Reverse Gear: Cairo’s Dependence on a Disappearing Paradigm

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In the 1960s and 1970s, attention was focused on rapid population growth and large scale family planning programs were launched in many developing countries. However, the paradigm for understanding fertility decline assumed that exogenous socioeconomic changes were necessary to reduce family size. By the mid-1990s, the standard model of the demographic transition had been all but discarded, partly there were numerous country experiences inconsistent with the model. The 1994 International Conference on Population and Development (ICPD) emphasized women’s broader needs, which were important but were promoted by reducing attention to population and the need for family planning. The timing of this shift was peculiar, because the Cairo proponents were depending on an already discredited model of reproductive behavior. The policy shift at Cairo undermined the political coalition that had supported international family planning since the 1960s. As a result of declining financial support, the health of women has deteriorated seriously in the past decade. Meantime, the countries that have been successful in lifting unprecedented numbers of people out of abject poverty were acting independently of the Cairo consensus.

Key words: ICPD; family planning; demographic transition; Iran; China; evolution

The global increase in population projected over the next 45 years (median estimate 2.4 billion) is approximately equal to the world population in 1950 (2.5 billion)[1]. Yet instead of raising global concern, economists are focusing on relatively small reductions in population predicted in some rich countries, and many demographers have switched to the study of ageing. By 2004 the rate of global population growth had fallen to 1.3 percent, but the
absolute annual increase (83.1 million more births than deaths) was greater than the increase in 1965 (68 million). Moreover, most of this growth is concentrated in the least developed countries, which are projected to grow from 0.76 billion in 2005 to between 1.41 and 1.96 billion in 2050. While some industrialized countries are occupied by the decline in birth rates the implications for aging and reduced work forces, little attention is paid to population growth in countries such as Pakistan, the Philippines and much of sub-Saharan Africa, where population pressures on vegetation are causing massive deforestation, or to the sustainability of the world megacities which continue to grow because of continued high birth rates in the surrounding rural areas.

Access to family planning reduces maternal and infant mortality. Children from smaller families are more likely to enter and to stay in school. Reductions in fertility accelerates economic development, as first described by Ansley Coale and Edgar Hoover[2] and reiterated later by Birdsall, et al[3]. Yet in spite of the opportunity slowing rapid population offers to improve so many aspects of human welfare, overall interest in population has waned since the early 1990s, and investments in family planning by foreign aid agencies are declining. Part of this lack of interest may be the perception that population is yesterday’s problem[4]. A recent survey has shown that the Cairo shift from family planning (FP) to reproductive health (RH) has made the topic of population growth more diffuse and difficult to relate to[5]. In this review, we will add one more reason: an inconsistency between demographic theory and practice, and more specifically, the basing of population policy at Cairo on a demographic paradigm that was in the process of being discarded by demographers.

Academic disciplines depend on different paradigms, and like-minded people are socialized to see the world through their own particular lens[6]. Almost half a century ago, two books launched a debate that is still in progress. In the two Cultures and the Scientific Revolution (1959) by C.P. Snow held that practitioners of the science and of the humanities know little of one another’s worlds and that communication between them was difficult[7]. Three years later, Thomas Kuhn, in The Structure of Scientific Revolutions[8] argued that scientific theories, such as the Ptolemaic picture of the solar system, Maxwell’s electromagnetic worldview or Lamarckian theories of evolution tend to become entrenched. Scientists are not analytical machines but human beings, and Kuhn pointed out that anomalies that an accepted theory cannot explain are often brushed aside or incorporated into accepted doctrines in implausible ways. Eventually, however, new world views emerge as they did with Copernicus, Einstein and Darwin.

The theoretical framework for understanding fertility decline that was accepted from the 1950s to the 1990s was not different. It has been adhered to tenaciously, even in the face of numerous exceptions to the basic model. At its core was demographic transition theory, describing the shift from high mortality and fertility to lower mortality while fertility stayed high, followed by the eventual decline in fertility. The widely accepted assumption was that the final fertility decline occurred when factors of modernization such as urbanization caused a reduction in parents natural desire for many children[9]. Over time, other aspects of mod-
ernization have variously been seen as the principal instigators of this change, including socio-economic change, education, and opportunities for women’s employment. At the core of this, the broad paradigm was the assumption that the demand for limiting family size was necessarily a change brought about by some societal changes exogenous to the personal experience of the parents making the decision. The justification for this paradigm was provided through innumerable comparisons of fertility decline and large data sets describing socio-economic and related factors, showing significant correlation, interpreted as causality. The comparisons, however, have always shown some countries where this theory did not work. This paradigm, like the geocentric model of the universe before Copernicus, has been sinking under the weight of an ever-increasing number of anomalies.

In the 1960s, demographers and economists\[10,11\] drew attention to the implications of rapid population growth leading to the support of numerous national family planning programs, and to a network of charitable Family Planning Associations in most of the world’s nations \[12\]. By the early 1990s, the world was almost exactly halfway through the demographic transition from large families characteristics of developing countries after World War II, and replacement levels of fertility - where each woman will on average see one daughter survive to reproduce herself, or a net reproductive rate of one. Interestingly, the decline of fertility occurred with the assistance of population programs that essentially ignored the prevailing demographic theory. Instead of striving to change exogenous societal factors to create demand for small families as classic demographic theory demanded, they sought to lower family size in order to improve socio-economic well-being. The family planning programs from 1960s to the 1980s focused on making family planning more easily accessible to couples, and in particular, to women.

The inconsistency between the policies driving the population programs and the demographers’ central assumptions were encapsulated in an exchange in the premier US journal Science between the distinguished U.S. demographer Kingsley Davis who called family planning programs “quackery and wishful thinking”\[13\] and Reimert Ravenholt (head of the USAID population program) who wrote, “It seems reasonable to believe that when women throughout the world need only reproduce when they choose, then the many intense family and social problems generated by unplanned, unwanted, and poorly cared for children will be greatly ameliorated and the now acute problems of too rapid population growth will be reduced to manageable proportions.”\[14\]. The large-scale family planning programs began in the 1960s (e.g. S. Korea, Taiwan), the 1970 s (e.g. Thailand) and the 1980s (e.g. Mexico) proved remarkably successful, demonstrating that family planning was neither quackery nor “wishful thinking” and in many countries did reduce the problems of rapid population growth to “manageable proportions”. 

As recently as 1993, the US National Academy of Sciences, the Royal Society, London and 57 other scientific academies, including the Chinese Academy of Sciences and the Indian National Science Academy, issued a Population Statement\[15\]. It concluded that if current patterns of population growth and human activity “remain unchanged, science and technol-
ogy may not be able to prevent irreversible degradation of the natural environment and continued poverty for much of the world.” The academies recognized that access to family planning is “essential in facilitating slowing of the population growth rate”, and emphasized, “The goal should be to reach zero population growth within the lifetime of our children.”

The shift at Cairo

Only a year later, a new policy was adopted at the 1994 International Conference on Population and Development (ICPD) in Cairo, based on a genuine desire to improve the health and status of women, in a framework of human rights and social justice. The paradigm is summarized by Gita Sen writing, “…the population issue must be defined as the right to determine and make reproductive decisions in the context of fulfilling secure livelihoods, basic needs (including reproductive health) and political participation. Although the reality is most countries may be far removed from such an idea, an affirmation of these basic values would provide the needed underpinning for much-needed changes in policy and action.”[16].

The coordination and funding of this policy shift was predominantly American, with participation and a number of leading voices from other countries, including Sen from India. In the process of developing this strategy, women’s advocates in their own words “redefined” population. Basic family planning programs were broadened to encompass more holistic goals related to woman’s welfare. The consensus at Cairo was achieved by this one dominant school of thought[17]. A strong preference for not drawing attention to population throughout the groups advocating this shift was endorsed through careful, subtle writing, making population growth and even the term “demographic” politically incorrect in many policy and academic circles. Assurance that fertility decline would occur only when broader reproductive health objectives were achieved was justified by circular citations referring eventually back to unproven assertions, while compelling evidence of fertility decline in countries such as Thailand or Bangladesh was ignored or even criticized as “target driven”. While sad and reprehensible instances of coercion had occurred, these were expanded to imply that any family planning program not simultaneously offering broader benefits to women was intrinsically coercive. The fact that every nonprofit Family Planning Association since their initiation in the 1950s was set up specifically to give poor women the same opportunities to manage their childbearing that richer women already had was lost in an increasingly polarized debate.

Unfortunately the broader reproductive health approach since Cairo has not proved a success. The WHO has increased the estimate of the total number of women dying from pregnancy, childbirth and unsafe abortion. Part of this sad rise is driven by a rapid increase in the number of women of fertile age, and part by lack of progress and political commitment to safe motherhood. In the poorest developing countries the health of women deteriorated more rapidly in the 1990s than at any time in the 20th century. Young women in particular are suffering a holocaust of ill health and premature death. The terrible growth in the number of HIV infections which took place in the 1990s was visible to any epidemiologist at the time of the ICPD, but the Cairo Plan of Action grossly underestimated the effort needed to confront the HIV/AIDS pandemic. The redefinition of population has not captured the attention of
hard-nosed politicians or bureaucrats trying to stretch limited budgets.

Much of the time available to the ICPD was spent on debating code words, which might for example imply abortion, and very little time was devoted to analyzing the budgets accompanying the Plan of Action. These budgets had been drawn up hastily towards the end of the discussions running up to the Cairo conference, and they probably over-estimated the cost of providing a couple-year of protection when family planning is provided in cost-effective ways such as social marketing[18], but they seriously underestimated the cost of improving women’s reproductive health, especially in the area of HIV/AIDS.

The shift from the population paradigm to the reproductive health model was remarkably rapid. One year before Cairo, in the words of Sir Michael Atiyah, the President of the London Royal Society, the Scientific Academies had sought “to bring population problems back into the limelight by showing the importance attached to it by the scientific community”[15]. Following Cairo, instead of hitting the limelight, population was pushed into the darkness offstage. The reproductive health paradigm was associated with a loss of focus on the growth of human population. Perhaps even more important, the reproductive health model emphasized “upstream” factors such as women’s autonomy rather than the provision of basic family planning services. To add to the confusion, the term “population” continues to be used as a catchall for any money spent in what might be called reproductive health, ranging from buying oral contraceptives to running a VCT clinics for HIV/AIDS. The majority of “population” money now goes to AIDS, while in 2003 family planning only received 13 percent of the target set by the ICPD for 2005[19](Figure 1). While large budgets are justified in the area of HIV/AIDS, it is confusing to categorize AIDS prevention and treatment as “population”. This practice has led to ingenious attempts to funnel back some of the AIDS money into family planning, by such ploys as conducting AIDS education in family planning clinics—although those at highest risk of HIV infection rarely go to a family planning clinic.

The disappearing paradigm

The ICPD process caused a shift toward more combined and more holistic services for women, with the assumption that while women’s broader needs were being addressed, family size would fall. This emphasis on shifting women’s thinking about their fertility through exogenous benefits was consistent with the standard demographic paradigm explaining fertility transition. The timing of this shift was peculiar, because the Cairo proponents were stepping backward, they were in reverse gear. By the mid-1990s the standard paradigm had been all but discarded, because for each one of the variations of the theory there have been country experiences inconsistent with the expected behavior. The European Fertility Survey revealed instances of extremely small family size in settings without the expected economic development or levels of education. Diffusion theory was offered as an alternate explanation, and it fit a number of world regions but did not apply well to the African countries[20]. The countries that had achieved low fertility shared only one factor in common: access to fertility regulation methods, including widespread availability of safe abortion.
The return to access

The current situation is highly unsatisfactory. The ICPD, like the call for universal primary health care at Alma Ata in 1978, generated excitement among sincere people who strived to improve the health and welfare of the poor, but the concept of reproductive health failed to capture broad political or social support in the west. By asking for too much it ended up getting too little. Cairo fell victim to its own idealism; in its genuine - and much needed desire - to help women who lived with appalling injustices, a failed paradigm was revived.

But it is never wise to let emotion trump the evidence base. We need either to develop a new paradigm, or to adjust the existing theory to place more weight on the influence of “supply” of options for helping people manage their own family size. The ICPD Programme of Action actually called for reduction of the many kinds of legal, medical, clinical and regulatory barriers to family planning to enable but in reality few such changes have been made in most developing countries where family planning options still often remain difficult for low income women to obtain.

The Demographic and Health Surveys from around the world demonstrate that in nearly every society women having more children than they want. When desired family size surveyed in high fertility societies few women say they want two children, but once the means to control fertility becomes available, then desired family size becomes a moving target, on average, always falling below achieved family size.

Since Cairo, additional evidence of the power of offering contraceptive choices has come from an unexpected source, the Islamic Republic of Iran, which had actively opposed many aspects of the reproductive health paradigm in Cairo. In 1987, Iran’s economists saw that the country’s population growth was steeper than its economic growth, which meant that they were on a path toward greater poverty. The Holy Koran endorses family planning. With the permission of religious leaders, the government set up Pill and condom factories, male as well as female sterilization was made available, and all couples must attend family
planning instruction before marriage. There are still many conservative aspects of Iranian
life. For example, a woman cannot undergo a surgical operation without the written consent
of a male relative. As family planning became more available, the gap in TFR between rural
and urban areas closed. There are now more women in Iranian universities than men. As the
TFR fell so did the maternal and infant mortality. It was access to family planning that drove
the falling birth rate, and this in turn helped the improvements in women’s education. The
percentage of couples using contraception in Iran is now the same as in the USA. While Iran
is profoundly different from China in culture, religion and political structure, family size has
fallen as rapidly as it did in China.

When Snow and Kuhn were writing about science and the humanities in the West,
China was in the midst of its own Cultural Revolution. However, when China emerged from
this violent period, then, like the other nations of east Asia, it made a series of pragmatic,
evidence-based decisions on population and family planning that end up offering women a
variety of contraceptive choices backed up by safe abortion (The vacuum aspiration tech-
nique of safe early abortion used all over the world now was invented by Wu and Wu in
China in 1958[21]). Without these decisions, East Asia would not have become the economic
powerhouse it is today. Numerous criticisms have been made of the Chinese family planning
policies - but few of the critics have offered any alternative to a policy to solve the demo-
ographic problems facing the country when Mao Zedung died in 1976, with rapid population
growth, ground water dropping, and arable land in diminishing supply. While most of the
decline in the Chinese birth rate occurred during a time when policies inimical to the ICPD
were in place, the economic rewards that the Chinese people have reaped from these poli-
cies have lifted the largest number of human beings out of abject poverty in the whole of
human history. It is also true that no country wishes to repeat the harsh aspects of the
Chinese experience, and it is important that attention be refocused on the need to make
family planning options realistically available in those countries with a high fertility and large
unmet need for family planning.

Conclusions

There is a synergy between individual human decision-making and the needs of a finite
world struggling to move towards the imperative of a biologically sustainable economy. This
synergy is one of the most positive discoveries of the last century. But instead of building on
this happy fact, the most assertive voices at Cairo insisted on portraying any demographic
message in the most pejorative terms possible. By doing so they helped undermine the politi-
cal coalition that had supported international family planning since the 1960s.

Unfortunately, the reproductive health paradigm has not only pushed the population
paradigm off the table, it has left an academic vacuum. Many scientists interested in global
warming, diversity, poverty alleviation, food security or conflict do not yet understand that
there is a large and rising unmet demand for voluntary family planning, and that therefore the population growth factor behind these important global challenges is itself amenable to change. The remaining high fertility countries of the world (for example in sub-Saharan Africa) will follow the demographic course that much of Asia has taken only if the barriers to fertility regulation methods are removed and the large unmet demand is satisfied.

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