LETTERS TO THE EDITOR

Neural tube defects in Newfoundland

SIR — It was recently suggested in this journal that the 1988–89 peak in the birth prevalence of neural tube defects (NTD) in eastern Turkey was due to the Chernobyl disaster.[1] Two other reports from the western hemisphere have described dramatic increases in the birth prevalence of NTD. In Jamaica the increase in several types of NTD between July 1989 and March 1990 was suggested to be attributable to a post-hurricane scarcity.[2] In Texas a 1989 increase in anencephaly was felt to be a problem of exposure to dumped inorganic solvents or to be due to a high proportion of Hispanic people, known to have an increased incidence.[3]

Neural tube defects (NTD) in Newfoundland by type of defect, 1976–1991.

Year	Anencephaly	Spina bifida	Encephalocoele	Total NTD	Total births*	Rate/1000 births
1976	23	15	–	38	10 538	3.6
1977	13	10	2	25	10 486	2.4
1978	14	15	3	32	9606	3.3
1979	12	10	2	24	9637	2.5
1980	15	27	5	47	9384	5.0
1981	17	18	1	36	9173	3.9
1982	15	11	–	26	9227	2.8
1983	9	12	4	25	8980	2.8
1984	12	11	–	23	8598	2.7
1985	11	7	4	22	7842	2.8
1986	11	8	–	19	7658	2.5
1987	9	15	1	25	7850	3.2
1988	10	11	3	24	7512	3.2
1989	7	9	1	17	7795	2.2
1990	13	7	2	22	7720	2.9
1991	14	19	2	35	7224	4.9
TOTAL	205	205	30	440	139 230	3.2

* Includes stillbirths

With a mean birth prevalence of 3.2 per 1000 births from 1976–91, Newfoundland has one of the highest rates of NTD in North America. In 1991, 35 NTDs were ascertained among 7224 total births, so that the birth prevalence was 4.9 per 1000 births, matching a previously described increase in 1980 (table).[4] Comparing the data over the 16 years indicated that there was a statistically significant heterogeneity ($\chi^2 = 27.96$, $p = 0.02$, $df = 15$). While a proportion of this heterogeneity could be attributed to the 1980 increase, the 1991 increase was significantly higher than in the preceding 15 years ($\chi^2 = 6.31$, $p = 0.01$, $df = 1$). The 1991 peak showed no excess of any type of NTD (see table) or concentration of births in any geographical region (results not shown).

Ascertainment is thought to be complete with data compiled from a registry of cases from many sources—all hospitals registering births, the only children's hospital, the Medical Genetics Program, and the Vital Statistics Division of the Department of Health. The data included terminations of NTD pregnancies.

It is difficult to assess the importance of this undefined increase in NTD births. It has occurred two years later than the three studies cited above, thereby suggesting yet another unknown causative environmental factor. It may be possible to explain the phenomenon by a normal clustering of space-time events. In high risk areas it is difficult to assess the impact of an unknown environmental factor acting against a background of genetic predisposition. It is more unlikely that there has been a change in the nutritional status of the population. Nevertheless, in view of current thought that NTD can be prevented by vitamin supplementation,[5] this fact must be kept in mind when discussing changing trends.

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1 Guvenc H, Uslu MA, Guvenc M, Ozekici U, Kocabay K, Bektas S. Changing trend of neural tube defects in eastern Turkey. *J Epidemiol Community Health* 1993;47:40–1.
2 Duff EMW, Cooper ES, Danbury CM, Johnson BE, Sergeant GR. Neural tube defects in hurricane aftermath. *Lancet* 1991;337:120–1.
3 Pemberton M. Anencephaly alert in Texas. *BMJ* 1992;304:732–3.
4 Frecker M, Fraser FC. Epidemiological studies of neural tube defects in Newfoundland. *Teratology* 1987;36:355–61.
5 MRC Vitamin Study Research Group. Prevention of neural tube defects: Results of the Medical Research Council vitamin study. *Lancet* 1991;338:131–7.

Collaborative Registry of Smoking Cessation Trials

SIR – Over the past 10 years there has been a significant increase in the number of randomised controlled trials comparing the effectiveness of different interventions in smoking cessation.

Recently, substantial progress has been made to assemble, collate, and maintain systematically a register of published and unpublished randomised controlled trials of smoking cessation interventions as part of an international collaboration to facilitate the assembly of a register of randomised controlled trials in all fields of health care.[1] Steps have now been taken to establish a prospective registry of planned or continuing randomised controlled trials in the area of smoking cessation.

A number of researchers with experience in the area of intervention for smoking cessation have recently been approached to obtain information about trials of smoking cessation interventions currently in progress. The initial response has been encouraging, but it is possible that some people who are working in this field and ought to be approached have been inadvertently missed.

We are therefore seeking the help of all researchers to ensure that a registration form is completed by the principal investigator for all randomised controlled trials of a smoking cessation intervention of which they may be aware, and which is currently in progress or substantially advanced in the planning stages. To be eligible for inclusion in the registry, a trial must (a) be unpublished, (b) include at least two groups, (c) allocation to the groups must be by either a random or quasi-random method, (eg alternation, year of birth, etc), and (d) the trial must be related to an aspect of smoking cessation. Trials examining abstinence rates, relapse prevention, withdrawal symptoms, training or encouraging health professionals in smoking cessation techniques, or any aspect of smoking cessation research are all eligible for inclusion. If you are in doubt as to whether a trial is suitable for inclusion, we suggest you still complete a registration form.

Once the register has been assembled a copy will be distributed to all contributors and it will be published in summary form on an annual or bi-annual basis.

The registry will not collect any trial result data or participant information, although the existence of such a register may facilitate efforts to establish collaborative groups who wish to undertake more detailed systematic reviews in the future, similar to those undertaken in other fields.

Trial registration forms are available on request from:

The Collaborative Registry of Smoking Cessation Trials,
General Practice Research Group,
Gibson Building,
Radcliffe Informary,
Oxford OX2 6HE,
United Kingdom.

Tel: +44-865-319 124
Fax: +44-865-310 545

The coordinators would also appreciate being informed of any completed *but unpublished* smoking cessation trials of which you may be aware. No special form is provided for this purpose, but any information that researchers can provide will assist in updating our current register of completed trials and ensure its comprehensiveness.

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1 Chalmers I, Dickersin K, Chalmers TC. Getting to grips with Archie Cochran's agenda. *BMJ* 1992;305:786–8.