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The Chernobyl accident and induced abortions: only one-way information

In the study recently published by Bertollini et al (1), a reduced number of births and an increased number of induced abortions were observed in some regions of Italy after the Chernobyl nuclear accident.

In this letter, we report the main results of a similar study (2) conducted in the canton of Ticino (the Italian-speaking part of Switzerland) and point out a possible causal factor that seems to deserve more attention in the discussion of the induced-abortion results and consequent reduction in birth rate in relation to the Chernobyl event.

In Ticino we observed a 57.7 % ($P < 0.001$) increase in the number of induced abortions in June 1986 (figure 1) in comparison with the four-year trend for 1984-1988, and a significant reduction in the number of births in the first two months of 1987 with respect to the secular trend, particularly in February (15 % reduction in the birth rate, $P < 0.05$). For June 1986 we also found a significant reduction in the average number of days between the date of the request for an induced abortion and the surgical operation.

These results, in particular the reduction in the time lag between request and surgical operation, seem not only to suggest fear, anxiety, and panic among pregnant women [psychological distress from abortion

generally being the greatest before the intervention (3)], but also uncertainty and confusion among physicians. We surveyed a sample of Ticino physicians and gynecologists and found that they were not aware of the relationship between low-radiation exposure and the risk of fetal abnormalities. In May 1986, we were unable to find a Ticino physician ready to explain this relation to the public on the Swiss Italian radio channel.

In Switzerland a special federal task force was implemented immediately after the Chernobyl accident to inform the population of how (particularly with dietary habits) to contain the possible adverse effects of the radioactive fall-out. The recommendations issued by this group indicated an increased risk especially for pregnant women. This information, which was given to the general population, repeatedly created a situation of panic, like a posttraumatic stress disorder, in those particular subjects. However, the federal task force neglected to give special information to the medical profession in general, and to gynecologists in particular, about the "state of the art" or a reasonable evaluation of the risk of fetal abnormalities following the Chernobyl fall-out in Switzerland, and in the canton of Ticino in particular — risk that

Figure 1. Index of monthly rate of induced abortions in Ticino (Switzerland) in 1984-1988.

was recognized as negligible (4). Thus the "pressure" to induce abortion generated by the information given by the federal task force was not counterbalanced by official and authoritative information to the medical profession. This lack of information prevented physicians from providing pregnant women who inquired about a possible abortion due to the fear of fetal abnormalities with explanations in line with the actual situation until June 1986 (5—8). Therefore it might be possible that several wanted pregnancies were interrupted by legal abortion.

We propose that this "one-way" information could probably be considered an additional explanation for the Bertollini et al findings.

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