

OVERCOMING THE OBSTACLES TO FERTILITY DECLINE IN TODAY'S LESSER INDUSTRIALIZED COUNTRIES

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After millions of years of very slow growth, the world population grows explosively in the present century.

The first billion of world population took some 2 to 5 billion years to be attained by 1800 AD, while the fifth took 12 years (UN and Durand, 1977). Adding the next billion will take only about 10 years (probably by the end of this year) (UNFPA, 1992). Given the fixed amount of resources within this planet, the threats posed by the simplification of world ecosystems, and the amount of pollution produced each year, many scholars have joined their voices in curbing present fertility rates in "developing" countries and restricting, at the same time, the levels of affluence in "developed" countries, where one person consumes as several hundred persons in the developing countries. The present paper will focus on the obstacles to fertility decline in today's Less Industrialised Countries (LICs) and how they can be overcome for a significant decline in fertility rates over the next decade.

Looking upon ways to overcome the obstacles to fertility decline, one cannot avoid the need for a theoretical framework as a guide to his exposition. Unfortunately we do not yet possess "The Theory of Fertility" but rather a set of competing theoretical elaborations. Despite that Caldwell's theory of fertility, known as "wealth flows theory of fertility" can provide an adequate framework for the analysis of the present fertility patterns in the LICs. Caldwell's theory can reveal the obstacles that greatly impede any effort to bring down fertility rates. Of course, it can also provide the basis for policy intervention measures in those areas.

There are several unique features in Caldwell's theory. First, Caldwell's conceptualization of the process of fertility transition, as Cain (1982:159) argued has more to do with the transformation of the family rather than with the economic costs and benefits of children to

Abstract

The present paper examines the obstacles to fertility decline in today's lesser industrialized countries (LICs). It also addresses the question of how those obstacles can be overcome for a significant decline in fertility rates over the next decade. The literature reviewed provided evidence that a significant decline in fertility rates in the LICs would probably come not through family planning programs that concentrate on providing new and efficient contraceptives on a national basis but through changes in the structure and function of the family. Such changes are more likely to be brought about through mass education. Furthermore, it is unlikely that mass education can have substantial impacts on fertility over the next ten years. Instead, the impacts of mass education are most likely to be seen not on the parental generation but on their children who received better education.

Résumé

Ce travail examine les obstacles à la baisse de fertilité des pays moins industrialisés d'aujourd'hui. L'auteur discute aussi de la manière de surmonter ces obstacles pour une baisse significative des taux de fertilité dans les décennies futures. L'étude bibliographique a montré qu'une baisse significative des taux de fertilité des pays moins développés serait probablement possible à travers une modification de la structure et du rôle de la famille plutôt que par des programmes de planification basés sur la fourniture de nouveaux anticonceptionnels à toute la population nationale. Ces changements seraient réalisables à travers l'éducation de masse. Il est improbable que l'éducation de masse puisse avoir un impact remarquable sur la fertilité pour les dix années futures. Au contraire, probablement ses impacts ne seront pas évidents sur la génération des parents mais sur celle des enfants auxquels on aura assuré une meilleure instruction.

parents – a concept that is the basis for the economic theories of fertility. Another significant point to which Cain brought our attention is that Caldwell instead of depicting the family as an intermediate institution that is acted upon in the course of development; he treats the family as an institution whose transformation initiates rather than accompanies change in the reproductive behavior.

Second, one was not comfortable with the thesis that was a pivotal point in the theory of the demographic transition, namely the irrationality of fertility behavior in traditional societies. Instead, Caldwell pointed out that societies of every type and in all stages of development maintain a rational fertility behavior.

Third, his precondition for fertility decline lies in the social transformation of the family – the emotional and economic nucleation of the family – a process that according to Caldwell is only loosely tied to economic development. Thus, development contrary to the "attractive and confident sentiments expressed" at the World Population Conference in Bucharest in 1974 (Teit-

elbaum; 1975:174) cannot be considered anymore as "the best contraceptive".

Finally, his argument on the direction of intergenerational wealth flows (income and labor services) from children to parents in traditional societies and the reversal of those flows in modern societies is a very useful concept not only for understanding and explaining the transition in fertility rates from traditional to modern societies but it is also very useful for policy intervention purposes in the LICs.

The extension by the mid-1960's of knowledge, Attitude, and Practice (KAP) surveys in the LICs with the main intention to measure fertility orientations or goals has been proved unsuccessful. Several studies (Ryder, and Westoff, 1971; Westoff, Mishler, and Kelly, 1957; Blake, 1974) have revealed the independent meaningfulness of the questions about the ideal family size even within one of the most "developed" nations, the United States.

Caldwell (1976) has strongly questioned the logic behind those surveys that were used to prove that the larger gap between ideal and achieved size in

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the LICs as compared to “developed” countries was a strong evidence of irrational behavior. According to Caldwell (1976:331-333) the “ideal family” questions have failed to measure accurately fertility behavior even under conditions of adequate access to contraception for two reasons:

- a) they have a Western cultural perspective and in many surveys respondents could not fully understand the question,
- b) In the LICs, the woman is not free in defining her own family size since she is under pressure to meet the expectations of her husband and other relatives and to conform at the same time with peer group behavior.

Coombs and Freedman (1979) analyzing 1973 Taiwanese data found that preferences for smaller families were related to intrafamilial husband-wife relationships, extrafamilial activities of the wife, and familial and religious values relating the family to the larger institutional setting. These findings are supportive of Caldwell’s assertion that fertility decline is possible, only when “family morality” is replaced by “community morality”. Of course, Caldwell would not accept their assertion – based on the smaller significance of the intrafamilial role index to family size preferences as compared with those for extrafamilial activities or for familial-religious values – that “... changes in relations to the outside modernizing world rather than in internal familial role relationships ... are (more) important for preferences (for smaller families)”. Instead, Caldwell would argue that changes in roles within the family precede rather than follow changes in relations to the outside world. Of course, Caldwell did not miss to point out that it is possible during the transition period from “family” to “community” morality to have relations with the outside world without having any substantial change in the role relationships within the family, a situation that was probably present in the Taiwanese society in 1973.

Freedman (1963:224) in an earlier study where he presented his normative theory of fertility argued that the decline in fertility rates was accomplished with the expansion of the unit within which social and economic interchange occurs. He argued that the movement for small kinship-based institutions to larger social units is accomplished with an increase in the education and literacy of the population. Through education the individuals become involved with the ideas and institutions of a larger non-familial system and find rewards in social relationships for which large



numbers of children may be irrelevant. Thus, measures like those employed in Coombs and Freedman’s study plus similar others tracing changes in various aspects of “family” and “community” morality in the LICs (e.g. attainment of mass education, changes over time in the proportion of female students in the various levels of education e.t.c.) can trace better preferences for smaller families. As Caldwell (1976:358) pointed out we need studies dealing with “... the changing family and the measurement of movement toward the social, emotional, and economic nucleation of the conjugal family...”

Obstacles to fertility decline

Programs intended to control the population growth in the LICs were adopted mainly during the 60’s. Their effectiveness in lowering fertility rates was very limited contrary to the high expectations placed on those programs by International Organizations and Governmental Agencies. The inability of those efforts to bring down substantially fertility rates in LICs is associated

with three main obstacles: organizational, women’s status, and gender preferences. These obstacles will be analyzed in the remaining part of this paper in an effort to pinpoint that success in future programs will be closely related to the extent that new programs will incorporate policies capable to surmount those obstacles.

Organizational

While the population problem was an issue of debate among scientists since Malthus published his essay on population in 1798 only recently specific policy measures were implemented. Although those programs were welcomed by demographers dealing with population policy issues, recent evidence has revealed that those programs were ineffective in curbing fertility rates in the LICs.

Kingsley Davis (1967:27-36) in an extensive critique of the population programs implemented at that time, and to a certain degree still in use today, revealed why those programs aiming at controlling population growth were in-



effective. Davis pointed out that those programs under the name "family planning" were geared towards providing new and efficient contraceptives on a national basis. Davis discussed first the inherent weaknesses in those programs, like:

a) the lack of explicit discussion of their long-range goals,
 b) the great confusion over the terms used that lead to a miss-understanding of their specific goals and made impossible their evaluation. The terms "population control", "population planning" were used as synonyms for family planning programs while there was no deliberate effort in the latter to influence all population attributes (age-sex structure, geographical distribution, racial composition, and total size). They cannot be called fertility control programs either since they do not aim at affecting most at the determinants of reproductive performance.

Instead, family planning programs were geared towards achieving a reduction in the birth rate through making available to individual couples information and devices on contraceptives that will

enable them to have the number of children they want. As Davis (1967:29) pointed out, this logic behind the family planning programs does not necessarily imply that a national population control can be achieved. As he emphasized: "there is no reason to expect that the millions of decisions about family size made by couples in their own interest will automatically control population for the benefit of society". The most that those programs can do is to remove unwanted births, or as he very epigrammatic declared "wipe out the cream".

Eliminating unwanted births still leaves an extremely high rate of reproduction. Even aiming at eliminating unwanted births, family planning programs have not used all the methods available. Their emphasis was placed on contraceptives exclusively without making induced abortion legal, thus leaving couples without any back-up help in case of failure in contraception. The same is true with irreversible methods of contraception, like sterilization, although it became very popular in Puerto Rico and was the main factor for reducing

fertility rates in this country. This was of no surprise since politicians and decision-makers were not highly committed to the idea of population control and/or did not have the power needed to support such controversial and politically risky issues as abortion and sterilization. But most of all, family planning programs totally ignored the motivation behind fertility behavior and this was the main reason for their ineffectiveness. They did not answer the fundamental question: "Why couples desire so many children" and what can be done to influence this desire so as a smaller number of children would become more attractive?"

To summarise, six were according to Davis (1967) the reasons that made family planning programs ineffective in bringing down fertility rates in the LICs: a) lack of explicit discussion of their long-range goals (achievement of zero population growth or the growth rates of "developed" countries and which out of the many different growth rates), b) left population control to individual couples,
 c) did not provide couples with all the available means to control their fertility but only with the "respectable" ones,
 d) ignored the motivation behind fertility by not addressing why women desire so many children and how this desire can be influenced,
 e) designated population control as a medical or public health task like as family planning was a branch of medicine (and) overpopulation a disease, to be treated by a pill or a coil, and
 f) ignored that any deliberate policy to regulate births in accord with the demands of the collective welfare would require political power that is not likely to inhere in public health officials, nurses, midwives, and social workers.

Gender preferences

Malcolm and Selman (1979:98) pointed out that most couples have fairly clear ideas not only of how many children they want, but their gender composition. Williamson (1978:8) after an extensive review of the literature on gender preferences concluded that son preference is common in the populous developing countries and especially among fathers than among mothers. At the other end, preferences for girls can be found in very few societies. Malcolm and Selman (1979:98) mentioned such societies in parts of Sumatra, where land inheritance is through women or societies where a man has to pay a high bride price.

But how gender preferences can become an obstacle for lowering fertility

rates in countries where there is strong preference for boys or girls? As Williamson (1978:8) pointed out parents with large families do not have to worry about getting several of each gender. On the contrary, when they are faced with the problem of having a smaller family they begin to worry about whether they will have enough sons. Research on contraceptive practice in many developing countries where there is a strong preference for one gender over the other was found to be related to the existing gender composition of the family. Malcolm and Selman (1979:100) refer to the results of contraceptive practice in Taiwan, where in 1973 among couples with two children the proportion who wanted no more rose from 29 percent of those with two daughters, to 63 percent of those with two sons, with similar differences in the proportion currently using birth-control. Malcolm and Selman (1979:100) pointed out also that implications on fertility behavior can have not only the preference of one gender over the other but also the desire for equal numbers of each gender. As they pointed out (1979:100) in many African societies, there is a preference for equal numbers of sons and daughters, so that the former can marry with the bride price brought into the family by their sisters.

Strong preference of one gender over the other in the societies reflects the differences in roles played by men and women and the unequal status placed on those roles. As Williamson (1978:13) pointed, a society where sons are strongly preferred is one where women's status is low. In those societies males have more prestige, political and economic power than females (family and inheritance laws favour men and continuation of the family line is accomplished through males while daughters are scarcely considered as a part of the family). According to Williamson the widespread preference for sons in developing countries has several important implications:

- a) social and Economic: lower esteem for sonless couples, high marital insecurity for women,
- b) psychological: a girl might be raised as a boy in a sonless family with a strong preference for son, emotional disturbances to children that were of the wrong gender in their parent's eyes, emotional pressures on women for not producing children of the desired gender,
- c) demographic: higher fertility rates depending on the strength of the preferences; the amount by which the preferred ratio deviates from the natural

sex ratio; the total number of children desired; and the availability of effective birth control.

Status of women

Cain, Khanam, and Nahar (1979) analyzing the position of women in Bangladesh revealed the same picture as Caldwell did (1978:553-577) in his analysis of women's status in agrarian societies and its effects on fertility behavior. Cain's et al (1979) analysis in Bangladesh revealed the dominant role played by men under the support of kinship, political, and religious systems. Powerful norms that emerged from those systems have excluded women from any activities outside the home. Even with an increase in economic status, Cain et al found that the burden of work decreases for men, by about two hours, and increases for women by about half an hour, making thus even worse the position of women.

Cain et al (1979:433) made two very important points. First, under the pressure of poverty the normative obligation of men to provide women with food, clothing, and shelter has eroded and thus increased the risk of precipitous decline in women's status. Second, women without a male to depend on (widowed, divorced, or separated) and thus forced to sell their labor in the market, find a market severely restricted to them and with low wages. Thus, women aware of their insecurity and the high risks they face are highly motivated towards high fertility that can only insure them with several sons. Sons are the best risk insurance for women, given the high probability of widowhood and also provide them with higher status, in later years, when they become mother-in-law. In light of these evidences it is clearly understood why the lower status of women and the risks and insecurities associated with it provide women in the LICs a powerful incentive for higher fertility.

Overcoming the obstacles

The preceding analysis provided enough evidence to support the argument that lower fertility rates can be achieved in the LICs only if programs are geared towards affecting the motivation of having children. As Davis (1967:31) emphasized, an effective change in the motivation of having children would come through changes in the structure of the family, in the position of women, and in the mores associated with gender.

The most possible way that those social and structural changes can be brought

about in the LICs is through education. As Caldwell (1980) argued in his extensive paper on the role of education, in the West and in the contemporary developing countries the onset of the fertility decline coincided with the attainment of universal schooling.

The mechanism through which such change was possible was the effect of education on the family structure and function. The introduction of mass education supplanted "family morality" by a new form of morality, the "community morality". Family morality provided the framework for family production whereby production and consumption roles were differentiated by age and gender with the old and male members of the family controlling the power. Children were expected to work hard from an early age in tasks suitable to their gender, demand little, and respect the authority of the older members of the family. Actually, this picture matches in every detail that given by Cain, Khanam, and Nahar (1979) for Bangladesh. Thus, within this familial mode of production where the flow of wealth is upward – from children to parents and grandparents – those who controlled the power had an advantage from high fertility, whereas low fertility could be destructive.

As Caldwell (1980) and Graff (1979) pointed out, education is expected to have its greatest impact on fertility indirectly and not directly, by changing family relationships that would result in the reversal of the intergenerational wealth flows (income and labor services). Caldwell (1980) pointed out that the impact of education on fertility is possible through at least five mechanisms among which the last three have the most impact in changing family economics from a situation in which high fertility is worthwhile to one in which it is disastrous:

- a) through reduction of the child's potential to work inside and outside home,
- b) through increases in the cost of children far beyond fees, uniforms, and stationary demanded by the school,
- c) through the creation of dependency, both within the family and within the society,
- d) through the speeding up of cultural changes and the creation of a middle class culture since school teaches the values of the middle class,
- e) through the propagation of the values of the Western middle class and not of the local middle class.

Caldwell argued also that in the past the transition from "family morality" to "community morality" was not easily accomplished since "family morality"

proved remarkable resistance to change. This resistance stemmed not only from the powerful family members that drew their power from high fertility but also from the fact that family production, that was supported by family morality, continued to play an important role for some period of time as the economy was moving to a non-domestic form of production. In addition, in societies that have a family oriented religion that enshrines the gender and age segregation in family production (Hinduism) and addresses itself mainly to the patriarch (Islam) the pace of transition to new morality can be slowed down substantially. A similar view is espoused by Graff (1979) who argued that the effect of education on fertility cannot be examined in isolation from the particular social milieu. According to Graff education affects fertility through its function and mediation with other structural and attitudinal factors.

It is also interesting to examine, using Luker's model, how education might affect contraceptive risk-taking by women in the LICs (Luker, 1975). Of course, first of all, we have to assume that women in those countries know about contraceptives as a method to prevent a pregnancy and that contraceptives are available – an assumption that will be better met with increased education that will enable people to get involved with the ideas and institutions of the larger non-familial system. The cornerstone in Luker's theory – that makes it also applicable to women in the LICs – is that women do not take chances, as a result of ignorance or irrationality. Instead, women are weighing-up the costs (not so much the monetary costs as the social and cultural costs) of acquiring and maintaining contraceptive use, against the perceived likelihood of falling pregnant and the possible costs and benefits of pregnancy.

The effects of education on contraceptive risk-taking are expected to be greater during the fifth step of the process, known as the "cost-benefit set" where women assign utilities to both pregnancy and contraception. This set is "successfully" negotiated when women assign low utilities to contraception and high utilities to pregnancy. As Luker (1975:110) pointed out the social system in which a woman finds herself must present her with the elements to provide the basis for a cost-benefit analysis.

Education, as described earlier is going to change the values of all those elements used by women in their "tacit coordination" in such a way as to make

them assign low utilities to pregnancy and thus discourage them from taking further contraceptive risks. At the same time education would have as a result to normalize contraceptive behavior and thus remove the high emotional costs that resulted in persuading women to assign low utilities to contraception that were, previously, favorable of further contraceptive risk taking.

Conclusions

The preceding analysis revealed that a significant decline in fertility rates in the LICs would probably come not through family planning programs that concentrate on providing new and efficient contraceptives on a national basis but through changes in the structure and function of the family that can be brought about through mass education. As Davis (1967:35) emphasized "the schools define family roles and develop vocational and recreational interests; they could, if it were desired, redefine the gender roles, develop interests that transcend the home, and transmit realistic (as opposed to moralistic) knowledge concerning marriage, sexual behavior, and population problems. The drop in fertility rates in the West was not accomplished through a family planning program. Instead, there were efforts to prosecute the pioneers that were trying to disseminate information on birth-control practices (Francis Place in England, Robert Dale Owen in the USA).

Mass education can have demographic impacts only under two conditions emphasized by Caldwell (1980):

- a) if it is not confined mainly to males, as has been the case in countries of the Middle East,
- b) if it emphasizes the breadth of education rather than the depth (the proportion of the population receiving some schooling is more important than the average duration of schooling among those who have attended school).

This last argument might be taken as an answer to some studies – especially in the "developed" countries – who find the relationship between educational attainment and family size either vanishing or even reversing from the long standing view of a negative relationship.

If then mass education is going to bring about substantial declines in fertility rates in the LICs how likely is that this can happen within the next decade?. The 10-year period is substantially limited for any effective contribution of mass education on fertility decline to become evident. That period of time is

definitely needed to build the infrastructure required (school and teachers) and most of all, achievement of universal schooling takes several years after its compulsory enforcement by some legislative action. But most of all, the impacts of education on fertility are most likely to be seen not on the parental generation but on their children that attended school. In addition, the transition from "family morality" to "community morality" – a precondition necessary for fertility decline – cannot be accomplished easily since as Caldwell (1980:246) pointed out family morality can prove remarkably resistant to change. ●

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