

Mesothelioma and pleural cancer in six Cancer Registries Population-Based of Brazil between 1997-2006: epidemiological silence?

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INTRODUCTION

Mesothelioma is the type of cancer most closely related to occupational exposure (asbestos). Studies on cancer in association with asbestos exposure are still scarce in Brazil, especially regarding to incidence, thus creating the so-called "epidemic silent". Cancer surveillance is fundamental and *Cancer Registry Population-Based* (RCBP) is the main tool to monitor

OBJECTIVE

Evaluate the occurrence of mesothelioma and pleural cancer in six Brazilian capitals, using *Cancer Registry Population Based* (RCBP) informations.

METHOD

The number of mesothelioma and pleural cancer cases were quantified in six RCBPs (Fortaleza, Recife, Belo Horizonte, São Paulo, Curitiba and Porto Alegre), with time series with more than five years, then crude rates incidence were calculated for each cancer.

RESULTS

There were related 221 cases of mesothelioma and 550 of pleural cancer. The highest risks observed for mesothelioma were 15.7, 13.6 and 13.3 / 1,000,000 in Porto Alegre, Sao Paulo and Recife, respectively. For pleural cancer, the highest risks were observed in Porto Alegre, Recife and Fortaleza: 100.0, 42.2 and 32.7 / 1,000,000, respectively.

Table 1: Number of cases and crude incidence rate of mesothelioma, according RCBP, in six Brazilian capitals: period 1997-2006

RCBP	Years										Total	Population ¹	Rates ²
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006			
Fortaleza	1	0	1	0	1	2	3	0	1	4	13	2.141.402	6,1
Recife	5	2	0	0	0	6	1	1	4	NA ³	19	1.422.905	13,3
Belo Horizonte	NA ³	NA ³	NA ³	3	3	5	2	1	1	NA ³	15	2.238.526	6,7
São Paulo	17	21	18	12	11	16	14	8	11	14	142	10.434.252	13,6
Curitiba	NA ³	1	1	1	1	1	2	2	1	0	10	1.587.315	6,3
Porto Alegre	3	0	1	0	1	8	2	5	2	NA ³	22	1.409.351	15,6
Total	26	24	21	16	17	38	24	17	20	18	221	19.233.751	11,5

¹ National Survey IBGE, 2000
² por 100.000 inhabitants
³ NA = Not Available

Table 2: Number of cases and crude incidence rate of pleural cancer, according RCBP, in six Brazilian capitals: period 1997-2006

RCBP	Years										Total	Population ¹	Rates ²
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006			
Fortaleza	6	9	7	8	10	12	10	3	2	3	70	2.141.402	32,7
Recife	11	5	3	3	3	6	7	11	11	0	60	1.422.905	42,2
Belo Horizonte	0	0	0	7	5	9	5	3	3	0	32	2.238.526	14,3
São Paulo	16	20	19	10	51	55	8	6	14	17	216	10.434.252	20,7
Curitiba	0	6	3	3	2	3	3	8	3	0	31	1.587.315	19,5
Porto Alegre	16	11	10	23	18	22	16	20	5	0	141	1.409.351	100,0
Total	49	51	42	54	89	107	49	51	38	20	550	19.233.751	28,6

¹ National Survey IBGE, 2000
² for 100.000 inhabitants

CONCLUSION

Although the identification of cancer cases is restricted to a few Cancer Registries, our results are conclusive and in opposition to the "epidemic silent" described by many authors. An expansion in number of Cancer Registries throughout the country, to ensure greater representation, is necessary. Also fundamental is to assure the improvement in diagnose, in order to better discriminate cases of pleural cancer and mesothelioma, and avoid misclassification. Moreover, taking into account the *Precaution Principle*, all forms of asbestos should be banned in Brazil, thus resulting in reduction in morbidity and mortality from these neoplasms in time.