Our Growing Numbers*

ALLAN C. BARNES, M.D.

Vice-President, Biomedical Sciences, Rockefeller Foundation, New York, New York

According to Dr. Barnes: There is no one problem more immediately pressing or as crucial as the questionable future of man's existence of terms of our expanding population.

To stress the immediacy of the problem, Dr. Barnes vividly illustrated by statistics the magnitude of the world's population growth. The exponential curve yielded by calculations of this rate of growth leads Dr. Barnes to state, unequivocally, that "... we have about six hundred years at the present rate of growth before every man, woman, and child on this globe has one square foot in which to stand. This calculation includes the polar caps, northern Siberia, and southern Siberia."

Because we live in a finite world, Dr. Barnes points out that infinite population expansion is impossible. Analogous to the life-support system for the astronauts, "We are locked in a little capsule that has been thrown up into the air and we are orbiting the sun. Nothing that is not already here is going to be delivered to our door." Presently, elements critical for man's existence, such as calcium and nitrogen, cannot be replaced once depleted. Consequently, "Zero population [growth] is going to become a necessity. And the later the year at which we achieve it, the lower will be our standard of living."

Recent observations made by Dr. Barnes during travels to several underdeveloped nations reveal that the problem there is not so much a problem of living space, as "... that they cannot maintain the supporting structures for what we call society." That is, the existing facilities to cope with their present population are so inadequate as to be nearly nonexistent. When this predicted population over-growth occurs, it will be impossible for a self-sustaining nation to retain its socio-economic equilibrium.

Statistics quoted by Dr. Barnes indicate that the United States now faces a precarious situation. Presently, our population doubling time is approximately 75 years, but worse, our pollution factor is even greater. In addition, America is the consumer of 55% of everything that is produced on the globe. One obvious solution, states Dr. Barnes, is that "We must start immediately to lower our standard of living so that we will have more to send out to those around us." At the moment, however, even if we agreed on family replacement (two children per set of parents), statistically, "... we would still almost double our numbers before we brought a halt to our continuing burgeoning growth."

Fervently, Dr. Barnes supports the belief that the medical profession should exert leadership in the field of population control. His reasoning is threefold: First, physicians should be advocates of preventive medicine. "America doesn't practice preventive sociology, it practices crisis sociology... the physician who is delivering groups of illegitimate children, who is watching unwanted pregnancies continue, has not fulfilled his obligation when he sews up the last episiotomy. He has not fulfilled it until he advocates a national policy toward [abolishing] unwanted pregnancies and national enforcement that will assist those individuals who choose not to be so afflicted." Second, "... it is our responsibility because it is caused by us." As Dr. Barnes illustrates, medical advances in the areas of vaccination, antibiotics, and nutritional changes each have had traceable affects upon our population growth. And last, "... it is our problem, at least for the moment, because the weapons that will cure it are in our possession."

The weapons Dr. Barnes refers to are: contraception, sterilization, and abortion. It is important to note that he is primarily concerned with their use on a global basis. "Of contraception," he feels, "the ideal method is not at the present time at hand. With the introduction of the ovulatory suppressant steroids and with the reintroduction of the intrauterine device, there is a tendency to relax that has proven
unwarranted in its optimism.” Doctor Barnes supports the continuing need for research in this field; for example, “We need an oral abortifacient . . . a simple medication that rules out the need for the operating room, abortions, sterile instruments, and so forth . . . and I would hope that we’re within five to eight years of that.” Above all, however, “. . . in the research field we need dignity given to this topic . . . particularly in the face of the size of the problem.”

It is Dr. Barnes’s view that “Progress in research . . . is progress in reaching the ignorant, the uneducated, and the lowly motivated.” That is, if we can provide the underdeveloped nations with a simple, inexpensive, readily available procedure, we can hope to lower the percentage of conceptions. A sizable failure rate in preventing conception, whether it be 8% or 1%, should be considered a positive indication. “On a global basis,” continued Dr. Barnes, “you have to look at the risk-benefit ratio . . . America has fallen into the trap of not [establishing] a balance between risk and benefit, and only looking at the risk as far as its medical program.” In other words, “. . . you can use a considerably less safe method and still be well ahead of the death rate when no method at all is used. In the United States, no form of contraception is as dangerous as pregnancy.”

Doctor Barnes points out that at the present time we have the pill, the intrauterine device, and the condom for global use. The comparative complexity of the pill limits its usefulness to a minority of the people on a global basis. The intrauterine device, on the other hand, has the advantage that people will have to be motivated only once a year. When insertion of this device is possible by paramedical personnel, as Dr. Barnes expects it will be, reaching the lowly motivated will not be such an arduous task. As for male methods of contraception (i.e. withdrawal and the condom), statistics reveal that they have been more effective than female methods of contraception.

The use of surgical sterilization and abortion on a global basis, Dr. Barnes adds, requires too many sterile instruments, trained personnel, and scrubbed rooms. In a modern society such as ours, Dr. Barnes advocates sterilization and abortion on demand. Globally, however, his advice is “. . . do all you can as fast as you can, but I’m afraid it isn’t going to have a statistical recognizable effect.”

The contributions obtainable from prostaglandins, according to Dr. Barnes, are still uncertain. Presently, their cost is too high to enable consideration on a global basis. “It takes about forty dollars’ worth of prostaglandins to serve as an interrupter of early pregnancy or as a [luteolytic] agent, and that multiplies out to too much when you’re beginning to talk about the percentage of people we need to reach.”

Because of the mounting statistical evidence, Dr. Barnes cannot understand why concern for population expansion does not overshadow every other problem facing today’s world. It is his contention that in our crisis society, people tend to ignore that which either does not touch them personally, or is not immediately grave or perilous. In order to bring proper attention to the problem, people must be reached on a personal basis. As a means of demonstrating the seriousness of the problem, Dr. Barnes suggests giving the public something to focus on; possibly a poster campaign with a “population baby” as the central theme, somewhat similar to the campaign mounted by the March of Dimes or Cerebral Palsy.

Even in the event of immediate public response and worldwide mobilization to counter the problem, Dr. Barnes is skeptical. “What is the solution? I’m not sure I know,” said Dr. Barnes, “. . . it is entirely possible that anything we do may be too little and too late.”