European Journal of Cancer, Vol. 35, No. 7, p. 1162, 1999

Printed in Great Britain
0959-8049/99/$ - see front matter

Letters

PII: S0959-8049(99)00064-7

Comments on: *Survival of Colorectal Cancer Patients in Europe during the Period* 1978–1989, Gatta, et al., *Eur J Cancer* 1998, 34, 2176–2183

S. Papagrigoriadis

South Cleveland Hospital, Colorectal Unit, Marton Road, Middlesborough TS4 3BW, U.K.

I AM writing regarding the publication of Gatta and colleagues [1]. This is obviously a very important study, as is the whole of the EUROCARE study, and those results should be analysed very carefully by all European oncologists as well as each country's health authorities. I have only one reservation about what I think represents a potential statistical bias.

It appears from the 5-year relative survival figures by country, shown in Figure 3, that all countries, apart from Finland, that have poorer registry records (6–20% of the total population) also appear to have better survival. In contrast, of the countries with better registries (20–100% of the total population), all but Polish and Austrian women have poorer survival. This gives the impression that the presence of a better or complete registry may be associated with poorer survival. This is difficult to understand. Although the sizes of the samples in all countries are adequate for statistical comparison there is a possibility of bias.

One could claim that in countries with poorer registries, university hospitals and specialised cancer units might be over-represented with a higher proportion of patients. Alternatively, smaller district or remote hospitals might not report enough cases.

In contrast, in countries with registration of 80–100% of colorectal cancer cases, a greater variability of treatment or lack of treatment by specialists might give a worse picture.

What Gatta and colleagues should do is to break down each country's cases according to management in teaching hospitals/specialised units as opposed to district hospitals. This might not be an easy task and it would certainly complicate the subgroup analysis. However, it would be the only way to prove their point beyond any doubt. For the time being, for those who have a deeper knowledge of research methods, this doubt remains.

Received and accepted 17 Feb. 1999.

---

1. Gatta G, Faivre J, Capocaccia R, Ponz de Leon M and the EUROCARE Working Group. Survival of colorectal cancer patients in Europe during the period 1978–1989. *Eur J Cancer* 1998, **34**, 2176–2183.

European Journal of Cancer, Vol. 35, No. 7, pp. 1162–1163, 1999

Printed in Great Britain
0959-8049/99/$ - see front matter

PII: S0959-8049(99)00111-2

Response from G. Gatta, J. Faivre, R. Capocaccia, *et al.*

G. Gatta, J. Faivre, R. Capocaccia, M. Ponz de Leon and the EUROCARE Working Group

Division of Epidemiology, Istituto Nazionale dei Tumori (INT), Via Venezian 1, 20133 Milan, Italy

I AGREE WITH Dr Papagrigoriadis's statement regarding the comparability problem arising from the variable national coverage of cancer registration, ranging from 100% in northern and some eastern European countries to less than 10% in countries of southern and central Europe. In the latter, the areas covered by registries may not be representative of the whole nation. Small registries in particular may be more likely to be present in areas where the local medical community has an above average interest in oncology, and this could positively influence the standard and availability of care in those areas [1]. However, Spain, France, Switzerland and The Netherlands have, in fact, a much larger coverage than suggested by their participation in EUROCARE II. I do not think that the registries from these countries that participated in EUROCARE II did so because of the possible bias mentioned by Dr Papagrigoriadis. It is worth noting also that the number of cancer registries increased in EUROCARE II compared to EUROCARE I and several countries were much better represented. This was the case with France, The Netherlands, Spain, Italy, Poland and England, and the rank of cancer survival for these countries did not change between the studies.

Dr Papagrigoriadis suggested analysing survival by type of hospital (specialised versus district hospitals) as one would expect better survival for the former. I disagree with this because of stage migration [2]. With modern staging techniques a fraction of cancers previously classified as localised are recognised as at a more advanced stage, apparently improving the prognosis for both stages. The new diagnostic techniques are not available at the same time in different countries or in different hospitals within a given country or

---

Correspondence to G. Gatta,
e-mail: gatta@anprisc.anapat.istitutotumori.mi.it
Received and accepted 27 Apr. 1999.