

cer prevention approach that has an overall benefit.⁷

Sidney J. Winawer

Gastroenterology and Nutrition Service
Memorial Sloan-Kettering Cancer
Center
New York, NY

Ann G. Zauber

Department of Epidemiology and
Biostatistics
Memorial Sloan-Kettering Cancer
Center
New York, NY

References

1. Ontario Expert Panel on Colorectal Cancer Screening. *Colorectal cancer in Ontario 1971-1996*. Toronto: Cancer Care Ontario; 1999.
2. Winawer SJ, Zauber AG. Colorectal cancer screening: Now is the time [editorial]. *CMAJ* 2000;163(5):543-4.
3. Winawer SJ, Fletcher RH, Miller L, Godlee F, Stolar MH, Mulrow CD, et al. Colorectal cancer screening: clinical guidelines and rationale. *Gastroenterology* 1997;112:594-642.
4. Mandel JS, Church TR, Bond JH, Ederer F, Geisser MS, Mongin SJ, et al. Effect of fecal occult-blood screening on the incidence of colorectal cancer. *N Engl J Med* 2000;343:1603-7.
5. Atkin WS. Screening for colorectal cancer: the heart of the matter. *Gut* 1999;45:480-1.
6. Mandel JS, Church TR, Ederer F. Screening for colorectal cancer [letter]. *N Engl J Med* 1993;329(18):1353-4.
7. Robinson MHE, Hardcastle JD, Moss SM, Amar SS, Chamberlain JO, Armitage NCM, et al. The risks of screening data from the Nottingham randomized controlled trial of faecal occult blood screening for colorectal cancer. *Gut* 1999;45:588-92.
8. Winawer SJ, Zauber AG, Ho MN, O'Brien MJ, Gottlieb LS, Sternberg SS, et al. Prevention of colorectal cancer by colonoscopic polypectomy. *N Engl J Med* 1993;329:1977-81.

Is it health care or is it health?

In the past 2 years, *Maclean's* has used a composite scoring system to rank health care services in Canada.¹ However, the *Maclean's* scoring system includes components that are influenced by factors other than health care services. For example, life expectancy,² low birth weight,³ and avoidable hospitalizations⁴ are all influenced strongly by socioeconomic factors such as income, employment and education.

We examined the relationship between each of average income, percent unemployment and the percentage of

the population with a postsecondary education, and the *Maclean's* score for the same 50 health regions that the magazine studied. We obtained these socioeconomic data from Statistics Canada.⁵ For each relationship we calculated the Pearson correlation coefficient and associated *p* value. We found a significant linear relationship between each of the socioeconomic factors and the *Maclean's* score ($r = 0.49$ and $p < 0.001$ for average income, $r = -0.70$ and $p < 0.001$ for percent unemployment (Fig. 1), $r = 0.52$ and $p < 0.001$ for the percentage of the population with a postsecondary education).

Our findings highlight a need for caution when translating descriptions of health services into an overall assessment of health care. We recommend, along with others,⁶ that reports of clinical performance be adjusted for socioeconomic factors so that disparities in health care due to these factors can be emphasized and addressed.

Peter Dodek

Centre for Health Evaluation and
Outcome Sciences
Program in Critical Care Medicine
St. Paul's Hospital

Vancouver, BC

Keith Chan

Centre for Health Evaluation and
Outcome Sciences
St. Paul's Hospital
Vancouver, BC

Mathieu Simon

Program in Critical Care Medicine
St. Paul's Hospital
Vancouver, BC

Robert Hogg

Centre for Health Evaluation and
Outcome Sciences
St. Paul's Hospital
Vancouver, BC

References

1. Marshall R. The best health care. *Maclean's* 2000;113:18-21.
2. Lynch JW, Smith GD, Kaplan GA, House JS. Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions. *BMJ* 2000;320:1200-4.
3. Rutter DR, Quine L. Inequality in pregnancy outcome: a review of psychosocial and behavioural mediators. *Soc Sci Med* 1990;30:553-68.
4. Weissman JS, Gatsonis C, Epstein AM. Rates of avoidable hospitalization by insurance status in Massachusetts and Maryland. *JAMA* 1992;268:2388-94.
5. Statistics Canada. Statistical profile of Canadian communities. Ottawa: Statistics Canada; 1996. Available: ceps.statcan.ca/english/profil/Place-SearchForm1.cfm (accessed 2001 Feb 28).
6. Fiscella K, Franks P, Gold MR, Clancy CM. Inequality in quality: addressing socioeconomic, racial, and ethnic disparities in health care. *JAMA* 2000;283:2579-84.

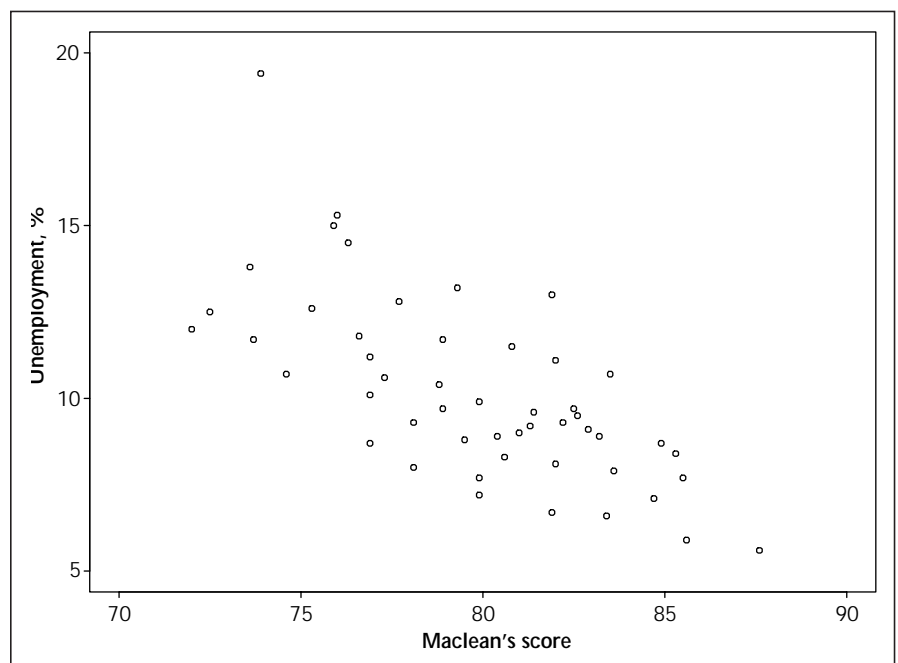


Fig. 1: Correlation between percent unemployment and the *Maclean's* score for the 50 regions studied by the magazine.