

POPULATION CONTROL AS A MOTIVATIONAL PROBLEM

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ABSTRACT

Small-family norms in industrial societies, and large-family norms in developing societies, present quite different motivational problems respecting population control. In the former, means are now more important than motives, while in the latter just the opposite is true. Yet programs of family planning in developing nations continue to operate with the assumption that means are more important than motives. Results of cross-cultural research on the social and psychological factors affecting fertility may serve better than clinic-based efforts, in the long run, to reverse the present rapid population growth in developing societies.

INTRODUCTION

Man has always practiced some form of population control, as witnessed by the ubiquitous gap between human fecundity, the biological capacity to reproduce, and fertility, the reproduction actually achieved. Infanticide, abortion, contraception, family structure, and marriage taboos represent forms of population control, whether intended or not, among human beings at various levels of social organization—family, clan, community, and society. Certainly the idea of population control is no longer novel among the people of many nations. The history of industrial societies is replete with changing norms relevant to family planning. Especially noteworthy has been the transition from social norms with population control as an indirect consequence to social norms directly intended to foster limited reproduction. This transition has resulted in two types of population control problems.

Though intimately related, there is a considerable and important difference between elements of the social structure affecting fertility indirectly, such as employment opportunities and proportion of females in the labor force, and motivational factors among specific couples which directly underlie the basic inducements toward families of a certain size. For example, patterns of urbanization and industrialization slowly, but certainly, effect changes in social organization, which subsequently permit changed cultural definitions of desirable family size. That is, cultural values are overhauled, there is a revolution in thinking about families and children, and average family size usually declines. This is the well-known historical pattern of most Western industrial societies, commonly summarized as the "Demographic Transition." The end result of low to moderate fertility, as compared with underdeveloped nations, presents a type of problem for population control which is relatively unique. That is, among industrial populations the problem is largely one of finding more effective means of control rather than of persuading individuals to accept family planning in principle.

By contrast, in underdeveloped countries where the vast majority of the world's population resides and where the potential for population growth is greatest, the problem is quite different. As Notestein (1945: 39) commented some years ago, with reference to high fertility societies:

All such societies are . . . ingeniously arranged to obtain the required births. Their religious doctrines, moral codes, laws, education, community customs, marriage habits, and family organization are all focused toward maintaining high fertility.

We can be certain that these high-fertility countries will not follow the Western sequence of changed social organization first, followed by gradual fertility decline. There is not enough time for that. Many of the developing nations are increasing their populations at rates that cannot possibly continue for very long without a consequent increase in mortality. For these nations, changed family valuations

affecting lower fertility cannot await changes in social organization, as they did in the West. Instead, for many nations in Asia, Africa, and Latin America, the changed valuations of children must come first. The motivations for family planning must be strong enough to induce a use of whatever means are available to effect that planning. Otherwise, the social organization itself cannot significantly change, for real economic gains will be thwarted by the burden of overpopulation.

In the underdeveloped nations, a relationship between small family size and economic welfare is not obvious to most people. In addition, the means for limiting family size often are not sociologically, economically, or psychologically accessible. In industrial societies, just the opposite is the case; the link between family size and personal welfare is obvious to most people, and the means are usually available. What we are suggesting is that the motivational problems involved in reducing fertility in these two types of societies, developing and industrial, may be quite dissimilar, and thereby require different kinds of study and planning.

We believe that means are now more important than motives in industrial societies, while motives are more important than means in the developing nations. While it seems true that when the motives are strong enough the means will be found, as the Japanese experience indicates (Koya, 1957), it seems useful to make a distinction, by type of society, regarding the relative importance of motives *versus* means.

The logic of this approach to population control assumes a sociologicistic, in contrast to a biologicistic model. That is, social and cultural variables affecting fertility, rather than biological variables affecting fecundity, constitute the major focus. Because of continued interest in biologicistic models, however, and for purposes of contrast, they will be briefly explored.

BIOLOGISTIC MODELS

The first modern scholars to attempt explanations of population change seemingly were influenced more by the biological than by the sociological dimensions in the work of Thomas Malthus (1872). Malthus' emphasis on sexual passions and man's need for food, as well as his laws of population and food increase, have sometimes been taken by other writers as the sum of his theory. Michael Thomas Sadler (1829), for example, believed that nature provided its own balance of population, as fecundity diminished with an increase in population density. Thomas Doubleday (1874) argued that, as the quality of food improves, fecundity decreases. Thus those who consumed meat would be less fecund than those who lived on grains and vegetables. In an effort to fit population growth into his general theory of an analogy between human society and the organic world, Herbert Spencer (1867) argued that fecundity decreases as the complexity of human life increases. In another theory by analogy, Raymond Pearl and Lowell Reed (1920), after studying the reproductive behavior of fruit flies, fitted human population growth to logistic curves.

Because these biological models focused on fecundity rather than fertility, as well as on birth rates instead of differences between birth and death rates, their usefulness for human populations was extremely limited. Yet biological models of human population change persist, at least by implication. Hudson Hoagland (1964:814), for example, recently implied an extrapolation from animal to human mechanisms of population control when he wrote that we "may learn something relevant to our problem [of population control] from a consideration of how animals regulate and control their population problems." The literature on the reproductive behavior of fruit flies, flour beetles, hares, and rats, among others, is usually cited to make this point. Special reference is being made today to the "stress syndrome" outlined by Hans Selye (1950), in which overcrowding leads, in turn,

to biologically induced pathological behavior and sharply reduced population growth. From such studies, Hoagland admits to the temptation of drawing comparisons between overcrowded animal populations and city slums. Nonetheless, it is interesting to note that Hoagland ends his discussion of human population control by reference to such cultural factors as changes in social, economic, and educational conditions, and the motivations underlying individual attempts at economic improvement.

A SOCIOLOGISTIC MODEL

The link between a human couple and a given level of fertility is, of course, highly complex. The variables operating in this linkage include, at a minimum, factors affecting exposure to intercourse, exposure to conception, and gestation and successful parturition (Davis and Blake, 1956). Obviously these variables include both biological and sociological elements. The transformation from high to low fertility among Western peoples, however, provides a partial answer to the culture-*versus*-biology question.

Let us, with Ryder (1957), ask why the birth rates have declined in virtually every country experiencing modernization. All reductions in fertility must operate through changed probabilities of intercourse, conception and, once conception occurs, of birth. No society has ever been indifferent to fertility, for fertility norms are found in all societies. And every society induces, through socialization, conformity with these norms. In a sense the demographic transition is, then, a substitution of individual goals for familial and societal goals.

Peasant societies, for example, are characterized by early marriage, a social factor affecting the probability of intercourse. Usually the newly married couple is incorporated into a larger economic unit based on kinship. And because the economic context is one in which additional labor is useful, the couple typically experiences high fertility.

The extended family eventually gave way, in Europe, to the nuclear family, where children were more directly the responsibility of each couple. This meant that marriage was usually delayed until certain prerequisites for the responsibility of children could be met. Two additional factors accompanied this change in family organization: a decline in mortality and an increase in income expectations. The declining mortality put increased pressure on the child-parent relationship, but most importantly, there was a concomitant economic development. Economic opportunities provided by urban industry and new world resources made large families a much less rewarding experience.

There followed rapidly the institutionalization of various individual rights, including the prohibition of child labor, compulsory education, and the new statuses for women. Thus the modern family, through the loss of selected functions, is no longer essential to education, employment, or social security. In short, in industrial societies, the relationship between small family size and individual economic and personal advantage is now obvious to most people. Present costs of rearing and educating children make large families economically burdensome. In addition, relatively affluent societies offer much by way of personally rewarding alternatives to large families. The saliency of personal freedom to do as one likes, to spend one's money in the pursuit of material and psychological goals, must be considerable. And unborn children must therefore compete with a wide assortment of motivationally relevant alternatives.

The remaining gaps between desired family size and actual family size in most industrial societies are probably due more to the lack of convenient and effective means than to a significant lack of motivation. For example, it is estimated that about 20 percent of all first pregnancies in the United States are premarital (Lowrie, 1965). In addition, perhaps as many as one million American pregnancies are terminated by induced abortions each year (Calderone, 1958). In

both cases it is reasonable to assume that most of the pregnancies were unwanted. So, even with relatively easy access to contraceptives, and even with small-family norms, there is a substantial amount of unwanted pregnancy in the United States. Here then is a kind of society in which we would expect improved means of fertility control to be especially rewarding.

For Western peoples, the motivational problem of the future must probably assume the dimensions of collective responsibility, a return to broader social interests. There will probably come a time when significant differences in perspective between individual decisions affecting fertility levels, and the social aggregate exposed to the consequences of these levels, will require government intervention of some kind. But because of the motivational nature of population problems in the underdeveloped nations, large-scale government intervention is much more likely to occur in those areas within the next few years.

THE DEVELOPING NATIONS

In the developing nations, where poverty is most ubiquitous, the relationship between fertility and economic advantage is not usually obvious to the vast majority of the population, and for good reasons. The economic benefits of reduced fertility accrue slowly, on a society-wide scale, and are not translated into real and significant economic gains for individual couples for perhaps several generations. With declining fertility, a society can more readily accumulate capital with which to industrialize, and the dependency ratio and labor force composition become more favorable to development generally (Coale, 1963). But it is a cruel fact that, while the industrial process will eventually benefit future generations, it will not very much help the masses of people now living. The governments of underdeveloped nations must establish priorities, and the first of these are not likely to be of direct advantage to successful family-planners. To many people in the developing nations, in other words, it will not seem to make much personal difference whether they severely limit their families or not. It would of course make a real difference to Indians now living, for example, if all Indian couples immediately limited their families to two or three children. But even realizing this possibility requires a sophistication of perception and a grasp of demographic and economic factors presently lacking among most people in illiterate, under-educated, and agrarian societies.

The motivational factors underlying effective large-scale family planning in industrial societies are not present in developing nations. A recent United Nations report (1965) concluded that "high-fertility and low-fertility countries differ greatly in every respect of economic and social advancement." Why is this? Among other things, pre-industrial peoples, in the face of centuries of high mortality, have been forced to develop a high-fertility institutional organization in order to ensure their survival. Returning for a moment to the fertility variables concerned with intercourse and conception, we must realize that preindustrial family motivations are closely related to early marriage and a high marriage rate, so little potential fertility is lost in that way.

Developing nations also exhibit high-fertility values for the conception variable, as for example among the world's 500 million Moslems. The way in which Islam is representative of pronatalist social forces generally should illustrate our point. Sons are valued for their contribution to a continuity of family line and land ownership, for agricultural labor, for strengthening kinship units in times of strife, for support in old age, and for specifically religious reasons (Kirk, 1966). In addition, the extended family in Islam acts as a buffer to direct consequences of childbearing on the parents. Islam, often described as a religion of practice rather than doctrine, permeates social life as few of the other great world religions do. Moslem marriage institutions, emphasis on sexuality, and subordination of women constitute particular Islamic characteristics which favor high fertility.

The importance of such factors as patrilineal and patrilocal family structures with traditional male dominance must be appreciated to understand why Moslems, geographically and historically long associated with Europe, have not adopted family planning along European patterns. In view of this, it seems particularly ironic that we continue to act as if the key to population control in developing nations were in devising new means of birth control, and of their distribution, by simply extrapolating the idea of birth control clinics and family planning information from the Western experience to the needs of the underdeveloped nations.

Nonetheless, researchers in several areas of Asia and Latin America have reported findings interpreted as quite encouraging (Kirk, 1967). In a Thai experiment, for instance, 23 percent of the women who had formerly disapproved of birth control changed their attitudes to approval, and those who actually used birth control rose from one to 21 percent (Hawley, 1966). In examining these results, one can emphasize either that *fully* 23 percent of the women changed their minds or that *only* 23 percent did so. Of course, as Spengler (1966:110) points out: ". . . verbal attitudes respecting particular values may not be significantly correlated with behavioral manifestations of those values." And we know that there is often a distinction between "users" and "accepters," as for example in Taiwan, where only (or fully!) 52 percent of the women in one study still had the IUD in place after 18 months.

Because birth rates in the developing countries average 40 to 45 per 1,000 per year, realistic and effective population control implies a drop of some 25 points, or more than 50 percent, from the current level. At present fertility rates, this means preventing approximately 50 million births a year, year after year. Perhaps it is natural that most programs have tended to place great emphasis on the magic of new contraceptive methods. But the fact remains that India, with 16,000 clinics last year and 100,000 sterilizations each year since 1963, has experienced no appreciable decline in birth rates, except possibly in the largest cities. The most successful programs have been among the most urban, most literate, most advanced populations in Asia and Latin America. Family planning programs in South Korea, Singapore, Taiwan, Hong Kong, Argentina, and Uruguay, for example, have been among the most successful in the world. But we believe the successes with family planning in these societies chiefly reflect the fact that favorable motivations were already present.

It seems to us that the present emphasis on contraceptive methods and their distribution in underdeveloped nations is at least partially unwarranted. While the medical-biological components of population control are obviously indispensable, the socio-cultural components always intervene between the availability and use of birth control methods. Each major cultural area should be considered in a context within which social and psychological factors modify and condition degrees of acceptability and use of various contraceptive procedures. Any other approach runs the serious risk of duplicating on a vast scale the Puerto Rican experience, where the availability, acceptability, and knowledge of contraceptives did not break through the cultural milieu to their widespread and effective use (Hill, Stycos, *et al.*, 1959).

No nation has yet effected significant declines in fertility through deliberate family planning programs. In the Western nations, individual couples took matters into their own hands and began to control the size of their families. It should be noted that this process began before the widespread availability of effective contraceptives. The same pattern has occurred in Japan, where the legalization and government supervision of abortion followed, rather than preceded, the recourse to abortion on the part of the Japanese population.

Just as we sometimes prefer to assume that Western patterns of economic and political development will be the models for the underdeveloped nations, we often tend to make the same assumption regarding demographic patterns. Under-

developed nations probably will not follow our particular patterns of development in either the economic or political spheres, and certainly not in the demographic realm. Aside from the plethora of cultural and historical factors already intimated, the argument could rest quite adequately on the proposition that the developing nations do not have the time to follow in our footsteps.

CONCLUSION

What the above means in terms of population control is that ways must be found of inducing motivation for small families into the thinking of millions of human beings. We, in our Western sophistication, know what family planning can mean for capital accumulation, dependency ratios, literacy rates, labor force composition, and other variables related to economic welfare. But family planning, in the developed nations, came from individual responses to changed economic and social conditions. These changes preceded widespread birth control practices in the West, while in the developing world the sequence must be just the opposite.

Pakistanis and Indians, Indonesians and Egyptians, do not share with the Western nations a context of prior motivational patterns for family limitation. If the means of fertility control alone were made more accessible to these people, the average family size might decline somewhat. This is not in dispute. But in reference to most underdeveloped nations, there is a gap between births and deaths which is ever widening, and therefore a need to reduce drastically the level of fertility. To reduce fertility levels, we need to know much more about the social and psychological variables which operate to maintain high levels of fertility. Only then can these forces be manipulated, quite frankly, toward massive change of attitudes and behavior favorable to effective family planning. It seems likely that policies of population control must include feedbacks involving direct rewards, material and psychological, for fertility control, and penalties for those who do not control their fertility (Spengler, 1966). At just what point varying magnitudes of feedback will become motivationally relevant is unknown, but it will surely be different from culture to culture. In the underdeveloped nations, population control will, of necessity, involve state intervention. But government intervention should be based on the soundest possible understanding of the sociological features peculiar to each major culture area, rather than merely on clinics equipped with the latest and most modern contraceptive information and supplies.

The approach we advocate requires research which is expensive, difficult, and time consuming. Even so, this approach might serve better, in the long run, than the emphasis on clinics, to reverse the present rapid population growth in the developing nations. Yet it often appears easier to think in terms of systems of clinics, of quantities and qualities of contraceptive supplies, and of training people to use specific methods of family limitation. All this seems especially attractive because it is precisely the kind of family planning program in which we are now engaged in the United States. Whether what might work for the United States will also work in the developing nations, where the need is so much greater, seems to us highly doubtful.

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