⁵.*

He therefore began to play an important role in the debates, meetings, and conferences about the health service which was beginning to take shape in Brazil, allowing him to have a double influence on the country's public policies: on

the one hand, on the direction and definition of higher education policies and, on the other hand, on the organisation, planning and delivery of health services.

From the academic perspective, he was involved in issues which were both internal and external to the FMUSP. His involvement in the proposal to establish an Experimental Course in Medicine (CEM, acronym in Portuguese) which aimed to modernise the USP's traditional programme stands out among his achievements. The movement which led to the creation of the CEM, which professor Guilherme joined due to its intellectual characteristics and political concerns, was the initiative of a group of academics who were committed to modern advances in health science and technology (the majority of the members of this group were removed from their positions and forced into compulsory retirement, or imprisoned, by the civic-military dictatorship. Professor Guilherme escaped this unfortunate and dire fate since he had recently joined the USP and was therefore little-known as a political figure in São Paulo). It should be noted that, from an institutional perspective, this proposal was also a response to the demands of the *estudantes "excedentes"* movement (a movement comprising of students who had passed the university entrance exam but could not enrol due to the lack of vacancies), whereby 75 new vacancies were created at the FMUSP (increasing the number from 100 to 175), specifically on the CEM. Professor Guilherme actively participated in the definition of the new curriculum. He was actively involved in the new design of the course which expanded teaching by transposing it to primary and secondary care, providing CEM students with training in both primary health care facilities and medically complex care facilities. He worked hard to create the University Hospital which would offer secondary care and complement the training provided for students at the FMUSP's *Hospital de Clínicas*, which delivered tertiary and quaternary care. The extensive revision of subjects traditionally offered on the curriculum of the medical degree program was particularly innovative and, given the political climate in Brazil at the end of the 1960s and beginning of the 1970s, generated a strong counter movement from the hegemonic forces which held onto power within the FMUSP. Despite the strong reaction to the proposal, which was unprecedented within Brazilian universities at the time and occurred in parallel with attempts made at the time to repress avant-garde intellectuals,

professor Guilherme was never intimidated, and used his capacity for argumentation and position to defend the ideals and objectives of the renewal which remain pertinent up until the present day. Unfortunately, the proposal to create the CEM was short lived because the FMUSP's governing body, given the reaction mentioned above, opted to merge the two existing curriculums, maintaining a small number of the isolated "seeds" of this innovative proposal. It is curious to note that current discussions about the curriculum of the FMUSP's medical degree program propose a wide-ranging review which, although timidly, rekindles aspects of the proposal to create the CEM; notably the three levels of health care (primary, secondary and tertiary) and the introduction of aspects related to humanising health care. It could be said therefore that, decades after, the dedication and commitment of this group of academics, endowed with a progressive vision, has been duly (at least in part) acknowledged, further valuing the life of those who dedicated themselves to building and designing academic training programmes which were totally committed to the progress of science and quality of life of the Brazilian population.

One of the highlights of professor Guilherme's involvement in the FMUSP was the pioneering and audacious Postgraduate Programme in Preventive Medicine, created in 1973 under his leadership and bringing together a group of highly qualified academics from various disciplinary backgrounds. Together with Cecília Donnangelo and Euclides Castilho, he brought together researchers from the fields of education, sociology, epidemiology, statistics, clinical medicine, nutrition and health management, forming the basis of the emerging postgraduate programmes in collective health. Under his direct and indirect guidance, the Postgraduate Programme in Preventive Medicine facilitated important research addressing major health issues in Brazil and the development of both quantitative and qualitative epidemiological research methods. Furthermore, it trained, and continues to train, professionals that went on and go on to occupy highly qualified and responsible positions in the academic and health management sphere, such as Eleutério Rodriguez Neto, Ricardo Bruno Mendes Gonçalves, Ricardo Lafetá Novaes. Guilherme's widely acknowledged influence is also felt in the actions and implementation of the modern and ongoing post graduate degree in public health.

Guilherme Rodrigues da Silva's involvement in medical education, particularly in the field

of preventive medicine, is equally notable outside the USP and his influence is strongly felt through his contribution to both *lato sensu* and *stricto sensu* post graduate programmes. At the end of the 1970s, he was actively involved in consolidating the post graduate programme of the National School of Public Health of the Oswaldo Cruz Foundation, and contributed indirectly to emerging programmes in Rio de Janeiro and São Paulo and a programme in the State of Bahia, where the emotional and professional ties with his ex-students from the then Department of Preventive Medicine (that gave rise to the current Institute of Collective Health) were always present and vivid.

His significant academic achievements and influence were paralleled by his involvement in the design and implementation of health policies where he revealed his social and political commitment, capacity and competence by positively influencing the reorganisation of healthcare services at state and national level, particularly in the 1980s. Attentive to the struggle for democratisation in Brazil, he actively participated in the elections for the governor of the State of São Paulo, which led to the election of André Franco Montoro, a clear manifestation of public dissatisfaction with the dictatorship, which had wide repercussions for the slow and gradual democratic opening process, the object in the struggle of the progressive forces. After Montoro was elected, professor Guilherme promoted himself as a legitimate candidate to lead the FMUSP's *Hospital de Clínicas*, a referral and base hospital for students pursuing careers in the health field at the USP. This was quite a tumultuous process due to the reactions of group of academics who held positions of power at the FMUSP and who were openly against progressive development. Gathering the hospital leaders around him, he was able to mobilise the "*haceana*" community to ensure his appointment as hospital superintendent. During his tenure as superintendent he played a key role in promoting the modernisation and democratic management of the hospital, recognised the work of the professional staff and improved the health services provided by the facility.

His involvement in the health system reform in the 1980s and 1990s was equally fruitful. In the 1990s he played a particularly important role in São Paulo where he presented his vision of renewal to the XIX Brazilian Congress of Hygiene and to the innovative I Paulista Public Health Congress where he gave the opening speech on National Health Policy. He also made a signifi-

cant contribution to the II Paulista Public Health Congress and the I Congress of the Brazilian Association of Post Graduations in Public Health (Abrasco, acronym in Portuguese) held in 1983.

Together with Sergio Arouca, he organised the VIII National Health Conference held in 1986, which provided the basis for the chapter of the Brazilian Constitution of 1988 which addresses health and ensures universal, comprehensive and equal access to health and also establishes the guiding principles for the reorganisation of the health service in the form of the Unique Health System (SUS, acronym in Portuguese), representing a major victory for Brazilian society. In this respect, the role played by professor Guilherme was particularly important since he was responsible for the complex task of elaborating the final report of the conference, which he did with the utmost competence and quality. He was also closely involved in and had a major influence on the events and debates which helped define the text addressing health of the 1988 Constitution and the Law 8080/1990 which lays down the guiding principles of the SUS¹⁶.

He was also president of Abrasco, an organisation of which he was a founding member, between 1987 and 1989, once again showing his competence and intellectual leadership in the field. The picture gallery of the board of directors (today known as the Brazilian Association of Public Health) pays him the following tribute: *... he was one of the main agents of change of post graduations in the field of public health. He was closely involved in the implementation of teaching-health care integration proposals and was one of the pioneers in this field, creating the Preventive Medicine Unit of the Hospital Universitário Professor Edgard Santos of the Federal University of Bahia – predecessor of the renowned Institute of Collective Health. He dedicated a large part of his academic life to the Faculty of Medicine of the USP and, alongside Maria Cecília Ferro Donnangelo, initiated the academic training of a generation of sanitarians, whose contribution to the Unique Health System remains to be completely quantified*¹⁷.

Other important written accounts, including various expressions of sadness on the occasion of his passing away, also praise professor Guilherme.

The Institute of Public Health and the Federal University of Bahia (UFBA), where professor Guilherme received his professional grounding, dedicated a special editorial in which professor José Rocha Carvalheiro states the following: *We have lost the rapporteur of the 'eighth'*¹⁸: *Guilherme was a dear and highly regarded professor*

of the Faculty of Medicine of the UFBA, where he stood out as a pioneering researcher in the fields of epidemiology and community health. He was one of the founders of the field of preventative medicine at our university, the origin of the group that, with Guilherme as its kind patron, created the Institute of Collective Health. At all times during its short but intense history, Guilherme was always a wise, modest and dear master. Although we are in some ways orphans without him, many ex-disciples from the public health community, inspired by Guilherme, already have great success to celebrate, such as the complex social health system, the SUS, which, despite its limits and shortages, offers health coverage to the population. This is just part of the important legacy that Guilherme Rodrigues da Silva leaves the Brazilian nation.

His colleagues at the Department of Preventive Medicine of the FMUSP affirm: *...Through these and many other gestures, structuring epidemiology in Brazil, post graduations in public health, teaching-health care programmes, our Professor Guilherme fought difficult and complex battles against deep-rooted traditions and conservatism in the institutional and scientific sphere. Nourished by these battles, which did not always result in immediate success, the field of public health in Brazil grew vigorously, and strongly influenced the whole of Latin America. His enterprise and daring was permeated with a constant concern with social justice, allied with an always active stance in the fight against social inequality and all other types of inequality. He will be remembered particularly for this humanizing quality. A man of science, who always kept himself up to date, with a command of a wide range of topics, from mathematical models to the relevance of genetics for epidemiology, our Professor, from the times of the dictatorship up to present times and the dictatorship of the market, positioned himself clearly in favour of democracy and the universalisation of health care, equity, public participation in care and the Unique Health System. An educator, even in the face of more conservative scientific and pedagogic attitudes, he did not hesitate to opt for interdisciplinarity, for opening up institutional space for dialogue with the social sciences and humanities and working together with social scientists. He did not fear, but rather embraced the need to combine teaching social aspects with teaching the technical and scientific aspects of health care to medical students, through the pedagogical experience of the direct contact of future doctors with the dramatic inequality, which is part of the reality in Brazil*¹⁹.

References

1. Silva GR. *Doença de chagas em famílias de duas áreas restritas da cidade de Salvador*. Salvador: Fundação Gonçalo Moniz; 1966.
2. Silva GR, Andrade Z. Formas pseudoneoplásicas da esquistossomose intestinal. *Arquivos Brasileiros de Medicina* 1955; 54:437-44.
3. Silva GR, Feldman HA. Formalin treated chicken erythrocytes as indicators of influenza A virus (asian) and its antibodies. *Proc Soc Exp Biol Med* 1959; 101(2):241-245.
4. Silva GR, Rabello SI, Angulo JJ. Epidemic of variola minor in a suburb of Sao Paulo. *Public Health Report* 1963; 78(2):165-174.
5. Angulo JJ, Silva GR, Rabello SI. Variola minor in a primary school. *Public Health Report* 1964; 79(4):355-368.
6. Angulo JJ, Silva GR, Rabello SI. Sociological factors in the spread of variola minor in a semi-rural school district. *J Hyg (Lond)* 1968; 66(1):7-18.
7. Silva GR. Chagas – Kran-Keit: Klinik und diagnostic. *Die Gelben Hefte* 1971; 11:165-170.
8. Silva GR, Litvoc J, Goldbaum M, Dias JCP. Aspectos da epidemiologia da doença de Chagas. *Ciência e Cultura (SBPC)* 1980; 31:81-103.
9. Litvoc J, Goldbaum M, Silva GR. Determinantes do processo de infestação domiciliar por *Panstrongylus megistus*: o papel da habitação e do desmatamento. *Rev Instituto de Medicina Tropical de São Paulo* 1990; 32(6):443-449.
10. Silva GR, Castilho EA. Infecção chagásica materna e prematuridade. *Rev Instituto de Medicina Tropical de São Paulo* 1976; 18:258-260.
11. Bandeira ACA, Silva GR. Calculation of HIV infection rates and projection of numbers of cases of aids in São Paulo, Brasil using a back calculation method. *Braz J Infect Dis* 1997; 1(4):186-195.
12. Silva GR. Sobre o modelo catalítico reversível aplicado ao estudo da cinética epidemiológica da infecção chagásica. *Rev Saude Publica* 1968; 3(1):23-29.
13. Struchiner CJ. Comentário: Guilherme Rodrigues da Silva, ritmos e temperos baianos na epidemiologia brasileira. *Rev Saude Publica* 2006; 40(2):202-204.
14. Silva GR. Origens da Medicina Preventiva como disciplina do Curso Médico. *Rev Hospital das Clínicas da FMUSP* 1973; 28:91-96.
15. Departamento de Medicina Preventiva e Social. *25 anos – Departamento de Medicina Preventiva e Social – 1965 – 1990* [mimeo]. Campinas: Unicamp; 1990.
16. Silva GR. O SUS e a crise atual do setor público de saúde. *Saúde Soc.* 1995; 41(1-2):15-21.
17. Abrasco. Galeria de Diretores da ABRASCO/Presidentes [acessado 2015 mar 12]. Disponível em: http://www.abrasco.org.br/site/wp-content/uploads/2014/09/Galeria_DiretoriaAbrasco_Presidentes/pdf
18. Carvalheiro JR. Editorial especial. *Rev Brasileira de Epidemiologia* 2006. 9(1):20-23.
19. Departamento de Medicina Preventiva. Guilherme Rodrigues da Silva, nosso e sempre professor (10/2/1928 – 10/3/2006). *Rev Instituto de Medicina Tropical de São Paulo* 2006; 48(2):117.

Article submitted 03/09/14

Approved 07/05/15

Final version submitted 08/05/15