



# The function of the *botánica* as a health care option in The Bronx

Jeanette Rodríguez, Department of Ecology, Evolution, and Environmental Biology, Columbia University

Research Mentor: Ina Vandebroek, Ph.D., The New York Botanical Garden

Seminar Advisor: Matthew Palmer, Ph.D., Department of Evolution, and Environmental Biology, Columbia University



## Abstract

Plants and traditional medicine are used exclusively or in addition to conventional health care in immigrant communities. Immigrants may opt for traditional healers and plants for several reasons including familiarity, legal issues relating to immigrant status, and lack and/or cost of health insurance. The *botánica*, a healing and religious shop, is a part of the traditional medicine practice but not well studied. A systematic survey of shops advertised as *botánicas* was conducted across several neighborhoods in The Bronx. 12 *botánicas* were selected and surveyed through convenience and purposive sampling while scouting *botánica* locations to identify active shops. The *botánicas* surveyed had a mainly Latino background but service a mixed clientele, including different Latino groups and non-Latino groups. Only four of the most commonly mentioned plants (*hierba buena*, *albahaca*, *menta*, *romero*), which were common herbs, were easily accessible both fresh and dry in NYC grocery markets. The plants sold in *botánicas* are acquired in New York, from other states, and from different countries. Lastly, the most common conditions of well-being that clients seek help with at the *botánica* were primarily spiritual related (ex. negative energy), followed by physical (ex. diabetes) and mental (ex. depression). Of the health conditions reported by the 2010 Community Health Survey, only depression and diabetes overlap with the conditions mentioned at the *botánicas*. Understanding how *botánica* function as a health care option and who they service can lead to better patient-provider communication and a more holistic approach to health care.

## Introduction

Many immigrants settling in urban areas will retain their cultural patterns, values, and beliefs, including traditional or folk medicine practices. Urban ethnobotany is an increasingly important area of study considering the growth in immigration and urbanization in the last few decades. With the potential contribution of traditional healers to health care in urban settings it is essential to understand the state of traditional medicine knowledge and participation in this alternative to conventional health care. One aspect of this alternative health care is the *botánica*. Despite the reality that *botánicas* are part of health care for many people, particularly in Latino communities, studies rarely focus on them except to say they are suppliers of healing products.

The first goal of this study was to characterize *botánica* staff and their clients. I expected that the *botánica* owners and staff would have a variety of backgrounds, including different Latino groups and non-Latino groups. Likewise I expected that these *botánicas* service a mixed clientele of various Latino groups and non-Latino groups. The second goal was to investigate the most commonly sold plants and their uses as well as the most common conditions of well-being for which people seek treatment. I expected that the majority of the most commonly mentioned plants would not be easily accessible in NYC outside of the *botánica*. Lastly, I predicted the most common health conditions mentioned would be a combination of physical and folk illnesses (illnesses with a strong cultural component, ex. *mal de ojo*, *susto*). The latter would not overlap with conditions people seek conventional biomedical treatment for.



## Methods

- Institutional Review Board protocol submission (IRB-AAAK4551; approved December 2012)
- Consent forms and a questionnaire were created in English and then translated into Spanish
- A survey of 12 *botánicas* was conducted throughout The Bronx, using convenience and purposive sampling
- Samples of the most commonly reported plants in each *botánica* were purchased, then were curated and identified at the New York Botanical Garden
- Questionnaire:**
  - Characterize *botánica* according to the ethnicity or nationality background of its staff and clients, the types of products sold, the presence of a specialist or healer, and types of consultations offered
  - Reasons for going to *botánica*
  - Most commonly sold plants, their origin and uses
  - Most common health conditions for which people seek treatment, plants used for treatment
- Comparisons:**
  - Visited 12 supermarkets and grocery markets around The Bronx using a check list compiled from interviews of all plants mentioned (116)
  - Used data gathered by the NYC Department of Health and Mental Hygiene in a 2010 Community Health Survey to compare against information gathered on health problems

## Results

### I. Characterization of the *botánica*

- Seven participants reported their *botánica* as specializing in "mainly spiritual/religious issues, some physical complaints"
- Six *botánicas* had a plant specialist present, all 12 had a spiritual consultant present

### II. Demographics

- 10 of the *botánica* staff were foreign born. Nine of the 12 participants were Dominican.
- Top reported nationalities of the majority of *botánica* clients were Dominican, Puerto Rican, and Mexican, top non-Latino nationalities or ethnicities reported include African-Americans, Africans, white Americans, and Jamaicans

### III. Plants

- 11 *botánicas* sold dry plants and nine sold fresh plants (Figure 2)
- Ruda*, *hierba buena*, and *albahaca* were some of the most commonly sold plants for medicinal and/or spiritual uses (Table 1)
- All of the most commonly sold plants were reported as used in *baños espirituales* (spiritual baths) for spiritual cleansings (Figure 2). Some were used for physical ailments as well (*hoja de naranja*), others were solely used in *baños* (*abre camino*).
- Outside of the *botánica* only 21 plants (of the 116 plants mentioned) were available fresh at a market, while 24 plants were available dry at a market. The following commonly sold plants were available both fresh and dry: *romero*, *albahaca*, *hierba buena*, *menta*.

### IV. Health

- Culture, belief, and faith were among the primary reason for going to the *botánica* instead of a physician, along with lack of health insurance and cost of health care, number of times mentioned for these reasons varied between 3 and 7
- Spiritual problems were the most common issue of well-being for which clients sought help (Table 2), including problems with luck, love, negative energy, and *brujería*
- Only five health conditions were included in the Community Health Survey. Depression and diabetes overlap with the most commonly mentioned conditions at the *botánica*. High blood pressure and high cholesterol were each only mentioned once during the interviews and asthma was never mentioned.

Table 1. Most commonly sold plants and the number of times it was reported as a top common plant.

Plant Common Name	Spanish	English	Scientific name (Family)	# of times mentioned
<i>Ruda</i>	Rue	<i>Ruta chalepensis</i> L. (Rutaceae)	8	
<i>Hierba buena</i>	Spearmint	<i>Mentha spicata</i> L. (Lamiaceae)	7	
<i>Albahaca</i>	Basil	<i>Ocimum basilicum</i> L., <i>Ocimum</i> spp. L. (Lamiaceae)	6	
<i>Abre camino</i>	"....."	<i>Lantana camara</i> L. (Verbenaceae)	5	
<i>Menta</i>	Mint	<i>Mentha piperita</i> L. (Lamiaceae)	5	
<i>Quita maldición</i>	"....."	<i>Caesalpinia</i> cf. <i>bonduc</i> (L.) Roxb. (Caesalpinaceae)	5	
<i>Rompe saragüey</i>	"....."	<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob. (Asteraceae)	5	
<i>Espanta muerto</i>	"....."	<i>Baccharis</i> cf. <i>halimifolia</i> L. (Asteraceae)	4	
<i>Hoja de naranja</i>	Orange	<i>Citrus cf. aurantium</i> L. (Rutaceae)	4	
<i>Romero</i>	Rosemary	<i>Rosmarinus officinalis</i> L. (Lamiaceae)	4	

Table 2. Most commonly mentioned conditions of well-being for which people seek treatment or help at the *botánica* and the number of times it was reported as a top condition.

Conditions of Health and Well-being	Spanish	English	# of times mentioned
<i>Problema espiritual/no físico</i>	Spiritual/non-physical problem	Spiritual/non-physical problem	17
<i>Artritis/huesos/articulación</i>	Arthritis/bones/joint	Arthritis/bones/joint	7
<i>Ansiedad/nervios/problemas para dormir</i>	Anxiety/nerves/trouble sleeping	Anxiety/nerves/trouble sleeping	5
<i>Dolor de cabeza/migraña/ mareo</i>	Headache/migraine/dizziness	Headache/migraine/dizziness	5
<i>Diabetes</i>	Diabetes	Diabetes	4
<i>Problemas renales</i>	Kidney problems	Kidney problems	4
<i>Cáncer</i>	Cancer	Cancer	3
<i>Depresión/problema mental</i>	Depression/mental problem	Depression/mental problem	3
<i>Dolores musculares/músculos apretados</i>	Muscle pain/muscle spasms	Muscle pain/muscle spasms	3
<i>Embarazo/fertilidad</i>	Pregnancy/fertility	Pregnancy/fertility	3
<i>Gripe</i>	Flu	Flu	3
<i>Problemas de la piel</i>	Skin problems	Skin problems	3



Figure 2. *Baños* are often composed of several plants and can be classified as either *dulce* (sweet) to attract good energy or *amargo* (bitter) to dispel negative energy or bad luck (left). Dried plant sample available at a *botánica* (right).

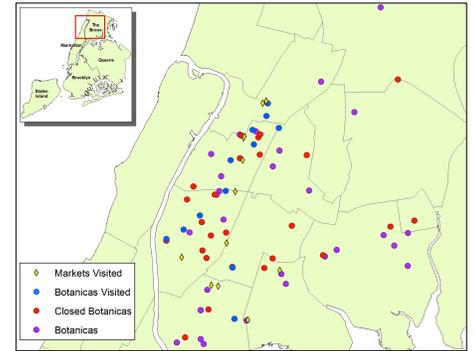


Figure 1. Map of The Bronx showing a total of 48 open *botánicas* (purple & blue dots), 20 closed *botánicas* (red dots), and 12 interviewed *botánicas* (purple dots). Grocery markets and supermarkets visited for comparison are also noted (yellow diamonds).

## Discussion

While the nationality and ethnicity background of clients was varied, the owners' and staff's backgrounds varied less so (mostly Dominican), which was not completely unexpected due to the small number of interviews conducted.

It would appear that spiritual issues are more common but physical complaints are still often present, which is reinforced by the fact that a plant specialist or *curandero* was not always present but a spiritual consultant was a constant. Still most *botánicas* sell plants, either fresh and/or dried. Those plants used purely for spiritual baths were not found in any of the markets. Those herbs common in cooking were easily found dry in the markets, but when found fresh they were often sold in small plastic packages that contained a couple of sprigs. Some of the more important plants are clearly not as accessible in NYC outside of the *botánica*, especially fresh plants.

Many participants reported spiritual problems as the main issue people have, including problems with luck, love, negative energy, and *brujería* (witchcraft). With the exception of *brujería*, no other folk illnesses were mentioned, which was unexpected.

Compared to the common conditions of well-being for which people seek treatment at the *botánica*, the NYC Dept. of Health and Mental Hygiene focuses more on chronic conditions, infectious disease, and the behavioral aspect of health (i.e. smoking, getting vaccinated). As such there is not much overlap between the two. With the exception of depression, the Community Health Survey does not focus on non-physical illnesses or conditions. This means that there is a whole area of health and well-being that the city is not examining, which is being addressed in part by traditional medicine and the *botánica*.

## Conclusion

Cultural ties, strong beliefs and faith appear to be the primary reason why people access the *botánica*. Many of the clients have been raised around and are familiar with traditional medicine. The *botánica* is a place where they can find religious products and inaccessible plants, while receiving help and advice from community members.

It is important that conventional health care providers understand this approach to health, especially due to disparities in the health care people receive according to ethnicity and income level. An enhanced understanding of traditional medicine can lead to better patient-provider communication, as well as a more culturally sensitive and appropriate approach to health care.

## References

Balick, M. J. et al. 2000. Medicinal Plants Used By Latino Healers For Women's Health Conditions In New York City. *Economic Botany*, 54, 344-357.

Gomez-Beloz, A. and N. Chavez. 2001. The botanica as a culturally appropriate health care option for Latinos. *Journal of Alternative and Complementary Medicine*, 7, 537-546.

Gordon, S. M. 1994. Hispanic Cultural Health Beliefs and Folk Remedies. *Journal of Holistic Nursing*, 12, 307-322.

Vandebroek, I. and M. J. Balick. 2012. Globalization and Loss of Plant Knowledge: Challenging the Paradigm. *PLoS ONE*, 7, e37643.

Vladimirov, A. 2006. Botánicas In America's Backyard: Uncovering The World Of Latino Healers' Herb-Healing Practices In New York City. *Human Organization*, 65, 407-419.