YOUTH AND THREAT OF NUCLEAR WAR

SIR,—Dr Beardslee's paper (Sept 10, p 618) was written before the appearance of a study based on the most scientifically designed sample yet obtained of thousands of young people in the USA and USSR.[1] The core method is the same as the one we devised in 1983[2,3] and which was used by most of the investigators Beardslee cites. The new survey[1] fully supports findings in previous surveys, including pilot studies in the Soviet Union[4-6] not discussed by Beardslee. There can now be no reasonable doubt that worry about the nuclear threat is significant for a large proportion of young people—and this concern crosses all racial, economic, and religious groupings in developed nations worldwide.

As both Beardslee and Mack[7] point out, we have only started to scratch the surface of understanding the psychology of adolescent adjustment to the threat of ultimate destruction. We do not even have good basic data from some nuclear-armed nations (UK, France, China, India, Israel), and only one less developed nation has been surveyed.[8] Now that there can be no doubt that research in this important area represents good science and is not somehow purely political, perhaps adequate funding will be available for more international research.

We agree with Beardslee that the issue should be dealt with in schools, but a curriculum designed only to cover the nuclear issue is not the best answer. There are many other issues that adults find difficult to communicate on and adjust to—for example, sexuality, drug abuse, cancer, and chronic handicaps, death, and racial tension. Many curricula tackle such issues separately but none tries to integrate them. The common thread to all these different topics (or "unspeakable" issues) is that they generate strong emotions. Adults are ill prepared to deal with such feelings, having been trained only to handle facts. The first step is to help adults, and teachers especially, to deal constructively with the strong emotional responses in themselves and in their students. A pilot project—the Thursday Night Group (1431 Ocean Avenue, Santa Monica, California, based on confronting feelings about the nuclear threat)—has been very successful in Los Angeles, where teachers soon recognised that the methods they had been introduced to could apply to all other "unspeakable" issues. The time has come for a "psychosocial curriculum for the 21st century", which will bring the social sciences into schools and so help young people deal with feelings and communication, and not just facts.

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MEDICAL EDUCATION

SIR,—The World Conference on Medical Education in Edinburgh (Aug 20, p 462, 464) urged medical schools to make the training of physicians more relevant to the health needs of their communities. The World Federation of Medical Education was responding to a call from the Network of Community Oriented Educational Institutions for Health Sciences. In 1979 in Jamaica this Network, with the help of the World Health Organisation, established with the aim of invigorating traditional medical education by integration with the health care system. Resources are diminishing; demands and expectations are growing; technology becomes more complex; knowledge based on patient care and research is growing; and health care has become an important issue both for political parties and for health care providers. The Network aims are to reflect these concerns in the medical curriculum.

In the 1970s different views on how to organise medical education emerged. John Evans (McMaster University, Hamilton, Canada) and Kerr White (Rockefeller Foundation) have been the founders of an innovative approach to medical education, with a combined problem-based/population-based approach. They introduced epidemiological thinking into the formulation of health policies and the anticipation of future problems.

In the past 20 years forty institutions (new ones and ones with a traditional medical curriculum) have adopted or changed towards a problem-oriented curriculum. The Network now has over a hundred members in many countries. For example, the medical school at Masstricht, Netherlands, is one new medical faculty that has a teaching programme in which health problems underlie medical education.

The Network has overcome resistance from traditional medical education, and barriers between branches of learning and practice have been broken down. The Network philosophy stresses the relation between theoretical and practical instruction from the day students enter medical school. We therefore whole heartedly support the Edinburgh declaration, which embraces the principle that medical schools should produce doctors who will promote the health of populations.

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WEARING GLOVES AS CAUSE OF FALSE-NEGATIVE HIV TESTS

SIR,—We have been testing sera for HIV antibody by the Abbott recombinant enzyme immunoassay. Recently, a positive control serum yielded a negative result. No gradual loss of reactivity had been noted in the preceding days. Suspicion fell on the disposable gloves worn by the technician: powder from the gloves could have been spread onto the tray in which the sera were tested and antibodies in the control serum could have adhered to these particles. To test this explanation the positive control serum and a negative control serum were examined for anti-HIV, in studies replicated tenfold, in two ways. Two gloved hands (latex examination gloves, Ansell Medical) were rubbed against each other above the tray and the test was done according to the manufacturer's instructions, no gloves being worn—or the gloves were first thoroughly washed with tapwater and dried before rubbing as before. A separate tray not prepared by rubbing gloves against each other was used to establish the cutoff value. The results are summarised in the table. The powder on the gloves, when examined under the microscope, was identified as maize starch.

We conclude that the starch on the gloves might cause false-negative reactions. Used as a lubricant on medical gloves starch seems to work here as an adsorbant of large molecules such as immunoglobulins. The particles drop randomly in the wells, so they may lower the sensitivity in an uncontrolled way. In a same experiment as described above we examined 10 known positive sera

COMPARISON OF ANTI-HIV ELISA AFTER RUBBING WITH GLOVES ABOVE TRAY

Serum	Positive reactions* (mean extinction)	
	Unwashed gloves	Washed gloves
Positive control (n = 10)	5 (0·504)	10 (1·252)
Negative control (n = 10)	0 (0·025)	0 (0·076)

*Cutoff value = 0·178.