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Abortion, Women's Health and Fertility

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Introduction

Policy & Research Papers are primarily directed to policy makers at all levels. They should also be of interest to the educated public and to the academic community. The policy monographs give, in simple non-technical language, a synthetic overview of the main policy implications identified by the Committees and Working Groups. The contents are therefore strictly based on the papers and discussions of these seminars. For ease of reading no specific references to individual papers is given in the text. However the programme of the seminar and a listing of all the papers presented is given at the end of the monograph.

This policy monograph is based on the seminar on 'Socio-Cultural and Political Aspects of Abortion in a Changing World' organized by the IUSSP Scientific Committee on Anthropological Demography and the Centre for Development Studies, Trivandrum, held in Trivandrum, India, from 25-28 March 1995.

Background

Today, worldwide, women may wish to interrupt a larger percentage of pregnancies than ever before. Throughout this century and especially since mid-century, women in nearly every country have been wishing to bear fewer and fewer children. As a result of these declining fertility desires and changing mores, the proportion of marital and extra-marital sexual activity in which children are unwanted or unacceptable has increased. Theoretically, modern contraceptive techniques, such as intrauterine devices, surgical sterilization and pharmaceuticals can prevent pregnancy in most instances. In actual practice, all except sterilization very commonly allow pregnancies to happen. Moreover, partly because modern techniques are unavailable in many areas, a majority or at least a sizable minority of the world's contracepting women rely on traditional methods, such as periodic abstention from intercourse, coitus interruptus and herbs. Based on observations in many populations, these methods cannot limit pregnancies to anywhere near the 2 or 3 that most women want. Abortion is women's only option to close the gap between the number of their pregnancies and the number of children they consent to bear.

The World Health Organization estimated that worldwide, about 50 million abortions were induced annually in the years circa 1990. Combining this estimate with others, WHO concluded that each year in this period, approximately 3.4% of women in the childbearing ages of 15 to 49 years had an abortion (the abortion rate), and 25% of all pregnancies ended in abortion (the abortion ratio).These estimates imply that at least a substantial minority of the world's women have the experience of undergoing or self-administering a procedure to induce abortion sometime during the span of their childbearing years. Many are at high risk for procedure-related morbidity and mortality, with repercussions, too, for their families and wider social networks. So many abortions and complications are deeply troubling, emotionally or morally, to many people. They impose considerable strains on health budgets, personnel and resources, which, in some areas, might seriously compromise the ability to pursue other health objectives.

These global rates do not, of course, apply equally to all women everywhere. A Population Council compilation of data showed that the abortion rate was twice as high among more developed compared to less developed countries: 6.0% versus 2.8%. Abortion rates (per 1,000 women aged 15 to 44 years) ranged from a low of 6 in the Netherlands, to 13 in Tunisia, 100 in Viet Nam, and - highest of all - 183 in Romania. Corresponding abortion ratios were 9.6% in the Netherlands, 9.8% in Tunisia, 38.4% in Viet Nam, and 74.4% in Romania.

BOX 3: LIMITATIONS OF EXISTING DATA ON ABORTION

The circa 1990 abortion rate and ratio calculated by the World Health Organization provide the best available estimates of the global incidence of induced abortion. They indicate that the practice is so pervasive that the potential consequences for fertility and women's health cannot be ignored anywhere in the world.While the WHO statistics are firm enough to establish that abortion warrants concerted medical and political attention,

they nevertheless carry a considerable margin for error. In the years circa 1990, only 23 countries - about 10% of the world's complement of nations, accounting for 15.5 million of the total 50 million estimated abortions - were judged to have reasonably complete statistics. All were more developed countries except for China, Cuba, Singapore, Tunisia, and Viet Nam. Each country had sufficient medical organization to generate robust abortion records, either as part of routine recording of all procedures in a national health system, or through registration systems and provider surveys in a private system. In addition, these countries offered abortion with more or less minimal legal restriction. In general, neither women nor abortion providers needed to conceal procedures for fear of potential legal repercussions.In the rest of the world, the reported number of abortion procedures was thought to represent less - sometimes much less - than 80% of the true incidence. Demographers have used various assumptions to extrapolate abortion rates and ratios from such faulty data.In most Latin American countries, for example, abortion is illegal. Most women who wish to terminate a pregnancy attempt to abort themselves or else seek out a practitioner who will perform a procedure in secret. For the most part, the mainstream health system learns of these events only when women experience post-procedural complications that compel them to seek treatment at a hospital. To estimate abortion rates in these countries, demographers start with the number of such hospital admissions. They then assume, based on other observations, that, depending on the country, roughly a third to a fifth of all induced abortions result in complications leading to hospitalization. The total number of abortions, then, is 3 to 7 times the number of women hospitalized with complications of abortion.Modelling methods that are even more indirect were used to determine abortion frequency in many other countries. The Bongaarts method, for example, first makes a hypothesis about what the 'natural' total fertility rate would be if all women were married throughout their reproductive lives and none contracepted. This 'natural' rate is usually thought to be around 10 children per lifetime. The model then explains the difference between the 'natural' fertility rate and the actual observed rate by the effects of 'proximate fertility determinants' - factors that restrict births, such as the portion of reproductive life that women spend unmarried, the use of contraception, levels of infertility, and abortion. In practice, the data for all other proximate determinants is always more complete and trustworthy than that for abortion. As a result, the abortion rate is estimated to be the residual difference between the 'natural' and actual birth rates once all the other proximate determinants have been estimated and subtracted from the ideal rate. It is intuitively obvious that such an estimate is inexact.Demographers report that women are more willing to speak about their abortion experiences than has been generally supposed. Some even believe that it may be possible to employ large-scale instruments such as the Demographic and Health Surveys to obtain reliable information about abortion practices, providing interviewers are properly trained. Meanwhile, existing data are useful for generating hypotheses about abortion practices and effects, although not robust enough to make wide-ranging comparisons between different countries or theories.

The significance of the enormous and often hidden activity of abortion was the subject of a seminar of the Anthropological Demography Committee of the International Union for the Scientific Study of Population and the Kerala Center for Population and Development. Meeting in Trivandrum, India, demographers, anthropologists, and sociologists assessed the quality of data relating to abortion (see 'The Limitations of Existing Data on Abortion'), explored the widely varying motives and pressures to abort, examined abortion's links with women's health and fertility, and discussed policy options.

Abortion and Women's Health

Women have terminated unwanted pregnancies everywhere in all historical periods. Today, skilled practitioners using modern equipment in hygienic facilities can perform vacuum aspiration and dilatation and curettage, and administer abortifacients during the first two trimesters of pregnancy with slight risk of complications. Swedish women in one recent year had a total abortion rate of 2 per lifetime, with not a single death. In the United States a few years ago, the maternal mortality rate from all causes was 1 in 10,000, only 1% of which was related to abortion.

In many less developed regions, however, and in some subpopulations in more developed regions, high proportions of women still self-administer or undergo traditional or faulty modern procedures. The adverse consequences of poor technique or the use of contaminated or unsuitable instruments include damage to the reproductive organs, haemorrhage, infection, sepsis, septic shock and death. Long-term sequelae include chronic pelvic pain, incontinence, obstetric problems and infertility. Latin America (excepting Cuba and Puerto Rico) stands out in this respect. In 1990, the average Brazilian woman had a 25% chance of sooner or later having recourse to a hospital due to complications of an induced abortion. The odds were similar in Chile, Colombia, Dominican Republic, Peru and Mexico. As with the less severe complications, abortion-related mortality is much more common in developing countries. In Mexico, abortions are thought to increase the baseline maternal mortality rate by at least 25% to 50%. In the Matlab study area in Bangladesh in the years 1982-1995 the figure was about 25%; in Russia in 1980 it was 35%. According to one estimate, 15,000 to 20,000 Indian women die from abortion-related causes each year.

The most important single determinant of abortion's impact on women's health appears to be its legal status. Where abortion is legal, physicians can learn procedures in schools, and equipment and supplies can be manufactured and obtained openly. Providers do not need to conceal their activities; when they encounter complications they can refer their patients to emergency facilities promptly, along with the complete and accurate case histories that are needed for optimal management. Women can find abortion services more easily, since they can be freely advertised, and so are better able to obtain a procedure in the earlier, safer stages of pregnancy. Recent events in Romania dramatically illustrated the link between legality and safety. After a longstanding ban on abortion was lifted in 1990, abortion-related mortality fell by nearly two thirds, from 170 to 60 per 100,000 live births, despite a doubling of the abortion rate.

The World Health Organization uses legality as its sole criterion for classifying abortion as safe or unsafe, and has estimated on this basis that 40% of 50 million abortions performed annually circa-1990 are unsafe. While this is a serviceable generalization, some illegal abortions are actually relatively safe. In Sri Lanka, abortion is banned except when a pregnancy is a mortal danger to the mother. Yet practitioners and clinics abound that give quick pregnancy tests and perform vacuum aspirations. Police ignore these activities unless a woman dies. The growth of this illegal but tolerated abortion network coincided with a decline in the rate of hospital admissions due to complications of abortion, from 870 to 845 per 100,000 procedures, between 1980 and 1990. In Latin America, inexpensive and safe, albeit illicit, abortions are available in many major urban centers. Some experts believe that these now comprise a sufficiently large share of all abortions that they are starting to have an ameliorating impact on regional rates of complications.

Nor does the mere fact that abortion is legal guarantee that every woman can obtain a procedure of good quality. In India, for example, the number of trained practitioners and adequately equipped facilities in the public health system is able to accommodate only a small fraction of the demand for services. So sparse are abortion services and outreach in the state of Bihar, that a significant proportion of women there told researchers they thought that abortion was still against the law - 25 years after its legalization in the 1972 Medical Termination of Pregnancy Act. With respect to sub-Saharan Africa, some experts contend that even where abortion is legal, the prevailing poverty precludes training and other activities that underwrite safety.

Legalization does not necessarily change entrenched social attitudes toward abortion, or persuade husbands and family members to accept a woman's decision to abort. In Europe, Asia and America, women commonly report encountering opprobrium and poor treatment from health workers who disapprove of their desire for an abortion. In Russia, state health workers, apparently taking it upon themselves to administer punishment, routinely perform abortions without anaesthesia. In India, health workers commonly pressure women to undergo sterilization following an abortion. Rather than risk or submit to such experiences, many women try to abort themselves or turn to private practitioners who offer discretion, but whose methods and skills may range from excellent to terrible. A recent study in India concluded that in 1991-1992, 10 of every 11 abortions in India were administered outside of the public health system.

To summarize, due to disapproving social attitudes and service shortfalls, many women who are eligible for legal abortion nevertheless confront the same difficulties as do women where abortion is illegal. Money and social connections become prime determinants of their ability to obtain an effective and safe procedure. These factors partially underlie Tanzania's experience, in which, although married women have the highest abortion rates, schoolgirls have much higher rates of complications.

A study of market vendors of abortifacients in Mexico City illustrates the interplay of legality, social attitudes, and money. As mentioned before, abortion is outlawed there. A woman with the most severe financial constraints might consult a pharmacist first, since drugs, being subsidized by the state, are cheaper than herbs. Pharmacists, however, tend to be ill-informed about the safety and efficacy of the compounds they provide - partly because of a scarcity of information related to illegality, and partly because personal opposition to abortion disinclines them to seek out what information is available. The compounds the pharmacists in the survey provided most frequently were metrigen, benzoginestryl and quinine. In fact, neither metrigen nor benzoginestryl can induce abortion. Quinine can, but would need to be taken in very high doses that risk serious side effects including death. Prostigmine and syntocinon, mentioned by some pharmacists, may be effective. A woman who felt able to pay a little more might seek out a herbalist. The most frequently recommended herbal teas, made of rue or zaopatle, appear to be somewhat effective, with unknown side effects, but relatively safe. A surgical abortion costs several times as much as a drug or tea.

In settings where affordable high-quality abortion services are unavailable, abortion is best viewed as a process rather than an event. Women commonly try several means to end their unwanted pregnancies, first attempting to abort themselves, then using methods supplied by various practitioners until something finally works or they give up. Each successive attempt adds to the costs and dangers, and each failure means that the next attempt will occur later in the pregnancy. Even a woman who has the ability to find and pay a trained practitioner may require many weeks to do so, particularly since illegality hinders her from acting openly. As a result, she may pass beyond her first trimester, the stage when abortion is safest, before she is able to arrange a procedure.

Abortion and Fertility

Demographers agree that abortion is playing an important role in the ongoing decline in global fertility, but the precise impact is extremely difficult to estimate. Overall, populations in developing countries where the average woman has 3 to 5 children in her lifetime may well be most likely to combine a strong desire to curb births with limited access to effective contraceptive technologies. Data from Kenya, Bangladesh, Brazil and Sweden seem to bear this out. Women in these countries were recently estimated to be giving birth to children at a pace that would result in their experiencing an average of 6.6, 4.3, 2.9 and 2.1 births, respectively, over the full course of their reproductive spans. Their corresponding abortion rates were 0.9, 1.2, 3 and 0.6 per lifetime. However, the incidence of abortion also depends on the level of sexual activity in the reproductive ages (largely determined by marriage rates), access to abortion services, and the degree of moral and emotional acceptance of contraception and abortion. All of these vary widely from population to population, with the result that relationships like that linking mid-range fertility and high abortion incidence do not hold consistently worldwide.

Ironically, the more women rely on abortion, the less efficient abortion becomes as a means of fertility control. More procedures are required to reduce births by an equal number when the rate of contraception is lower. Demographers estimate that each abortion prevents an average of 0.4 births in noncontracepting populations, up to 0.8 births where effective contraception is widespread. The discrepancy has to do with the timing of the next birth after the abortion.

Policy Implications

Abortion is an appropriate subject for policy making primarily because of its impact on women's health. The Programme of Action adopted by the 1994 International Conference on Population and Development contains three statements to this effect: Abortion is a major public health concern; Where abortion is legal, safe procedures should be available to everyone; Whether or not abortion is legal, high-quality services should be in place for women suffering from complications of these procedures.

The two most straightforward general strategies for reducing the toll of abortion on women's health are reducing demand and improving the safety of procedures. The two should be pursued together for an optimal health benefit.

Reducing Demand for Abortion

Promoting women's ability to avoid unwanted pregnancy and promoting women's ability to avoid unwanted fertility obviously overlap to a large degree. Clearly, in each case, success hinges on women's being able to regulate their own sexual activity, exercise autonomy with respect to contraception, and employ effective contraceptive methods.

In most places, wider distribution of family planning services is probably the most promising single strategy for rapid rollbacks in unwanted pregnancy, fertility and abortion. As previously mentioned, abortion rates seem to peak where the desire to lower fertility is intense and family planning services are sparse. The limited reach of family planning in Turkey is the main reason why rural women who already have several children and wish to forestall further expansion of their families dominate the clientele for abortion services. Similarly in India, the relative scarcity of family planning services in the countryside is a primary reason why rural women undergo a large majority of all abortions. The contraceptive options offered by family planning services also need to be made more suitable. Among Turkish women who can obtain modern contraceptives, a high level of failure - 25% with the pill - is another important condition for high abortion rates. When a group of Kenyan women were surveyed as they visited an illegal abortionist, most said they had previously used some form of contraception, and of these most said they had stopped because of side effects. Detailed discussion of the challenges of providing effective family planning services falls without the purview of this essay, but can be found in many other publications.

To obtain the greatest reduction in abortion rates, the extension of family planning services should focus on the groups at highest risk for abortion. Because abortion is a discrete decision that arises after an unwanted pregnancy occurs, these groups may have distinctive characteristics compared to those at highest risk for unwanted pregnancy.

Women reject pregnancies for two general reasons: the timing is inconvenient or they already have as many children as they want. Some other rationales are also very important, such as rape, threats to the mental or physical health of the mother, and likelihood of genetic defects or disease. However they pertain in only a relatively small portion of all abortions.

What makes a pregnancy mistimed is a woman's particular situation together with the codes of her group. In most societies, researchers have found certain social and age groups are at highest risk. North Americans and Western Europeans who undergo abortions tend to be primarily adolescent, unmarried and married childless women who wish to delay the start of childbearing. In Eastern Europe and developing countries, most women who terminate pregnancies are older, have already produced children, and plan to have at least one more - but not just yet.

More useful than these broad patterns is information about specific population subgroups that have outstanding abortion rates, and so deserve concentrated attention. In the United States, for example, the abortion rate is 21 per 100,000 among white women but 56 per 100,000 non-white women. In the Netherlands, immigrants from former colonies have much higher abortion rates than native Dutch women. In some cases, the factors whose confluence elevates women's risk of unwanted pregnancy appear to derive from social phenomena that are perhaps too fundamental for easy policy intervention. In Bihar, India, for example, they relate to the age-old custom of arranged marriage together with parental reticence about sexuality. Girls in their early teens who have recently consummated a marriage - despite being previously completely untutored in sexual and reproductive matters - are among the most common seekers of abortion. Their objective is to put off childbearing pending greater physical and emotional readiness. In other cases, some behaviours that ultimately result in abortion appear less deeply embedded. Indian scholars have noted, for example, that Keralan women tend to undergo sterilization when they have achieved their desired family size, but not until after they have conceived and aborted one last pregnancy.

Women in a few populations rely on surgical termination of pregnancy in preference to contraception as their primary means of birth control. In Japan, the consequences for women's health are probably not important, since little morbidity or mortality attaches to abortion. In Eastern Europe, however, they may be significant. In both cases, the medical establishment has played a leading role in limiting use of the pill and other forms of contraception. In addition, the former Communist governments of Eastern Europe denounced these methods as symbols of capitalist decadence, and some of this taint may still linger. In any case, modern birth control technologies are not yet widely used in these countries.

A unique scenario in which women begin pregnancies willingly only to terminate a large percentage of them occurs in parts of India, Singapore and some other Asian settings. Many women desire to bear males but are unwilling to carry females to term. Once pregnant, such a woman will employ ultrasound or another technology to ascertain whether she is carrying a male or female; if the latter, she will usually abort. One study has estimated that with plausible levels of access and willingness to utilize these services, women in Maharashtra would have incurred nearly 250,000 excess maternal deaths between the years 1981 and 1991. Indian law prohibits this practice, but has proven ineffective. More promising are policy initiatives aimed at changing the social conditions that support son preference.

Improving the Safety of Abortion Procedures

Legality is an essential prerequisite for the ability to provide reliably safe abortion services. Although the world has witnessed a wave of liberalization of abortion laws since the 1950s, a significant number of countries still have absolute bans on their books. The largest number of countries sanction abortion only when the pregnancy threatens the life of the mother. A somewhat lower number permit termination of pregnancies resulting from rape. The roster of legal justifications for abortion in a still smaller circle of countries includes a number of progressively more common conditions - such as the general physical or mental health of the mother and possible genetic disease of the infant. Countries that allow abortion on request - at least for women who have reached the age of legal independence - include the United States, most European countries, China and India.

An observation bearing on the prospects for reform of abortion laws is that existing restrictions often neither reflect current public opinion nor even represent contemporary public policy decisions. In developing countries, many restrictive abortion laws were instituted in previous, colonial phases of national histories. Some escape serious challenge in part because the population has become so accustomed to them over the centuries that hardly anyone thinks to challenge them. For this reason in Mexico, a simple public opinion survey proved to be a powerful tool for an organization that wished to instigate change-oriented debate. The results showed that - counter to some assertions and widespread assumption - an overwhelming majority of the respondents opposed the existing restrictions on abortion.

Worldwide, institutionalized religions are powerful forces in support of restrictive abortion laws. Of significance for potential change, however, the doctrines of the major religions generally speak of abortion with nuanced rather than categorical condemnation. Catholic theologians, for example, have always regarded abortion as a crime against the sanctity of life. From the founding of the church to the beginning of this century, however, most would impose lighter penance if the foetus was expelled before 'ensoulment' or 'formation', the stage of development when it assumes a relatively human appearance. Pope John Paul II asserted a more blanket opposition to

abortion in his publication of the 1995 Encyclical 'Evangelium Vitae'. Nevertheless, groups such as Catholics for the Right to Decide, along with its sister organizations in many countries, continue to call attention to dissenting doctrinal interpretations by a number of Catholic theologians.

The traditional Catholic doctrine of 'ensoulment' has a counterpart in the Muslim concept of 'quickening'. For theologians belonging to some of the most numerous Islamic groups, abortion is acceptable before this event occurs at about the 40th day of pregnancy. This dispensation has permitted the establishment of menstrual regulation services in Bangladesh, expressly for the purpose of bringing down the previously very high rates of abortion-related morbidity and mortality in that country.

In the face of opposition by religious institutions and conservative social groups, politicians commonly determine that the investment of political capital needed to push for reform is often disproportionate to the anticipated return. The history of efforts in the Brazilian legislature is illustrative. Several attempts over the course of three decades resulted in only slight gains. Significant progress finally occurred only when a legislator's impending retirement enabled him to push the cause hard by freeing him from worries about subsequent electoral reprisals. Clearly, such impasses in matters pertaining to women's health would not occur without political subordination of women.

Women's health advocates have recommended that where political obstacles prevent the abolition of abortion prohibitions, reformers work to lessen the associated penalties. Reducing the fear of being caught can be expected to entail, although in lesser measure, the same benefits full legitimacy would bring--that is, more providers, more open and accessible services, and freer dissemination of skills and experience. Where circumstances are favourable, de facto acceptance of abortion, as seen in Sri Lanka, may be a reasonable objective.

Menstrual regulation techniques have the potential to greatly increase the safety of pregnancy termination where abortion is legal and where it is not. The fact that menstrual regulation has other purposes besides abortion - in Guinea, for example, it is used to 'cleanse the womb' - and that it is often employed in the absence of a pregnancy determination, can render anti-abortion laws inapplicable. Cytotec (misoprostal) has a good (though not perfect) safety record. A great many other substances used in this way have not been evaluated scientifically.

An activity that has potential for large positive consequences for women's health is working with traditional abortion providers to identify and emphasize those methods in their repertoires that are safe and efficacious. As noted before, many women with economic and confidentiality concerns are likely to try a self-administered or home-based intervention before turning to a legitimate or illegitimate clinic. Researchers in Mexico and Ghana recently concluded that some pharmaceuticals and herbs used by women - either ingested or inserted into the uterus on a stick or as a pessary - probably do induce abortion, while others are useless. The potential for injury and illness apparently varies greatly from substance to substance. The same is undoubtedly true of folk abortifacients in many other places.

Abortion Policy and Fertility

In recent years, some governments have implemented abortion policies aimed at furthering national population objectives. Nicolae Ceausescu, Romania's dictator from 1965 to 1988, outlawed both modern contraception and abortion because he wanted to generate a massive labour force with which to industrialize the country. Women in the reproductive ages were required, under penalty of law, to submit to annual gynaecological examinations. A woman who was found to be pregnant was scheduled for a series of mandatory checkups throughout the course of the pregnancy. Should she present to one of the checkups no longer pregnant, the health worker would demand to know why.

After Ceausescu's overthrow, a new Romanian government adopted a laissez-faire attitude toward fertility and legalized abortion in late 1989. A national household survey conducted in 1993 provided data with which to compare abortion and fertility rates under the two regimes. Women's responses indicated that - despite the risks of punishment and complications - their total abortion rate from mid-1987 to mid-1990 was 1.7 per lifetime. In other words, if women continued to have abortions throughout their reproductive lives at the same rate they were having them in those years, they would have ended up with a total of 1.7 abortions apiece. In the subsequent period, from mid-1990 to mid-1993, the total abortion rate doubled, to 3.4 per lifetime. At the same time, the total fertility rate (a measure of fertility analogous to the total abortion rate) dropped by a third, from 2.3 to 1.5 per lifetime - a level that, if sustained, will result in a shrinking population. The survey also showed very little change in the use of contraceptive techniques of proven efficacy, suggesting that the increased frequency of abortion must account for almost all of the sharp decline in births. These data confirm that Ceausescu's anti-contraceptive and anti-abortion measures served his aims of elevating births and suppressing abortions.

China and Viet Nam, in contrast, use abortion as a tool to support antinatalist policies. In these countries, a woman who has given birth to the allowable number of children (usually 1-2, but more in some social groups and geographic areas) is strongly motivated to use contraception thereafter, and to abort if contraception fails. Should she bear another child, the consequences may include fines, loss of privileges and longer waits for desirable housing. In China, an 'excess' child can also bring penalties against the commune into which it is born. This sometimes drives a commune to ostracize a woman who resists terminating a pregnancy, or even physically force her to abort. In China in recent years, an estimated 10 million annual abortions, yielding an abortion ratio of 30.4 per 100 pregnancies, clearly helped hold the total fertility rate at 2.0.

The two-child policy is less consistently enforced in Viet Nam. This variation provides an opportunity to form a general impression of the impact of punishing women who have third children on abortion rates and fertility in a Southeast Asian context. A recent study compared two communes in Thai Binh province. The two were geographically adjacent and similar in most socio-economic characteristics that might have a bearing on fertility and abortion decisions. Both participated in the national programme to limit births to 2 in each family. However, only one wrote regulations stipulating stringent punitive measures against families producing a third child. These included an obligatory payment of rice in an amount equal to some 3-4 months' production, a contribution of work or rice to the public utility fund, demotion on the waiting list for land or housing allotments, and other reductions in social benefits. This commune experienced an abortion ratio of 50%, compared to 25% for its neighbour, and a total fertility rate of 1.5 compared to 2.3. Bearing in mind that many collective and individual influences affect abortion, these findings strongly suggest that imposing penalties for higher-order children can sharply increase the abortion rate and reduce fertility.

Ceausescu's Romania, China, and Viet Nam are exceptional cases. Most countries do not link abortion policies specifically to population goals. Indeed, although policy makers in most less-developed countries would prefer to slow population growth, most restrict legal abortion except in specific circumstances, such as danger to the mother's life or health. Nevertheless, the practice appears to be common enough to lower fertility in many of these countries.

For example, abortions are illegal in Sri Lanka unless a woman's pregnancy endangers her life. The possible penalties for providing an abortion are serious, including imprisonment for up to 7 years. Yet a recent study estimated that between 125,000 and 175,000 procedures were performed yearly between 1990 and 1993. Moreover, the impact on fertility was dramatic. In 1990, demographers estimated that Sri Lankan women would need to increase their use of all kinds of contraceptives to 71%, and their use of proven modern contraceptives to 51%, in order to achieve a total fertility rate of 2.3 by the year 2001. Instead, Sri Lanka reached that level in 1993 - 8 years early - with only 66% of women using contraception, and only 44% using modern methods. Similarly, while abortion is highly restricted in Brazil, Colombia and Mexico, studies have estimated that abortion lowered those countries' 1986-87 fertility rates 5% to 7%.

In summary, in terms of policy, the most important observation linking abortion and fertility is that programmes to reduce births risk increasing abortion rates, particularly if family planning services are not expanded to meet the added demand. A few countries have instituted policies that focus on abortion as a means to further national fertility objectives, both pro- and antinatalist. The condition for efficacy, however, seems to be willingness to enforce draconian measures.

Conclusions

Although research on abortion generally has been inadequate and, moreover, hindered by the effects of laws against abortion, some facts are clear. Women undergo tens of millions of abortions every year. The availability of modern contraception is the largest determinant of abortion rates in most countries. Demand for abortion nevertheless persists even among populations with wide access to modern contraceptives, for several reasons. These include the lack of acceptable forms of modern contraception for every woman, contraceptive failure and nonuse of contraception by uninformed women, in coercive sexual intercourse and other circumstances. Legality is the most important single factor affecting the safety of abortion. Even where abortion is legal, however, inadequate abortion services coupled with women's relative lack of autonomy and deep-rooted social and religious disapproval of pregnancy termination continue to drive many women to unsafe practitioners and methods. Finally, abortion has a significant - and perhaps increasing - braking effect on world population growth.

Seminar on Socio-Cultural and Political Aspects of Abortion in a Changing World

List of the papers presented at the seminar on 'Socio-Cultural and Political Aspects of Abortion in a Changing World' organized by the IUSSP Scientific Committee on Anthropological Demography and the Centre for Development Studies, Trivandrum, held in Trivandrum, India, from 25-28 March 1995.

Session 1: Changing Levels of Abortion: the Macro and Micro Evidence

- 'The incidence of abortion: a worldwide overview focusing on methodology and on Latin America' by Susheela Singh and Stanley Henshaw
- 'The challenge of induced abortion research: trans-disciplinary perspectives: a background paper' by Axel Mundigo
- 'Are unsafe induced abortions contributing to fertility decline in Africa? Findings from Egypt and Zimbabwe' by Nosa Orobaton
- 'Abortion in rural Bangladesh: what do we know?' by Barkat-e-Khuda
- 'The role of abortion in the fertility transition in Kerala' by Irudaya Rajan, U.S. Mishra and T.K. Vimala
- 'Induced abortion and contraceptive use in Russia: state of the art and need for a micro-approach' by Inge Hutter

Session 2: The Larger Environment: the Role of the State, Religion and Policy

- 'The impact of changing policy on fertility, abortion and contraceptive use patterns in Romania' by Florina Serbanescu et al
- 'Eastern Europe's abortion culture: puzzles of interpretation' by Libor Stloukal
- 'Abortion across social and cultural borders' by Kajsa Sundström
- 'Abortion legislation in Mexico in the face of a changing socio-demographic and political context' by Guadalupe Salas and Susana Lerner
- 'The abortion issue in Brazil: a study of the debate on abortion in Congress' by Maria Isabel Baltar da Rocha
- 'The Roman Catholic Church and abortion' by Stan Wijewikrema
- 'The role of the Catholic Church in the abortion debate' by Maria Consuelo Mejia

Session 3: Constraints and Negotiations

- 'Menstrual regulation in Bangladesh' by Sajeda Amin
- 'Correlates of timing of induced abortions in Turkey' by Ahmet Içduygu and Turgay Unalan
- 'The pressure to abort' by Chantal Blayo and Yves Blayo
- 'Changing assessments of abortion in a Northern Nigerian town' by Elisha Renne
- 'The role of local herbs in the recent fertility decline in Ghana: contraceptives or abortifacients?' by John Anarfi
- 'The role of pharmacists and market herb vendors as abortifacient providers in Mexico City' by Susan Pick et al
- 'Demographic research and abortion policy: the limits to statistics' by Andrzej Kulczycki
- 'A study of induced abortion in two villages in Thai Binh Province, Vietnam' by Annika Johansson, Nguyen The Lap et al
- 'Menstrual management and abortion in Guinea, West Africa' by Elise Levin

Session 4: Abortion in South Asia: some Determinants and the Reproductive Health Implications

- 'Abortion in India: an overview' by M.E. Khan, Sandhya Barge and George Philip
- 'The silent cry: socio-cultural and political factors influencing induced abortion in Sri Lanka' by Indradal De Silva
- 'The emerging problem of induced abortions in squatter settlements of Karachi, Pakistan' by Fariyal Fikree et al.
- 'Determinants of induced abortion in rural Bangladesh' by Kapil Ahmed

Session 5: Unwanted Births and Unwanted Pregnancies

- 'Kutoa Mimba: debates about schoolgirl abortion in Northern Tanzania' by Amy Stambach
- 'Chasing equality: the politics of sex-selective abortion in Asia' by Barbara D. Miller
- 'Level of unwanted pregnancies and its consequences' by M.E.Khan and Bella C. Patel
- 'Abortion in South Brazil: contraceptive practices and gender negotiation' by Ondina Fachel Leal and Jandyra M.G. Fachel