



Municipal Health Secretary of Maceió Federal University of Alagoas



Recent Progress in the Epidemiological Situation and Morbidity Survey in Maceió

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Lymphatic Filariasis Elimination in the Americas
6th Regional Program Managers' Meeting
(San José, Costa Rica, October 2005)

Epidemiological Situation

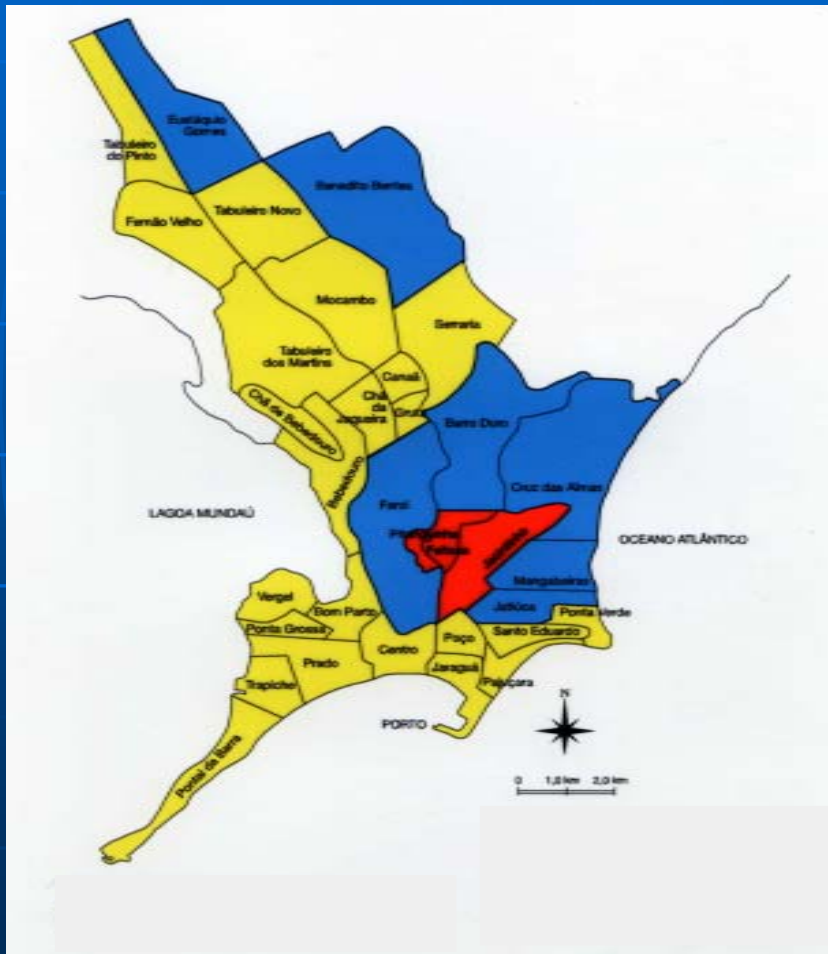
Surveys

➤ *January/2004 to October/2005*

- 14,268 blood thick smears
 - 8,172 peripheral area
 - 1,128 → 6-10 years (Group 1)
 - 1,595 → 15-25 years (Group 2)
- 2,541 ICT
 - 327 Group 1
 - 2,214 Group 2

Epidemiological Situation

Bancroftian Filariasis Distribution in Maceió



■ Endemic urban sectors

■ Urban sectors with microfilaraemic carriers not considered autochthonous

■ Urban sectors with no microfilaraemic carriers

Epidemiological Situation

Endemic area of Maceió



Epidemiological Situation

Results

- 2004/2005: 0,03% Prevalence (4 cases/14,268 examined)
- 2005: 7,553 Thick smears → 0,0% Prevalence

Characterization of microfilaraemic carriers found in 2004

- All male
- Age: 24 to 33 years
- Mean microfilaremia level: 45 mf/mL
- All autochthonous (Jacintinho urban sector)

Epidemiological Situation

Results

➤ *Periphery of endemic area*

▪ Thick Blood smear

→ Group 1 - 0,0%

→ Group 2 - 0,012% (1 case/8,172 examined)

▪ ICT

→ Group 1 - 0,0%

→ Group 2 - 0,27% (6 cases/2,214 examined)

(Group 1: 6-10 years)

(Group 2: 15-25 years)

Epidemiological Situation



Mf Prevalence 1993-2005 in Maceió, Alagoas, Brasil

Epidemiological Situation

Results

Comparison 1993/1996 x 2004/2005

Odds ratio = 77 (IC 95%: 27,7 - 242,5)

Morbidity Evaluation

Surveys

➤ *October - November 2004*

- Census (investigation in all residents of the endemic area)
- Training
- Application of questionnaires
 - Data: Gender, Age, Time of residence, Manifestations (Lymphoedema, Hydrocele, Chyluria, Varicocele, Erysipela and Tenderness of lymph glands)

➤ *July - September 2005*

- Clinical Evaluations

Morbidity Evaluation

Training of field agents



Morbidity Evaluation

Surveys

➤ *Characterization of the population*

- 50,775 individuals
- 12,978 households (mean: 4 persons per household)

▪ <i>Gender:</i>	Female:	27,101	(53.4%)
	Male:	23,674	(46.6%)

▪ <i>Urban sectors:</i>	Farol:	2,538	(5,0%)
	Feitosa:	17,026	(33,5%)
	Jacintinho:	28,962	(57,0%)
	Pitanguinha:	2,249	(4,5%)

Morbidity Evaluation

Results

- *Of the 50,775 individuals surveyed:*
 - 162 reported some clinical manifestation (0,3%)
 - 126 evaluated (77,8%)
 - 29 not found (17,8%)
 - 4 refused examination (2,5%)
 - 3 died (1,8%)

Morbidity Evaluation

Results

➤ *Profile of the 126 individuals evaluated:*

▪ <i>Gender:</i>	Female:	68	(53,9%)
	Male:	58	(46,1%)

▪ <i>Age:</i>	3-93 years
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▪ *Previous thick smear:*

Not done:	20	(15,9%)
Negative:	61	(48,4%)
Positive:	40	(31,7%)
Do not remember:	5	(4,0%)

➤ *Individuals with confirmed morbidity:* **42**

➤ *Frequency of morbidity in the endemic area:* **0,08%**

Filarial Morbidity Identified in Individuals with Reported Clinical Manifestation, by Urban Sector

Urban Sector	N° Interviewed	N° Evaluated	Results of Clinical Evaluations
Farol	2,538	6	Normal: 2 Lymphoedema: 3 Hydrocele: 1
Feitosa	17,026	50	Normal: 35 Lymphoedema: 7 Hydrocele: 8
Jacintinho	28,962	51	Normal: 35 Lymphoedema: 13 Hydrocele: 2 Lymphoedema+Hydrocele: 1
Pitanguinha	2,249	19	Normal: 12 Lymphoedema: 3 Hydrocele: 4

Characterization of Individuals with Morbidity

Morbidity	Total	Gender	Age	Urban Sector	Time	Previous Thick Smear
Lymphoedema	27*	F: 23 M: 04	16-80	Farol: 3 Feitosa: 7 Jacintinho:* 14 Pitanguinha: 3	7 < 10 years 20 > 20 yrs. (3 autoct.)	Positive: 5 Negative: 18 Not done: 2 Don't remember: 2
Hydrocele	15	M: 15	26-80	Farol: 1 Feitosa: 8 Jacintinho: 2 Pitanguinha: 4	5 < 10 years 10 > 14 yrs. (2 autoct.)	Positive: 9 Negative: 4 Not done: 2
<i>Total</i>	42*	F: 23 M: 19		Farol: 4 Feitosa: 15 Jacintinho: 16 Pitanguinha: 7		Positive: 14 Negative: 22 Not done: 4 Don't remember: 2

* Includes Lymphedema + Hydrocele association.

Morbidity Evaluation

Results

➤ *Characteristics of the morbidity situation:*

▪ Lymphoedema:	Degree I:	2
	Degree II:	9
	Degree III:	10
	Degree IV:	5
▪ Hydrocele:	Mild:	1
	Moderate:	4
▪ Lymphoedema+Hydrocele: (Lymph. Degree II + mild Hydrocele)		1

Future Perspectives: Morbidity

- Follow up on Filariasis patients.
- Plan specific clinic implementation.

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