

THE CONTRIBUTION OF CANCER REGISTRIES IN PLANNING ACTIONS FOR THE CONTROL OF CANCER: THE EXAMPLE OF COLON AND RECTAL CANCER IN THE CITIES OF FORTALEZA AND PORTO ALEGRE.



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INTRODUCTION

Colorectal cancer is the third most common cause of cancer worldwide in both genders and the second cause in developed countries. Data on the incidence of cancer were obtained from Population-Based Cancer Registries (PBCRs).

OBJECTIVE

To describe the incidence rate distribution of colorectal cancer in the cities of Fortaleza and Porto Alegre, and to evaluate the temporal trend of the disease between 1990-1999.

METHODS

For this study, the cities of Fortaleza and Porto Alegre were selected because of their broad experience with cancer registries, since their respective PBCRs were implemented in the 1970s. Both have data available for the same period (1990-1999), and both use the SisBasepop (population-based system), which makes standardization and comparison simpler. Moreover, these cities have well-differentiated behavioral profiles with respect to socioeconomic, demographic, cultural and dietary variables. Age-adjusted annual mean incidence rates were calculated, and the Estimated Annual Percent Change (EAPC), separated by gender, for the period 1990-1999.

RESULTS

The EAPC for males showed a trend towards an increase in both cities. No significant increase was observed in Porto Alegre (+4.2%), and a significantly high positive increment was found in Fortaleza (+9.3%). For females, a trend towards increase was also noted in Porto Alegre (+4.6%) and Fortaleza (+5.3%), but was not significant. The highest incidence rates of colon and rectal cancer were found in Porto Alegre for both genders. The age-adjusted incidence rates for Porto Alegre were almost three times as high as the ones for Fortaleza, for both men (25.1 vs 8.6 /100,000) and women (19.9 vs 7.1 /100,000). The two cities showed a trend towards an increase in the incidence rates between 1990 and 1999.

Table 1 - Descriptive characteristics of colorectal cancer by gender, between 1990 to 1999, in the cities of Fortaleza and Porto Alegre

Descriptive characteristics	Gender	Fortaleza	Porto Alegre
New cases	Men	475	1,295
	Women	544	1,601
% older than 60 years	Men	61%	66%
	Women	53%	70%
Unknow age	Men	2%	1%
	Women	1%	1%
Site			
Colon (C18)	Men	49%	63%
	Women	53%	69%
rectosigmoid junction (C19)	Men	8%	10%
	Women	5%	7%
Rectum (C20)	Men	43%	27%
	Women	42%	24%

Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Table 3 - Average age-adjusted incidence rates* and confidence interval for colorectal cancer by gender, Fortaleza and Porto Alegre, 1990-1999 *(World Standard Population)

Cities	Men (CI - 95%)	Women (CI - 95%)
Fortaleza	8.6 (7.8 - 9.4)	7.1 (6.5 - 7.7)
Porto Alegre	25.1 (23.7 - 26.5)	19.9 (19.9 - 20.9)

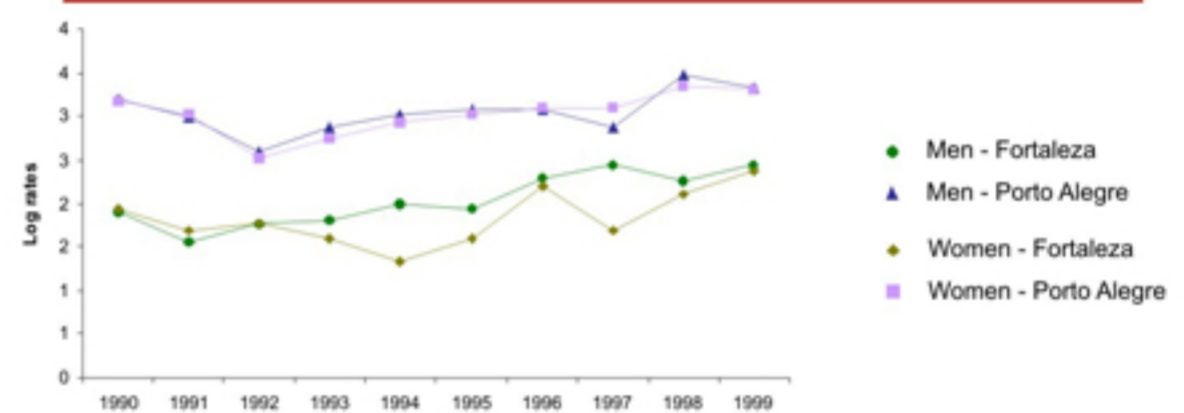
Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Table 3 - Estimated Annual Percent Change - EAPC for the average rates of incidence of colorectal cancer and in Porto Alegre and Fortaleza, for both genders, 1990 - 1999

Age group	Fortaleza		Porto Alegre	
	EAPC	p-value	EAPC	p-value
0 - 59 years				
Men	5.07	0.188	5.47	0.110
Women	6.13	0.076	4.34	0.173
Older than 60 years				
Men	10.42	0.001	3.60	0.207
Women	5.00	0.345	4.66	0.129
Total				
Men	9.29	< 0.001	4.21	0.141
Women	5.27	0.147	4.63	0.106

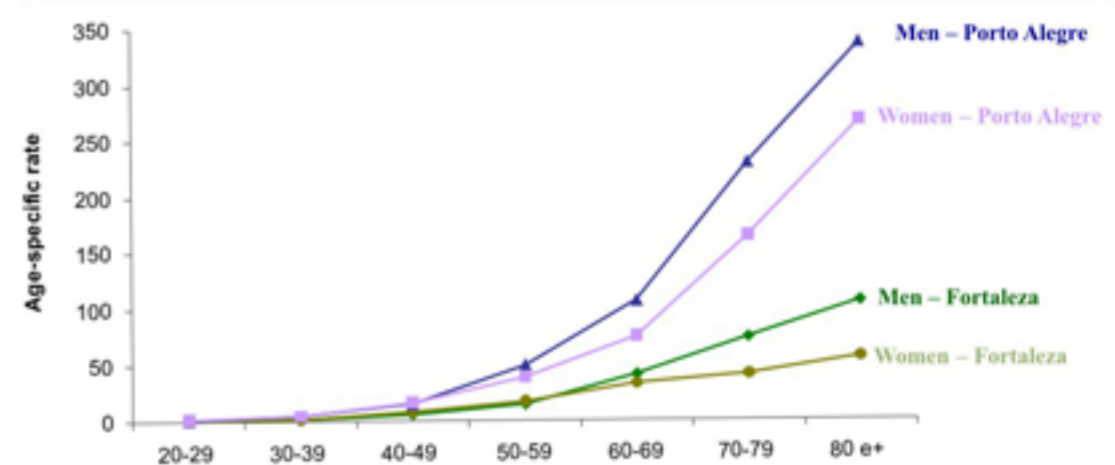
Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
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Figure 1 - Average age-adjusted incidence log rates* for colorectal cancer by sex, Fortaleza and Porto Alegre, 1990-1999



Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Figure 2 - Average age-specific incidence rates* for colorectal cancer by sex, Fortaleza and Porto Alegre, 1990-1999



Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

CONCLUSION

These results are similar to other national and international findings that have also shown a trend towards an increase in the incidence of colon and rectal cancer. This increase may be a result of strategies for early cancer detection, of lifestyle changes in the population or of the age structure of the population. It shows, therefore, the potential of cancer registries to identify and evaluate strategies for preventive actions and control of cancer, emphasizing its relevance within the National Plan for the Control of Cancer.

KEY WORDS: BRAZIL; Colorectal neoplasms; Diseases registries; Epidemiology; Incidence.

Projeto Gráfico: Seção de Multimídias / SDC / CEDC / INCA



Ministério da Saúde

