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Letters to the Editor

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LETTERS TO THE EDITOR

DEAR SIR:

It may seem strange at first sight that in a stoned age of *drugged individualism* it is nearly impossible for the average man to obtain sensible and meaningful information about psychotropic drugs. But what kind of information about witches was available during the Inquisition? These have been and evidently still are "burning" questions, and the spiritual belief system and praying unity of the Western medieval world can now be contrasted with the "objective" utopian belief system of our "progressive" drug-taking society.

My concern is the credibility gap with respect to what drugs do and don't do. As an example, for years we have been told, first through scientific journals and then via the mass media, that LSD produces chromosomal damage and malformation in the newborn. Although the chromosomal damage story is unfounded [1], the average "well-informed" citizen still does not know what to believe since the mass media do not give the same coverage for refutation as for the dissemination of the original sensational, but false, claim. In retrospect, it appears that the LSD-induced chromosomal damage story was conceived by internationally unknown puritans whose intentions were to eradicate illicit LSD-taking. In a similar vein, our puritanic ancestors tried unsuccessfully to discourage masturbation, which was supposed "to rot away the spine." In fact, the motto of all these crusaders was but another variation on an old theme; the God of the Old Testament already invoked the threat of chromosomal (genetic) damage: "For I the Lord am a jealous God, visiting the iniquity of the fathers upon the children unto the third and fourth generation of them" (Exodus 20:5).

If the purported LSD-damage was a typical example of overreporting, the victorious saga of successful psychochemotherapy with the major tranquilizers could be called an underreporting. For years we were made to believe that the discovery of these drugs revolutionized psychiatry and that the tranquilizers enabled millions of patients to spend less time in mental hospitals and to live "normal" lives within the community. A factual appraisal, however, reveals that these pills are beneficial only to some and detrimental to others, whereas in the majority of cases they only delay mental deterioration. This is reflected in what has been called the "revolving door" phenomenon: patients are being hospitalized for shorter periods than previously, but they are also being more frequently readmitted [2].

Although tranquilizers may help to produce "a less demanding and complaining patient," they can induce irreversible brain damage, as long-range experiments suggest [3]. Cytological examination of the brains of rats fed Thorazine® at various dose levels and sacrificed at various time intervals shows that certain animals suffered irreversible brain damage. In translating their data from rat to man, the authors warn that irreversible brain damage may be expected to occur in man if more than 400–500 mg Thorazine® (the most widely used tranquilizer

in the Western world) is administered daily to patients for an extended period of time.

We can indeed verify this prediction by visiting the chronic wards of any state mental hospital. They harbor a considerable number of patients—perhaps hundreds of thousands in the whole country—who were given 800–2,000 mg of Thorazine® daily, year after year, and who now display the unmistakable signs and symptoms of tardive dyskinesia, the consequences of tranquilizer-induced irreversible brain damage. The involuntary, stereotyped movements of these patients in the oral area and the ticks of their hands and feet persist even after the drug “treatment” has been terminated.

This kind of drug abuse is largely unknown to the public, since it is disguised as a side effect of successful psychochemotherapy. It is not realized that there is no such thing as *psychochemotherapy*, especially if we substitute the poetic term “psyche” with the more operational “cortical activity.” In man the set, setting, personality, and expectations based on past experience determine the cortical, that is, perceptual-behavioral (or cognitive) interpretation of drug-induced changes in his subcortical activity. In fact, except for the anesthetics and hypnotics, psychotropic drugs act mainly, if not exclusively, on subcortical structures, and there is no drug which selectively influences human cognitive (psychological) or, in our terms, cortical function.

Each pill, however, contains a “cortical component” implicit in the very act of drug administration: the “placebo effect.” Indeed, only the pharmacologically inactive placebo “contains” an individualized cortical component for those psychoactive pill poppers who, in other countries and other ages, would have been praying with equally effective rosary beads.

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DEAR SIR:

John B. Graham's thoughtful article in *Perspectives* [1] fails to recognize that uncontrolled human fertility is a qualitative, as well as a quantitative, problem. Because world population probably already exceeds its optimum, it is often assumed that everyone should practice reproductive restraint. Some go further and urge that the richer nations, and particularly their upper classes, have a greater

moral obligation than mankind as a whole to limit their numbers. Being richer, this privileged element consumes more goods and services, and hence inflicts more ecological damage to the biosphere.

This reasoning is questionable because it forgets that there are two sides to the equation. Men both cause and cure pollution. The control and minimization of ecological damage is almost exclusively the work of men with enough intelligence and training to discover scientific and technological solutions.

These people are disproportionately concentrated in the upper classes of the advanced nations. They are usually rich, rather than poor, because open societies reward intelligence. They are members of the opulent societies by birth or migration, because only these communities offer the academic, scientific, technological, organizational, and financial prerequisites for breakthroughs in ecological control.

Current propaganda among the professional classes of the opulent nations for zero population growth will, if successful, diminish the innate mental resources of mankind. These are both in short supply and essential to the rational solution of ecological problems. The effort is therefore both socially destructive and immoral.

From an evolutionary standpoint, the soundest, nonreligious foundation for ethics would seem to be the species survival and development of *Homo sapiens*. Since the crucial evolutionary process which gave man dominance over other fauna was the development of his intelligence, the genetic improvement of human brain becomes a primary moral objective. In the past, human genetic advance involved superior differential survival and reproduction by the more intelligent individuals and societies. Today, the wasteful and cruel processes of natural selection can be replaced by population planning. This implies, however, that the controls or persuasion should do more than adjust aggregate human numbers to available resources. It is also necessary that the brighter strains obtain reproductive advantage.

I am not utopian enough to imagine that politicians in our egalitarian society will support demographic policies that favor reproduction by the more creative and intelligent elements. But it should be possible to persuade intelligent people that their duty to society is not to sterilize themselves but to produce as many children as they can support.

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DEAR SIR:

Bioethics as a means "to balance cultural appetites against physiological needs in terms of public policy" [1] is actually a new name for an ancient method. The necessity to build up "the science to save us from science" [2] stems largely from

our anticipation of the fact that if our civilization follows its present course "something worse than extinction" is in store for man [3].

This seems to me to be a deterministic approach, and philosophical, psychological, and/or common sense arguments are sufficient to contradict its hypothesized future. Numerous questions can be raised as to which of the following are most vital:

1. Without entering into the details of the controversy of whether the future is *entirely* determined by the past or not, it may reasonably be asked in the language of Eddington: "We feel that we can to some extent change our nature; we can reform or deteriorate. But is not the reforming or deteriorating impulse also in our nature?" [4].

2. With reference to (1), we are definitely in need of a "real" or new "holistic" biology [1], but how far is it true to assume that the human mind can perceive the "whole situation" of Nature (i.e., "total" and "simultaneous" *realization* of the situation both *within* and *outside* our being) when it (our mind) is just a "part" of that "whole"? How far is such an idea feasible conceptually?

3. Both (1) and (2) are again evidently related to a "realistic knowledge of man" [1] which has been stressed by modern existentialists. The Upanishads also insist on a knowledge of the self: *ātmānam viddhi* [5]. How far are these views related to each other, and what would be the impact of such "true knowledge" on overall material progress including biological and cultural evolution?

Although problems raised by developments in biology are numerous [6], I fully agree with Clarke [7] in that "speculation and too detailed planning should be avoided," at least at this stage.

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