

Vietnam vets: How well did they adjust?

In an update of a national survey of soldiers who returned from Vietnam (SN: 4/11/81, p. 236), the veterans themselves indicate that they experienced more behavioral and emotional problems six to 15 years after serving in Vietnam than did other young men from similar social backgrounds. Interpretation of the severity of these problems, however, has triggered a debate over the emotional damage done by the war.

Sociologists Thomas Yager, Robert Laufer and Mark Gallops of the Center for Policy Research in New York City interviewed 1,342 men who were draft-eligible during the Vietnam War: 629 nonveterans and 713 veterans, 350 of whom served in Vietnam. The interviews took place in 1977 and 1979. The researchers report in the April ARCHIVES OF GENERAL PSYCHIATRY that, when pre-service social background was statistically taken into account, combat exposure was associated with increased arrests and convictions after discharge. About one-quarter of heavy-combat veterans have been arrested. Alcohol use also increased with combat experience.

Participants in atrocities, particularly the torture and murder of prisoners and the physical mistreatment of civilians, reported more stress symptoms such as jumpiness, loss of interest in usual activities and perceived hostility from others. Heroin and marijuana use was reported more often by these veterans.

Combat veterans reported more traumatic stress symptoms than did non-combat veterans. The findings "tend to confirm reports of stress response syndrome resulting from veterans' violent experiences in Vietnam," say the investigators.

Gallops says that an unpublished evaluation of the data indicates that about 20 percent of the respondents have severe stress responses that are similar to what is known as Post-Traumatic Stress Disorder (PTSD). Almost 35 percent of the veterans with heavy combat duty or participation in abusive violence fit into this category.

The survey was completed, however, before a comprehensive description of PTSD was published in 1980 in the American Psychiatric Association's diagnostic manual of mental disorders. PTSD is characterized by the re-experiencing of an unusually stressful traumatic event, numbing of responsiveness to the external world and at least two more symptoms of anxiety and depression. These include sleep difficulties, startle responses, memory impairment and guilt about surviving when others have not.

Yager and colleagues add that their study is not conclusive. The findings do not rule out the importance of an emotional predisposition to stress symptoms before military service. It is difficult to

show a causal connection between combat experience and psychopathology, they explain.

In a written comment published along with the survey, two California psychiatrists say the results show that, on the contrary, most Vietnam combat veterans do not experience substantial emotional distress or PTSD. Theodore Van Putten of the VA Medical Center in Brentwood and Joel Yager of the University of California at Los Angeles hold that stress and emotional disturbance scales used in the study were weakly elevated for combat veterans. "Understandable embitterment" after the war, not PTSD, could explain their higher arrest rate, they contend. There is, they add, a subgroup of these veterans with PTSD who often have coexisting psychiat-

ric disorders.

Van Putten and Joel Yager's comments are an attempt to subtly "sweep the problem under the rug," psychiatrist Arthur Blank, head of the Veterans Administration's Vietnam Veteran Out Reach Program in Washington, D.C., told SCIENCE NEWS. Of approximately 200,000 Vietnam veterans treated at VA centers since the end of the war, about one-quarter have clearly diagnosable PTSD, he says. "This disorder affects a substantial minority of veterans," notes Blank, most of whom do not have coexisting psychiatric disorders. "The national survey shows an important association between stress symptoms and level of combat experience."

The VA, at Congress's request, is about to launch its own national survey of Vietnam veterans' post-war adjustment, including an up-to-date look at the prevalence of PTSD. —B. Bower

U.S. seconds Australia with frozen embryos

Scarcely one week after Australian reproduction researchers announced the healthy birth of the first baby born following test tube fertilization and subsequent freezing, a California hospital granted permission for a similar effort in the United States, SCIENCE NEWS has learned. Embryos have already been frozen following a protocol similar to the Australians', says Richard P. Marris of the University of Southern California Medical School in Los Angeles, who plans his first transfer of a thawed embryo within the next few weeks.

The Australian physicians, led by Carl Wood and Alan Trounson at Monash University in Melbourne, and Marris say they see the "cryopreservation," or freezing of human embryos, as a logical extension of their increasingly high success rate with in vitro fertilization techniques. During a typical procedure, several ripening eggs can be taken surgically from an ovary and inseminated in a nutrient-filled laboratory dish. As physicians' understanding of the best way to nurture and implant the developing embryo has increased, so has the number of multiple births.

"We [at USC] are now getting an average of five eggs per patient," Marris told SCIENCE NEWS. "We just delivered our first set of triplets several weeks ago and are about to deliver another. It's not going to be very long before multiple births occur regularly at many centers."

One current alternative to the transfer of many embryos is the donation of one or two to another couple, a form of embryo adoption. But controlled freezing of the unused embryos could permit the parents a new choice: a second attempt at implantation the next month if the first attempt is unsuccessful, or a successive pregnancy several years later — all resulting from only one surgical procedure with its attendant risk and discomfort. "The science behind it is good," Marris says. "It should

simply make the system more cost-effective."

Gary Hodgen, who has pioneered a number of embryo transfer techniques in monkeys at the National Institutes of Health, predicts that the United States is likely to see a half-dozen teams freezing and implanting embryos in 1984. "Interest is very high," he told SCIENCE NEWS. "The birth in Australia proves that the theoretical is possible. The success rate remains to be seen." Marris says research with rodent embryos and extensive use of cryopreservation in the cattle industry indicate that the freezing procedure does not damage chromosomes, or pose any other form of toxicity.

Both Hodgen and Marris say they are keenly aware of the need for ethical as well as technical guidelines in dealing with the frozen embryos, and hope that in the United States, such limits will emerge from the scientific community rather than from legal restrictions. (In Australia, a researcher can be jailed for improperly utilizing gamete material.) The American Fertility Society published in the January issue of FERTILITY AND STERILITY a list of guidelines that includes a restriction against "scientifically examining" any donated embryos more than 14 days after fertilization, the stage at which implantation would normally occur. Embryos are not to be kept frozen longer than the reproductive life of the mother, according to the guidelines, and the couple must decide prior to freezing how they wish to deal with unused embryos at menopause.

How to enforce such limits, and a similar set soon to be published by the American College of Obstetricians and Gynecologists, will be one topic for a small, recently established subgroup of the American Fertility Society at an international conference on infertility in Helsinki in May, says Marris. —D. Franklin