

## EPIDEMIOLOGY OF COLORECTAL CANCER IN THE UMBRIA REGION OF ITALY: PRESCREENING PERIOD

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**Aims and background:** The epidemiology of colorectal cancer in Umbria, Italy, was evaluated, and data were analyzed in the pre-screening period to better understand the etiology of the disease and to develop screening strategies.

**Materials and methods:** Incident data were collected by the Umbrian Population Cancer Registry and mortality data by the Nominative Regional Mortality Registry from 1994 to 2002. The survival rates relative to Italian cancer registries were derived from the Italian Associations of Cancer Registries publications. Time trends were analyzed by joinpoint regression. The follow-up for survival rates referred to December 31, 2005.

**Results:** The trend of colorectal cancer age-adjusted incidence showed a slight, constant, but non significant increase over time. The mortality trend showed a slight, constant, but non-significant decrease. Age at diagnosis remained constant in males, whereas in females it showed a significant increase of

about 1.5 years. In the last period, all incidence rates increased with age, but in males they presented a rapid increase in the 55-74 age group, levelled and declined up to 84 and after again reached, which could be a consequence of opportunistic screening practice, probably undergone by males. Mortality in both sexes increased with age, whereas survival rates fell. Comparison of survival rates in some Italian cancer registries showed that the Umbria region, in the 1994-1996 period, was the zone with the highest relative survival; in the 1996-1999 period, the rate stopped, differently from other Italian zones. In the last period, the highest survival rates were recorded by registries covering zones with active screening programs.

**Conclusions:** The present reduction of mortality in Umbria, as in other Italian areas, is dependent on the natural behavior of the disease, which is linked to a birth cohort-related effect of stabilization and decrease in exposure to risk factors.

**Key words:** colorectal cancer, incidence, mortality, survival.

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*Acknowledgments:* This work was supported by the Department of Health, Regional Government of Umbria.

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Received April 12, 2006; accepted August 23, 2006.