

REGISTRO DE CÂNCER DE PERNAMBUCO

CANCER REGISTRY OF PERNAMBUCO (1967 - 1968)

The "Registro de Câncer de Pernambuco" is in operation since 1967 under the auspices of the following organizations :

Serviço Nacional de Câncer do Ministério da Saúde

Universidade Federal de Pernambuco

Secretaria de Saúde de Pernambuco

Sociedade Pernambucana de Combate ao Câncer

Faculdade de Ciências Médicas de Pernambuco

Program coordinator :

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Adress :

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Faculdade de Medicina da Universidade Federal de Pernambuco

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Recife — Pernambuco — Brazil

The Cancer Registry of Pernambuco operates in connection with the "Departamento de Anatomia Patológica da Faculdade de Medicina da Universidade Federal de Pernambuco" and is under the auspices of the "Serviço Nacional de Câncer" and operates in cooperation with the "Secretaria de Saúde do Estado", the local Cancer Association and the "Fundação de Ensino Superior" of Pernambuco."

The Registry is located in the city of Recife, the capital of the State of Pernambuco (Brazil) and is situated at a southern latitude of $8^{\circ}04'00''$ and $34^{\circ}32'00''$ longitude of the Greenwich meridian. According to the climate classification of Serebrenick, the temperature is tropical and humid and in the economic-social classification of Rostow, is in the third stage. It has an area of 146 Km², corresponding to 0.15% of the area of Pernambuco and its population (tables I and II) represent 28.8% of the state population. The demographic density is of 7233 inhabitants per km². It is the most important northeastern city in Brazil and the largest in population. The most frequent cause of death are the contagious diseases and in 1968 the global mortality was 8.93 for 1.000 inhabitants. The death rate for infants was 125.96 for each 1.000 born alive and the death rate for cancer, 69.88 per 100.000 inhabitants, representing a death rate of 5.88%, being this disease the fourth in line as a cause of death.

In tables III and IV are tabulated the prevalent causes of death in Recife and the variation of the death rate related to malignant diseases.

The analysis of the collected data is to be evaluated considering that:

- 1 - there are 2100 physicians practicing in Recife, that is one physician for every group of 525 inhabitants;
- 2 - all the death certificates are given by accredited physicians;
- 3 - there were 9894 deaths in 1968 among residents of the city;
 - 3.1 - of these deaths 7680 occurred in hospitals (77.7%);
 - 3.2 - 5004 death certificates were given after performance of autopsies (50.5%);

- 3.2 - death certificates given for patients having cancer failed to state the exact localization of the disease only 31 times (0.23%);
- 4 - there are in Recife 8.3 hospital beds for each 1000 inhabitants.

Source of data

In this study the International Nomenclature of Diseases, Accidents and Causes of Death, was used. The mortality data was taken from the Division of statistics of the Health Department of the State of Pernambuco. The morbidity data (new cases) was obtained through visiting agents and from the following sources:

- 1 - Hospitals - encompassing 8049 beds :
 - 1.1 - the Cancer Hospital, with 105 beds, the only specialized cancer hospital in Recife and the main source of information;
 - 1.2 - five maternity hospitals, with a total of 343 beds;
 - 1.3 - one sanatory for tuberculosis, with 1815 beds;
 - 1.4 - one dentistry ward with 6 beds;
 - 1.5 - five hospitals for mental diseases, with 1815 beds;
 - 1.6 - twenty five general hospitals, with a total of 4761 beds;
- 2 - thirteen private laboratories of pathology;
- 3 - fourteen private laboratories of clinical hematology.

DISCUSSION

This first condensed publication of the data collected by the Cancer Registry includes the first two years of its activity, 1967 and 1968. In tables V and VI the coefficients of mortality are given by sex and age groups and tables VII to IX express the morbidity of the disease.

In 1968 the Registry collected 704 more cases than in 1967 and this means that our capacity to obtain data is improving. Besides, the percentage of cases registered as "age, unknown", 33% in 1967, decreased to 12% in 1968. On the other hand it is very important to stress that the majority (about 60%) of the cases registered included cancer located in the skin, oral cavity, cervix penis and breast pointing out that prevention and early diagnosis are feasible in this geographical area.

TABLE I

CANCER REGISTRY OF PERNAMBUCO
POPULATION OF RECIFE
1967

Age Group	Total	Male	Female
0 — 4	151 334	75 731	75 603
5 — 9	108 036	53 543	54 493
10 — 14	101 488	48 105	53 383
15 — 19	113 739	50 113	63 626
20 — 24	125 884	54 797	71 087
25 — 29	105 290	47 328	57 962
30 — 34	80 472	37 564	42 908
35 — 39	70 123	32 229	37 894
40 — 44	51 959	24 332	27 627
45 — 49	42 665	19 191	23 474
50 — 54	33 372	15 041	18 331
55 — 59	23 445	10 088	13 357
60 — 64	21 121	8 814	12 264
65 — 69	10 984	4 458	6 569
70 +	16 158	4 308	11 850
Total	1 056 070	481 642	570 428

TABLE II

CANCER REGISTRY OF PERNAMBUCO
POPULATION OF RECIFE
1968

Age Group	Total	Male	Female
0 — 4	157 691	72 896	84 795
5 — 9	112 574	55 792	56 782
10 — 14	105 752	50 126	55 626
15 — 19	118 517	52 219	66 298
20 — 24	131 171	57 099	74 072
25 — 29	109 713	49 316	60 397
30 — 34	83 853	39 143	44 710
35 — 39	73 069	33 583	39 486
40 — 44	54 141	25 354	28 787
45 — 49	44 457	19 997	24 460
50 — 54	34 774	15 673	19 101
55 — 59	24 430	10 512	13 918
60 — 64	22 009	9 150	12 008
65 — 69	16 123	4 679	7 616
70 +	16 837	4 489	12 348
Total	1 100 432	500 028	600 404

TABLE III
CANCER REGISTRY OF PERNAMBUCO
PRINCIPAL CAUSES OF DEATH IN RECIFE — 1968
(residents)

Causes of Death	Nº of deaths	Rate by 100 000	Percentages of total death
All transmissible diseases			
001-138-480-483-490-493	2 408	218.82	24.34
“Diarrhea” — 543-571-572	1 307	118.77	13.21
Cardiovascular diseases			
410-434-440-447	1 247	113.32	12.60
Malignant neoplasms — 140-205	558	50.71	5.64
Gastro-intestinal/liver			
540-541-550-570-581	521	47.35	5.27
Accidents-E 800-E 866-E 870-E 970-E			
971-E 999	450	40.89	4.55
Other causes	3 403	—	34.39
T O T A L	9 894	899.10	100.00

TABLE IV
CANCER REGISTRY OF PERNAMBUCO
MORTALITY FROM MALIGNANT NEOPLASM
RECIFE
1952 - 1968

YEARS	N.º deaths	Rates by 100 000	Mortality %
1 9 5 2	378	66.35	3.14
1 9 5 3	386	65.02	3.03
1 9 5 4	372	60.14	2.94
1 9 5 5	427	66.24	3.30
1 9 5 6	428	63.70	3.21
1 9 5 7	413	59.01	2.95
1 9 5 8	413	56.63	2.77
1 9 5 9	475	52.61	3.55
1 9 6 0	558	70.47	4.31
1 9 6 1	564	68.80	4.30
1 9 6 2	614	71.42	4.63
1 9 6 3	618	68.98	4.86
1 9 6 4	628	67.27	4.82
1 9 6 5	659	67.75	4.95
1 9 6 6	664	65.52	5.16
1 9 6 7	707	66.94	5.86
1 9 6 8	769	69.38	5.88

TABLE V

CANCER REGISTRY OF PERNAMBUCO
 MORTALITY FROM CANCER IN RECIFE — 1967
 (Rate per 100 000 inhab.)

A G E G R O U P	S E X				T O T A L	
	M A L E		F E M A L E		N. ^o	rate
	N. ^o	rate	N. ^o	rate		
0 — 4	9	22.76	7	15.85	16	19.52
5 — 9	10	18.67	9	16.51	19	17.56
10 — 14	4	8.31	2	3.74	6	6.00
15 — 19	6	11.97	4	6.28	10	8.80
20 — 24	5	9.12	5	7.03	10	7.90
25 — 29	1	2.11	11	18.97	12	11.40
30 — 34	5	13.31	15	34.95	20	24.80
35 — 39	14	43.43	32	84.44	46	65.60
40 — 44	23	94.52	32	115.82	55	106.00
45 — 49	33	171.95	47	200.22	80	187.50
50 — 54	30	199.45	50	272.76	80	236.21
55 — 59	31	307.29	40	299.46	71	300.28
60 — 64	37	419.79	28	228.31	65	307.75
65 — 69	43	964.56	35	532.81	78	710.12
70 +	56	1.299.90	86	725.73	142	878.70
T o t a l	307	63.74	403	70.64	710	67.23

TABLE VI

CANCER REGISTRY OF PERNAMBUCO
 MORTALITY FROM CANCER IN RECIFE — 1968
 (Rate per 100 000 inhab.)

AGE GROUP	SEX				TOTAL	
	MALE		FEMALE		N. ^o	rate
	N. ^o	rate	N. ^o	rate		
0 — 4	14	19.20	16	18.86	30	19.02
5 — 9	5	8.96	4	7.04	9	7.89
10 — 14	3	5.98	4	7.19	7	6.61
15 — 19	13	24.89	6	9.09	19	16.13
20 — 24	10	17.51	2	2.70	12	9.14
25 — 29	11	22.30	11	18.21	22	20.05
30 — 34	4	10.22	21	46.96	25	29.81
35 — 39	11	32.70	18	40.25	29	39.71
40 — 44	13	51.20	40	138.95	53	97.89
45 — 49	22	110.01	48	196.23	70	157.45
50 — 54	24	153.12	45	235.58	69	198.42
55 — 59	36	342.46	44	316.13	80	327.46
60 — 64	48	524.59	45	374.75	93	422.53
65 — 69	43	918.99	47	617.12	90	558.20
70 +	78	1.737.58	83	672.17	161	956.22
Total	335	66.99	434	72.28	769	69.88

TABLE VII

CANCER REGISTRY OF PERNAMBUCO
MORBIDITY FROM CANCER IN RECIFE

1967 — 1968
(Rate per 100 000 inhab.)

AGE GROUP	1967			1968		
	Male	Female	Total	Male	Female	Total
0 — 4	5.30	6.59	5.95	15.00	188.89	17.10
5 — 9	9.34	7.34	8.33	8.96	8.80	8.88
10 — 14	4.15	11.23	7.87	5.98	23.37	15.12
15 — 19	3.99	9.98	6.15	22.98	16.59	19.40
20 — 24	18.25	1.41	8.74	19.26	14.85	16.77
25 — 29	16.90	15.53	16.15	36.49	64.57	51.95
30 — 34	21.30	48.94	36.04	33.21	98.41	67.97
35 — 39	40.34	118.75	82.71	86.35	169.68	131.38
40 — 44	69.87	209.94	144.34	114.38	298.74	212.38
45 — 49	67.74	247.08	166.41	225.03	457.89	353.15
50 — 54	192.81	245.49	221.74	242.45	544.47	408.55
55 — 59	76.78	329.42	264.45	568.39	711.30	650.83
60 — 64	169.64	285.43	395.79	732.24	774.48	726.98
65 — 69	740.24	395.79	537.14	1.538.79	957.19	899.33
70 +	974.93	396.62	550.81	2.494.98	1.190.47	1.538.27
Total	72.62	103.34	89.20	121.79	173.05	149.75

TABLE VIII

CANCER REGISTRY OF PERNAMBUCO
NEW CASES OF CANCER REGISTERED IN RECIFE IN 1967
DISTRIBUTION BY SITE AND SEX
 (Percentages and rates p/100 000 inhabitants)

CODE (*)	LOCALIZATION	MALE			FEMALE			TOTAL		
		N. ^o	%	rates	N. ^o	%	rates	N. ^o	%	rates
140	Lip	2	0.2	0.41	1	0.1	0.17	3	0.3	0.28
141 - 145	Mouth	22	2.3	4.52	11	1.1	1.93	33	3.4	3.42
146 - 149	Pharynx	8	0.7	1.65	3	0.3	0.52	11	1.1	1.04
150	Esophagus	3	0.3	0.62	2	0.2	3.35	5	0.5	0.47
151	Stomach	17	1.8	3.29	11	1.1	2.12	28	2.9	2.74
152	Small intestine	—	—	—	1	0.1	0.17	1	0.1	0.09
153	Large intestine	5	0.5	1.03	12	1.2	2.12	17	1.8	1.61
154	Rectum	14	1.5	2.88	17	1.8	2.98	31	3.3	2.93
155	Liver	4	0.4	0.83	7	0.7	1.22	11	1.1	1.04
156	Biliary tract	—	—	—	7	0.7	1.22	7	0.7	0.66
157 - 158	Pancreas and peritoneum	3	0.3	0.62	4	0.4	0.70	7	0.7	0.66
160	Nasal cavity	2	0.2	0.41	5	0.5	0.87	7	0.7	0.66
161	Larynx	9	0.9	1.86	2	0.2	3.35	11	1.1	1.04
162	Lung	5	0.5	1.03	3	0.3	0.52	8	0.8	0.76
163	Mediastinum	1	0.1	0.20	1	0.1	0.17	2	0.2	0.19
170	Bone	5	0.5	1.03	6	0.6	1.05	11	1.1	1.04
171	Soft tissues	3	0.3	0.62	5	0.5	0.87	8	0.8	0.76
172 - 173	Skin	113	12.0	23.24	84	9.1	14.73	197	21.1	18.65
174	Breast	1	0.1	0.20	93	10.4	16.49	94	10.4	8.90
180	Cervix uteri	—	—	—	199	21.7	34.71	199	21.7	34.71
182	Corpus uteri	—	—	—	26	2.8	4.55	26	2.8	4.55
183	Ovary and Fallopian Tube	—	—	—	16	1.9	2.80	16	1.7	2.80
184,0	Vagina	—	—	—	6	0.6	1.05	6	0.6	1.05
184,1	Vulva	—	—	—	4	0.4	0.70	4	0.4	0.70
185	Prostate	16	1.7	3.32	—	—	—	16	1.7	3.32
187	Penis	29	3.1	6.02	—	—	—	29	3.1	6.02
188	Bladder	16	1.7	3.32	3	0.3	0.52	19	2.0	1.70
189	Kidney	5	0.5	1.03	4	0.4	0.70	9	0.9	0.85
190	Eye	3	0.3	0.62	2	0.2	0.35	5	0.5	0.47
191 - 192	Nervous System	1	0.1	0.20	2	0.2	3.35	3	0.3	0.28
193	Thyroid	3	0.3	0.62	9	0.9	1.57	12	1.2	1.13
194	Adrenals	—	—	—	1	0.1	0.17	1	0.1	0.09
195	Ill-defined site	2	0.2	0.41	1	0.1	0.17	3	0.3	0.28
196 - 197	Secondary and Unspecified sites	15	1.6	3.52	16	1.9	3.15	31	3.3	3.31
199	Unspecified sites	8	0.7	1.24	8	0.7	1.39	16	1.7	1.13
200 and	Lymphatic tissue	11	1.2	2.43	7	0.6	2.27	18	1.9	1.70
201	Hodgkin's disease	15	1.6	3.32	8	0.7	1.39	23	2.4	2.18
204 - 207	Leukaemia	12	1.2	2.43	2	0.2	0.35	14	1.4	1.32
	Total	353	37.0	72.61	589	63.0	103.33	942	100.0	89.19

(*) International Classification of Diseases, Accidents and Causes of Death (8th Revision).

TABLE IX

CANCER REGISTRY OF PERNAMBUCO
 NEW CASES OF CANCER REGISTERED IN RECIFE IN 1968
 DISTRIBUTION BY SITE AND SEX
 (Percentage and rate p/100 000 inhab.)

CODE (*)	LOCALIZATION	MALE			FEMALE			TOTAL		
		N. ^o	%	rates	N. ^o	%	rates	N. ^o	%	rates
140	Lip	15	0.9	2.99	6	0.99	0.3	21	1.2	1.90
141 - 145	Mouth	35	2.3	6.99	19	3.16	1.1	54	3.4	4.90
146 - 149	Pharynx	10	0.6	1.99	5	0.83	0.3	15	0.9	1.36
150	Esophagus	9	0.5	1.79	7	1.16	0.4	16	0.9	1.45
151	Stomach	54	3.7	10.79	40	6.66	2.6	94	6.3	8.54
152	Small intestine	2	0.1	0.39	7	1.16	0.4	9	0.5	0.81
153	Large intestine	5	0.3	0.99	16	2.66	1.0	22	1.3	1.99
154	Rectum	7	0.4	1.39	35	5.82	2.1	42	2.5	3.81
155	Liver	37	2.4	7.39	37	6.16	2.4	74	4.8	6.72
156	Biliary tract	11	0.6	2.19	8	1.33	0.4	18	1.0	1.63
157 - 158	Pancreas and peritoneum	20	1.2	3.99	15	2.49	0.9	35	2.1	3.18
160	Nasal cavity	3	0.2	0.59	2	0.33	0.1	5	0.3	0.45
161	Larynx	20	1.2	3.99	4	0.66	0.2	24	1.4	2.10
162	Lung	29	1.9	5.75	19	3.16	1.1	48	3.0	4.36
163	Mediastinum	2	0.1	0.39	1	0.16	0.1	3	0.2	0.27
170	Bone	6	0.3	1.19	4	0.66	0.2	10	0.5	0.90
171	Soft tissues	13	0.8	2.59	13	2.16	0.8	26	1.6	2.36
172 - 173	Skin	131	8.4	26.19	126	20.98	8.0	257	16.4	23.35
174	Breast	—	—	—	154	25.64	9.0	154	9.0	13.99
180	Cervix uteri	—	—	—	304	50.63	18.0	304	18.0	27.62
182	Corpus uteri	—	—	—	66	10.99	4.0	66	4.0	5.99
183	Ovary and Fallopian Tube	—	—	—	22	3.66	1.2	21	1.2	1.90
184,0	Vagina	—	—	—	6	0.99	0.3	6	0.3	0.54
184,1	Vulva	—	—	—	7	1.16	0.4	7	0.4	0.63
185	Prostate	45	3.0	8.99	—	—	—	45	3.0	4.08
187	Penis	3	0.2	0.59	—	—	—	3	0.2	0.27
188	Bladder	19	1.1	3.79	—	—	—	19	1.1	1.72
189	Kidney	37	2.3	7.39	5	0.83	0.3	42	2.6	3.81
190	Eye	7	0.4	1.39	10	1.66	0.6	17	1.0	1.54
191 - 192	Nervous System	5	0.3	0.99	3	0.49	0.1	8	0.4	0.72
193	Thyroid	7	0.4	1.39	7	1.16	0.4	14	0.8	1.27
194	Adrenals	3	0.2	0.59	9	1.49	0.6	12	0.8	1.09
195	Ill-defined site	4	0.2	0.79	14	2.33	1.0	18	1.2	1.63
196 - 197	Secondary and Unspecified sites	17	0.9	3.39	24	3.99	1.3	41	2.2	3.72
200 and	Lymphatic tissue	14	0.8	2.79	14	2.33	0.8	28	1.6	2.54
201	Hodgkin's disease	23	1.3	4.59	14	2.33	0.8	37	2.1	3.36
203	Multiple myeloma	3	0.2	0.59	1	0.16	0.1	4	0.2	0.35
204 - 209	Leukaemia	12	0.8	2.39	14	2.33	0.8	26	1.6	2.36
	Total	608	38.0	121.59	1.038	172.88	62.0	1.646	100.0	149.57

(*) International Classification of Diseases, Accidents and Causes of Death (8th Revision).