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Life Course Perspectives on Women's Autonomy and Health Outcomes

IN RECENT DECADES, much has been written in the social sciences on female status and autonomy. A subset of this literature has specifically pointed out some of the negative demographic consequences of low levels of female education and autonomy in developing countries, noting that they may be barriers to improving child survival and reducing fertility. Much of this literature focuses on the low status of women relative to men. Yet a large body of evidence, especially in anthropological literature, shows that a woman's status rises and falls over her life cycle. As several studies highlight, in some societies women's status is higher at younger ages, while in others it is higher at older ages.[1]

Quite independent of gender inequality, both men and women spend part of their life cycle in a position inferior to that of others of their own sex. However, women commonly have less power and autonomy than men at any given point. Thus in many societies, women spend part of their life cycle in double powerlessness, subordinated not only to men but also to other women at higher status stages of their own life cycles. Contrasts in patterns of household formation and inheritance between peasant societies of preindustrial northern Europe and northern India highlight the impact of differences in the acquisition or loss of power over the life cycle. Whether women's status is higher in youth or old age makes a critical difference to health and demographic outcomes, as data from my fieldwork in northern India and from other studies in South Asia indicate.[2]

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Household Formation Patterns and Swings in Life Cycle Autonomy

	Married youth		Older ages
Pattern one	higher autonomy	→	lower autonomy
Pattern two	lower autonomy	→	higher autonomy

The diagram above depicts the two basic patterns of life cycle shifts in autonomy. In pattern-one societies, autonomy is highest among young married adults and falls with age. The reverse is the case in pattern-two societies, where autonomy rises with age and dips only in extreme old age. The distinction made between power, authority, and autonomy is important to this discussion, although all three are subsumed under the shorthand of "autonomy" in the above dichotomy.[3]

The pattern-one as well as the pattern-two societies discussed here are characterized by gender inequality, with women subordinate to men. This similarity highlights the importance of differences in power between women at different stages of the life cycle for demographic outcomes.

Pattern-One Societies

This discussion of pattern-one societies is based on northern European peasant societies that had impartible inheritance and nuclear or stem families. It draws primarily on Berkner's (1972) study of 18th-century Austrian peasant households but also uses similar accounts from 19th-century Scandinavia and 19th-century Austria.[4]

Under this family system, the head of household retained property and managerial power until he retired. Retirement and property transfer typically took place when the heir married. A retirement contract commonly was drawn up, specifying where the old couple would live

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and what obligations the heir had for providing them with food, fuel, and other material support (Berkner 1972).

This meant the new couple started out with an independent economic base and were in control of all decisions relating to their household. For the old couple, of course, it meant a very sudden reduction in power and status. The strong intergenerational conflict arising from this sharply discontinuous transfer of power is discussed and illustrated with contemporary accounts by several historians and is summarized by Andrejs Plakans: "There is now something like a consensus that the treatment of the old was harsh and decidedly pragmatic. Dislike and suspicion, it is said, characterized the attitudes of both sides" (1989:177).

This discussion of intergenerational relationships focuses on those between men, since in these societies inheritance was patrilateral and residence patrilocal.[5] The tension over retirement contracts revolved essentially around the father and son. Much less information is available on how women fared under this system. "The sources speak most revealingly of men and mention spouses as an afterthought and female heads as a transitory phenomenon" (Plakans 1989:191). However, it seems that the mother was centrally involved in her role as the wife of the retiring farmer, who would share with him the comforts or discomforts of retired life.

Upon the heir's marriage, the incoming wife entered her new household as an outsider. Depending on how far away her own family was, she might have considerable or negligible contact with them. Describing the position of the new wife in mid-20th-century rural Ireland, Arensberg and Kimball recount how strongly some of these women missed their homes and the familiar people there. However, the emphasis on a strong conjugal unit facilitated the woman's situation by giving her a high degree of autonomy in household matters, subject only to her husband's acquiescence: "Stranger as the new woman may be, the norms of the community in ordinary cases demand that the young husband take the part of his wife. The bond between them is stronger than that between son and parent" (Arensberg and Kimball 1968:128).

The details of the operation of kinship and inheritance in northern Europe varied considerably. The somewhat stylized version presented here highlights its essential features to throw into relief the contrast with northern India. Others have found it useful to draw similar stylized contrasts (Goody 1990; Hajnal 1982). Moreover, only the life course of the landowning peasants is discussed here. That of those lower in the socioeconomic hierarchy could be entirely different: for example, the high prevalence of nonmarriage meant that many never established their own households. Broader aspects of the ways in which systems of kinship, marriage, and inheritance influence demographic regimes are discussed in Das Gupta (in press).

From the point of view of health and demographic outcomes, the important contrasts between northern Europe and northern India hinge upon the strength of the conjugal bond and the extent of intergenerational bonding. Among northern European peasants, the conjugal unit seems to have been the most important in economic, social, and emotional terms. The viability of the farm itself depended on the joint viability of the couple in charge. The couple *was* the joint enterprise, recruiting help as needed through childbearing and hiring servants. Though women might come as strangers into their husband's home, they came as the important and explicitly acknowledged partner in the husband's enterprise. The strong focus on the conjugal bond was paralleled by weak and inherently conflict-ridden intergenerational links.

Pattern-Two Societies

This discussion of pattern-two societies is based largely on contemporary rural northern India, with occasional references to Bangladesh and China, where family and inheritance forms are similar in many ways. Household formation in such societies follows the model of the multiple or joint family (Laslett 1972), in which the transfer of managerial power and property is made gradually as the head of household ages. The sons gradually take over managerial decisions about production and finally the property is transferred to them, though frequently after the father's death.

The gradual nature of the transfer of power and authority makes for much less intergenerational conflict than in northern Europe.[6] The newly married pattern-two couple typically lives with the husband's parents and lacks an independent economic base. Bonds between patrikin are strong, both intergenerationally (between parents and children) and intragenerationally (between siblings). Consequently, there is far less emphasis on the conjugal unit. Indeed, the marital bond is viewed as a potential threat to these other bonds and not given much opportunity to thrive. The basic unit is the *joint household*, not the *couple* as it is in northern European peasant societies.[7]

Women in both northern Europe and northern India are clearly in a position subservient to men. Sons ensure the continuance of the family line. An extreme but telling example is given by Sorensen:

> A particular property in Hessen, Germany, was occupied continuously for more than 400 years . . . by a Johannes Hoss. This remarkable stability was achieved by naming all sons in the family Johannes (with varying second names to provide individual identification) through this whole period. [1989:201]

Women's similarly subservient position to men in both societies highlights their actual differences in autonomy. The northern European peasant wife had considerable autonomy in the running of the household. In northern India, women have highly limited autonomy in these

matters until late in their life course, since close bonds between patrikin work to marginalize young married women.

In both settings, female subordination can be expected to lead to gender-based discrimination of an essentially *volitional* nature. For example, a man might choose to mistreat his wife, or parents might choose to favor boys over girls. In northern India, young women's limited autonomy would make for additional *nonvolitional* forms of discrimination, leading to unintended negative outcomes. For example, in caring for a cherished son, a woman and her in-laws may share the same goals but fail to reach them due to poor communication.

Another factor in women's autonomy is the age at marriage. In northern Europe the age at marriage was higher than in northern India; marriage in the former was a contract between two adults. In northern India, however, the marginalization of the bride continues even when the age at marriage rises. The data in this article showing the negative health outcomes of low female autonomy are based on Punjabi villages where women's average age at marriage is close to 22 years.

The Phases of the Female Life Cycle in a North Indian Village

In the northern Indian village of Rampur, less attention is given to a girl than to her brothers. The birth of a girl is not celebrated ritually as is that of a boy, and even the midwife is paid less. If a female child falls ill, she is far less likely to get prompt and high-quality treatment. The young girl is trained to be tough and hardworking yet completely subservient to the decisions of her male kin. She nevertheless enjoys a certain amount of personal freedom and autonomy in her own village, where all the men are her classificatory brothers, but this will be lost after marriage and not regained until old age.

When she marries and moves to her husband's village, a girl's behavior must undergo a dramatic transformation. She loses almost all voice and autonomy. In her husband's village she knows no one, and custom requires that she remain with head bowed, not speaking. On her first visit, she must sit silently while the women of the family and their friends scrutinize her, comment loudly on whether or not she is beautiful, and examine the jewelry and the dowry she has brought, behaving as if she were an inanimate object. Once back in her parents' village, she is again free to be as mobile and vocal as before.

A young bride's personal and public behavior is monitored by a whole array of women, including her husband's mother, aunts, grandmother, sisters, and sisters-in-law. All the men in the household older than her husband are in a position of remote authority over her; in their presence she cannot speak. She is at the bottom of the household hierarchy and is given the more onerous household tasks, such as waking before dawn to fetch water or churn butter. She never knows when she will be allowed to visit her parents. This will be decided suddenly and capriciously by her in-laws. Cut off from the rest of her affinal village, she is usually very lonely. The rules of exogamy, ensuring that women marry outside their kin group and outside their village, make it easy to understand how such subservience can be enforced.[8]

Myriad ways are used to keep the young wife and her husband apart, to delay the growth of a bond between them. Their daily tasks are performed mostly in different locations. Other occasions for marital privacy are also restricted. After completing the long day's chores, a young woman is expected to massage her mother-in-law's legs before going to sleep.

A woman's status begins to rise when she has her first son. As her sons grow, her status increases and continues to increase as she becomes a mother of grown sons and then a mother-in-law. Finally, as a grandmother, an asexual woman and the female head of the household, she can have a considerable say in domestic matters. Freedom increases with age, as the number of people superior to the woman in the household hierarchy decreases. This is reflected symbolically by the requirement that a woman cover her face from all men who are older than her husband in her husband's village, since as she gets older, the number of such men obviously decreases.

When the grandmother becomes too old to work, she gradually gives up the managerial duties in the household and spends more time on less physically demanding activities such as child-minding. She is now at a stage of her life when she is free to make leisurely visits to other houses and spend time with her grandchildren. When she is too old to move, she sits on her bed in the winter sunshine or the summer shade in the company of her grandchildren. If she has sons who are openly supportive of her, she continues to enjoy a great deal of respect and autonomy until she dies.

The power a woman exercises in her old age depends greatly on the support of her sons. This becomes especially important if she is widowed. The rest of the household follows the lead of her sons so that, if they respect her, her position within the household will be reasonably assured until she dies. A widow who has no sons, or whose sons take the unusual step of refusing to look after her, is extremely vulnerable.

The Mother-Son Bond

Sons represent much more to their mothers than a source of support in old age. They offer almost the only means for women to build independent standing in the household. Women are the moving, peripheral parts of

their society, while men are the permanent members of the lineage. As a result, women have little intrinsic source of standing other than as the mothers of the future men of the lineage.

Every effort is made not only to bear sons but also to ensure that they are emotionally attached to the mother, becoming her firm supporters as they themselves grow in household stature. The woman is careful to bind her sons to herself through various measures. She can be solicitous of their needs, the gentle nurturer who cooks foods they like. She can allow her sons to see how she suffers at the hands of her in-laws and even her husband. She can allow them to see how hard she works. She can be careful to communicate that all her sacrifices will be rewarded if her sons have successful lives, while also subtly communicating that she expects unquestioning loyalty from them in compensation for her sacrifices.[9] Unfortunately, the successful self-assertion of women through this route involves the sons' loyalty to their mothers at the expense of their wives, which helps perpetuate the cycle of female subordination.

Double Powerlessness and Health Outcomes

Women's double powerlessness in pattern-two societies with strong gender inequality takes a toll on women's and children's health. The description of the stages of the woman's life cycle in Rampur and in other studies of northern India shows a clear pattern of variation in a woman's status and autonomy over her life.[10] Status is low in early childhood, rises during adolescence, and drops sharply upon marriage, remaining low during the early reproductive years. Rising during the later reproductive years to a high when the woman becomes a mother-in-law and grandmother, it drops slightly in extreme old age.

This pattern of shifting status is faithfully reflected in sex differences in age-specific death rates in India (see Figure 1). Female mortality is substantially higher than male mortality in childhood, becomes similar during adolescence, and rises again during the peak reproductive years, after which it remains lower than male mortality rates over the remainder of the life span. In societies without strong gender discrimination, female survival rates are typically higher than male rates throughout life, except sometimes during the peak reproductive years if fertility and maternal mortality levels are very high. In South Asia, however, women's biological advantage is offset by social and behavioral factors.

Child Survival

Children of Both Sexes

It is not easy to test the hypothesis that differences in maternal autonomy influence child survival. To compare this between peasant societies of northern Europe and present-day India would require controlling for several aspects of economic conditions and exposure to disease, which would be difficult to do. One currently available option is to compare differences in personal autonomy and child survival between women within a single given society.

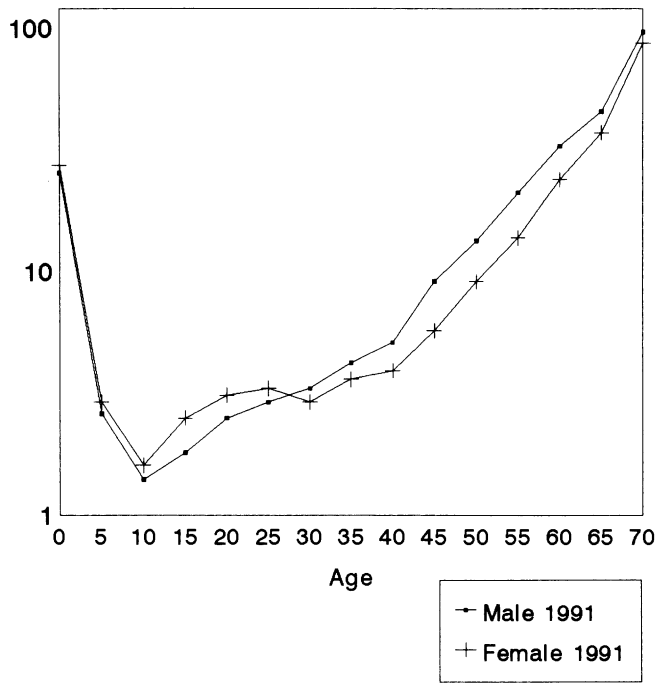

Figure 1
Age-specific death rates by sex, India, 1991. Government of India 1991.

The results are very striking. As Table 1 shows, children born in the home of the mother's in-laws (the children's father's home) have over double the infant mortality rate of those born in their mother's parental home. This relationship is significant even after controlling for several factors influencing child survival, including the household's socioeconomic status, the child's gender, the mother's education, and several aspects of the circumstances of delivery and child care (Das Gupta 1990).

The selectivity in the location of each delivery would tend to *increase* the differences found in Table 1. Customarily, first births take place in the mother's own home and later births in the husband's home. First-born children

Table 1
Infant mortality rates by place of delivery, Khanna 1984–88 (deaths in the first year of life, per 1,000 live births).

Place of delivery	0 months	1–11 months	0–11 months
Mother's home	15	31	37
Husband's home	34	67	86

have a higher risk of dying than second and third births, followed by a subsequent rise in mortality for higher-order births. Since the total fertility rate is below 3.26, there are relatively few higher-order births, and the preponderance of high-risk births is among the first births. The higher mortality of children born in hospitals and clinics is due to the fact that the great majority of births take place at home, and institutional deliveries include a high proportion of emergency cases rushed to the doctor when it becomes clear that labor will be complicated.

The place of the birth is an objective measure of the mother's autonomy at the time of the birth. In her parents' home, a woman is accorded the status and freedom she had before marriage. She is better able to care for her child because it is easier for her to ask for help if she feels her baby is having difficulties. In her husband's home, she is much more constrained. If she says her child needs help, this judgment may be superseded by that of her mother-in-law and others superior to her in the household hierarchy.[11] The young husband, even if close to his wife, may not be much help because he is trained to defer to his elders, especially his mother, where child rearing is concerned. The young mother's judgment may thus be ignored, or action delayed. Infants are so vulnerable that even a brief delay can mean the difference between life and death. An infant with diarrhea, for example, can die of dehydration within a couple of days.

Female autonomy, as measured by a woman's own assessment of her role in household decision making, also correlates with child survival. An analysis of the determinants of child mortality (Das Gupta 1990) showed that the mother's autonomy was significantly negatively related to the probability of her children dying: the children of women who had greater decision-making authority in the household were less likely to die.

Female Children

Female children suffer an additional burden because of the strong preference for male children in this society and discrimination against daughters. Girls suffer from substantially higher levels of mortality during childhood, except for the first month of life. In Bangladesh, for example, females experience 22 percent higher postneonatal mortality than boys (the postneonatal period is the second through eleventh month of life), while in Punjab the level is nearly double that of boys (see Table 2).

The crossover between the male-female ratio in neonatal and postneonatal mortality is clearly indicative of differential care of boys and girls. During the neonatal period biological factors are the primary cause of death, and the higher male mortality is consonant with their being biologically weaker than females. After this first month of life, environmental and care-related factors become more important determinants of survival; the substantial gender gap in survival indicates that girls receive much less care than boys. Studies in South Asia indicate there is greater discrimination in health care than in food, and this is the main cause of excess female mortality.[12]

Increasing evidence suggests that this sex differential in child mortality is not the result of *unconscious* neglect of girls. It is higher parity girls—those born into families that already have a girl—who bear the brunt of the excess mortality (Das Gupta 1987; see Figure 2). This has been confirmed by studies in Bangladesh (Muhuri and Preston 1991) and elsewhere in Punjab (Pebley and Amin 1991). Excess female mortality appears to be a part of the explicit strategy parents use to obtain their desired family size and sex composition. The Chinese data suggest that similar considerations are at work there (China 1984 and Hull 1990). It seems, then, that some daughters are more unwanted than others, and excess female child mortality is concentrated among them.

Given the patriarchal nature of northern European peasant family organization, it is not surprising that there was excess female child mortality in 18th- and 19th-century Germany (Klasen 1994). Klasen also found that excess female mortality rose with the birth order of the child. Apparently, family-building strategies in historical Ger-

Table 2
Infant and child mortality rates by sex, Khanna and Bangladesh.[a]

	Age at death (in months)					
	<1	1–11	0–11	12–23	24–59	0–59
Khanna 1965–84						
Males	50.7	27.1	77.7	9.4	8.2	95.3
Females	43.0	51.3	94.3	18.5	12.6	125.4
Male/Female	1.18	0.53	0.82	0.51	0.65	0.76
Matlab, Bangladesh 1974–77						
Total	73.0	58.2	131.2			
Male/Female	1.16	0.82	1.00			

[a] Sources: Das Gupta 1987 for the Khanna Study villages, Punjab, India; D'Souza and Chen 1980 for the Matlab Project data, Bangladesh.

Figure 2
Child mortality by sex and birth order, Khanna villages, Punjab (deaths by age five per 1,000 live births, of children born between 1965 and 1984). Das Gupta 1987:83–85.

many had goals similar to those of contemporary South Asia—having few children and a preference about their sex. The evidence for son preference is one manifestation of the potential discussed above for *volitional* gender discrimination in northern Europe.

Marriage and the Early Reproductive Years

A young woman is handicapped in coping with the stresses caused by childbearing. She lacks the autonomy to reduce stress through improved nutrition and health care or through a lighter workload. This aggravates problems of reproductive health for mother and child.

During the peak reproductive years female mortality in India is substantially higher than male mortality (see Figure 1). However, this is not in itself necessarily indicative of neglect of women's needs. Excess female mortality during the childbearing years is not unusual in societies where fertility is high and modern medical facilities are sparse. As fertility declines, the sex gap in survival closes because of the reduced physiological stress of childbearing. Over time, the extra mortality of young adult males from accidents and violence comes to predominate over the stresses of reproduction, such that mortality of males becomes higher than that of females. This crossover of male and female mortality is commonly found in the course of the demographic and health transition. Data from Sri Lanka (Nadarajah 1983) illustrate this point very well (see Table 3).

Table 3
Excess of male over female age-specific death rates, Sri Lanka.[a]

	1952–54		1962–64		1970–74	
Age group	A[b]	B[c]	A	B	A	B
15–19	–26	–11	–1	+8	+8	+11
20–24	–41	–18	–29	–12	+18	+31
25–29	–44	–23	–26	–6	+6	+20
30–34	–41	–21	–26	–7	+5	+19
35–39	–28	–10	–14	+2	+23	+35
40–44	–8	0	+4	–11	+52	+58

[a] Source: Nadarajah 1983.
[b] A = all causes of death.
[c] B = all causes of death excluding maternal deaths.

However, low female status can exacerbate the effects of reproductive stress and slow down the pace of improvement in women's health when fertility declines and the physical toll of reproduction is reduced. This natural effect can be dampened by lack of care during the process of childbearing. Such neglect can take place in several ways, notably inadequate nutrition, heavy workloads, and poor conditions of delivery.

Inadequate Nutrition and Heavy Workloads

As Figure 3 shows, adult women in Punjab are generally adequately nourished, except during the peak reproductive years. This shortfall is due to the fact that women's average consumption does not rise during pregnancy and lactation, although their nutritional requirements at such times rise sharply. This results in startling levels of undernutrition (see Figure 4) in a society that is otherwise quite well nourished.

This lack of adequate nutrition has little or nothing to do with food taboos or such exotic reasons as wanting to keep the fetus small to ensure an easy delivery, as answers to a prospective survey of pregnant women evidenced. The problem seems to lie in the bulkiness of the regular diet, which consists of bread with some lentils and milk. It is difficult to increase consumption of such foods enough to reach dietary sufficiency during pregnancy. Pregnant and lactating women need to eat nutritionally more dense foods. Such foods, rich in milk, fats, and sugars, are available in the local diet. That these foods are not given to pregnant and lactating women suggests their needs are being neglected.

It is not as though the connection between physical stress and increased nutritional needs is not made in this society. This need is recognized for the ill, who receive special and expensive foods; for cattle, who are given extra oilseed cake when they are lactating; and for the anthropologist, who is told to eat more butter to counter the exhaustion of interviewing. Above all, it is recognized for men. Figure 5 shows how men's nutritional intake rises with their number of hours of hard physical labor.

Nor is it that the connection between childbearing and physical stress is not recognized. When women lose

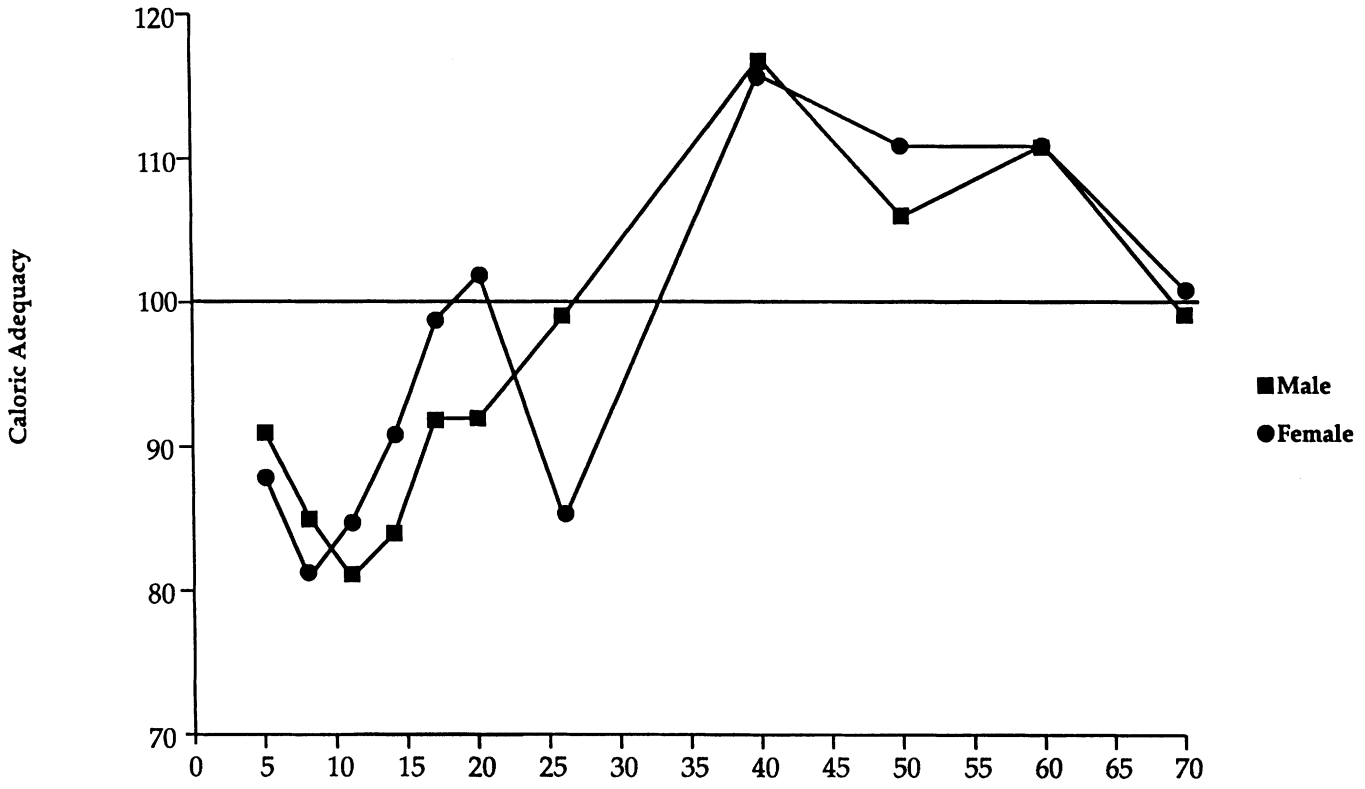

Figure 3
Caloric adequacy by sex, using NAS standards, Khanna villages, Punjab, 1984.

their teeth and age prematurely, this is clearly recognized as related to having borne children. Women are explicit in their recognition of this effect: in response to a question in my survey, a high proportion said that high fertility is bad for the health of the mother. Talking with women revealed that they clearly understand the need for a nutritionally more dense diet during pregnancy and lactation, but that little effort is made to provide this to them, while they themselves feel unable to demand it.[13] Only during the days immediately following a delivery is a rich diet of fats and sugars given to the woman, and appropriately enough, it is the custom for this to be sent by the woman's parental home.

Nutritional deprivation during pregnancy and lactation exacerbates the natural effect of maternal depletion from childbearing. This affects women's own health as well as increasing the probability of having low-birth-weight babies whose survival rates are far lower than those for children of normal birth weight. Thus the neglect of women's health translates directly into worsened child survival, as well as poorer reproductive health.

Inadequate nutrition during pregnancy is exacerbated by heavy workloads that further increase the gap between nutritional requirements and intakes. It is common for women not to reduce their workload much until toward the end of the second trimester and in some cases into the third trimester of pregnancy. Many of their chores require a great deal of physical strength, energy, and stamina.

As in other matters, young women are not free to take more leisure on account of their pregnancy. I happened to visit a woman called Surjit one day when she was over six months pregnant with her second child. She was cutting fodder, a very heavy task, and her face looked white. She told me that she had fallen down some steps a couple of days before and hemorrhaged, but was better now. Surjit would obviously have preferred to rest or do lighter tasks, but the choice was not hers. It was not that her mother-in-law was uninterested in the fate of her grandchildren. In fact, she had breast-fed Surjit's first child because Surjit herself had very little milk. It was simply that in chopping fodder, Surjit was doing what is expected of women in her society. These conditions can be imposed even on pregnant women because they can usually absorb such abuse without necessarily threatening the child's life chances. Surjit herself helped reinforce this view by giving birth to another healthy boy.

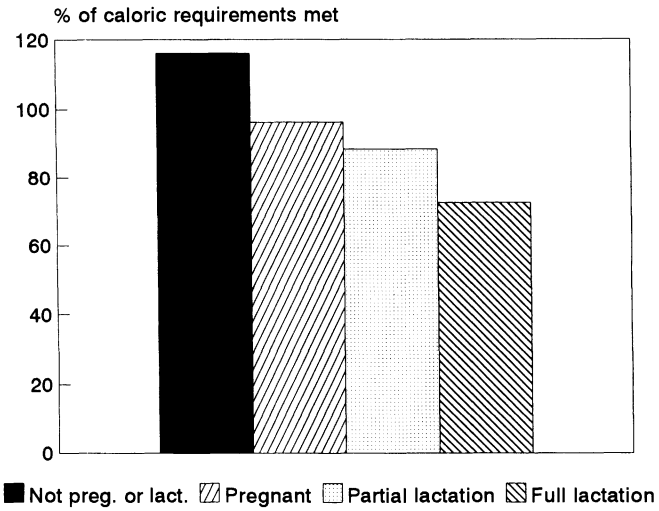

Figure 4
Caloric adequacy by reproductive status, Khanna villages, Punjab, 1984 (women aged 16–44). Das Gupta and Millman 1994.

Care at Delivery

Given the availability of health services in India, which is high by developing-country standards (Government of India 1987:303), it is astonishing to find that the vast majority of deliveries are carried out at home by traditional midwives. This is true even in Punjab and Haryana, wealthy states in which almost every village has good-quality public and private health facilities within easy reach. A woman is likely to be taken to a clinic or have a doctor called only if she has serious complications, by which time it may be too late.

A telling example of the difference in response to health problems of men and women occurred in a wealthy household in a village located less than two miles from a fully equipped primary health center with a delivery ward. A woman in this household had a difficult delivery which was eventually acknowledged to be beyond the abilities of the midwife. Arrangements were finally made to take her to the clinic, but she died of hemorrhage before reaching it. Yet in the same household, a private doctor was summoned to attend to the old father who was not feeling at his best. There was little more to be done in this case than give a "strengthening injection," that is, a shot of vitamin B complex.

Maternal mortality is, of course, a small part of the totality of women's reproductive health problems.[14] A study in Maharashtra found that over 90 percent of the rural women examined suffered from one or more gynecological diseases and that only a fraction of these women had received treatment for them (Bang et al. 1989). Lack of interest among other members of the household, and among health personnel, creates a situation in which a woman feels that her reproductive health problems must be borne silently as "women's problems." That a high proportion of births are still attended by poorly trained women leads to widespread reproductive health problems, including prolapsed uterus and pelvic inflammation. This in turn increases the potential complications of subsequent deliveries and raises infant mortality.

The combination of poor delivery conditions and nutritional deprivation during childbearing must go a long way toward accounting for the extraordinarily high proportion (63% in 1984) of infant deaths in India that occur in the first month of life.[15] At levels of infant mortality as high as 104 per 1000 live births, a much lower proportion of infant deaths should be taking place in the first month of life. As much as 30 percent of these early deaths are attributed directly to "prematurity," and an additional 20 percent are attributed to "other causes peculiar to infancy" (see Table 4). Of this, a substantial proportion must result from low-birth-weight babies as well as incompetent delivery practices. Of course, in much of India, poverty and chronic undernutrition make for increased reproductive stress. However, the fact that women in such an affluent and developed state as Punjab are undernourished during reproduction and have poor delivery conditions suggests that the effects of poverty in poorer regions of India are exacerbated by a general neglect of women's needs.

The unpalatable fact is that it is mostly through the agency of *women* that the needs of young women during pregnancy and delivery are neglected. Daily decisions about allocation of food are made by the senior woman of the household. Decisions about delivery arrangements, the preparation of the delivery room, when to call the midwife, and whether to seek more skilled help also fall largely within the jurisdiction of the senior woman.

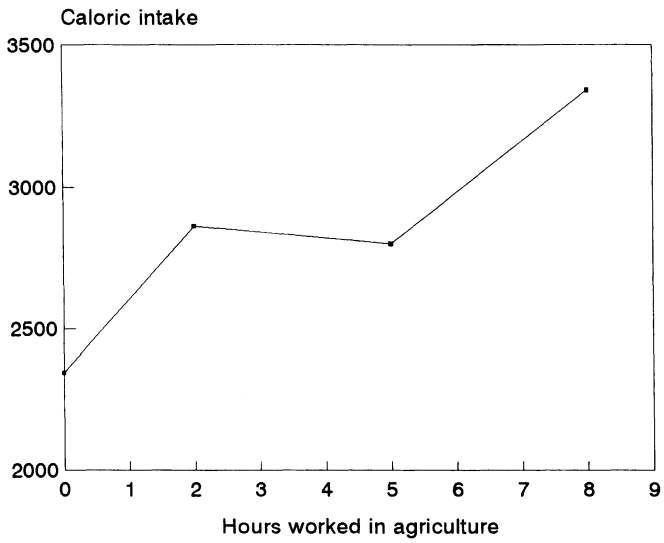

Figure 5
Caloric intake of males by labor input, Khanna villages, Punjab, 1984.

Table 4
Infant mortality rates by cause of death, India, 1984.[a]

Cause of death	Percentage of infant deaths
Respiratory disorders	15.2
Fevers	6.2
Other	11.6
"Diseases peculiar to infancy"	
Prematurity	30.4
Respiratory infection of newborn	10.4
Diarrhea of newborn	6.0
Other	20.3

[a] Source: Registrar-general of India, Survey of Causes of Death, quoted in Government of India 1987:125–126.

But does the senior woman not care about the fate of the child, who is often her own grandchild? Unfortunately, as Surjit's story illustrates, the connection between care of the mother and the fate of the child is diffused by the fact that the mother can usually absorb the consequences of undernourishment and other neglect without necessarily jeopardizing the child's survival. This biological fact can be exploited in a system that is far less concerned with the welfare of the mother than that of the child. After birth, the speed with which children are taken for medical care can be slowed down by involuntary factors springing from the mother's necessary circumspection when communicating with her in-laws and her low credibility as a judge of appropriate actions. The change that education brings to the balance of power between younger and older women is an important reason for educated women's children having higher survival rates.

Slower Fertility Decline

The low status of young adult women also impairs reproductive health by slowing the process of fertility decline. Older women are accustomed to the larger family size norms of the previous generation. While some older women are attuned to changing circumstances and the need to reduce fertility, others are not. Their power in household decision making can stand between the young woman's desire to have a small family and her ability to implement it. Limited opportunities for young couples to communicate and limited freedom of movement place further obstacles in the path of effective contraception. Just as in the case of child survival, a woman's ability to implement fertility decisions is reduced by her low position in the household hierarchy.

The Later Reproductive Years and Old Age

In the later stages of the life cycle, women's power and autonomy in the household rise, making them better situated to care for their own needs. They are free to choose to eat, seek health care, and enjoy leisure according to their wishes and the financial circumstances of the household. This makes it possible for their natural biological advantage over men to manifest itself in terms of lower mortality. As Figure 1 shows, women in India have lower mortality rates than men for all ages above the reproductive years.

It is at this late stage of their life cycle that women in northern India gain the full access to the household's resources that women in northern Europe had at an earlier stage of their life cycle. Moreover, given the more complex household structure and stronger intergenerational bonds, they have access to additional physical and emotional support from the presence of their children and grandchildren. Thus at the later stages of the life cycle, women in northern India actually have considerable advantages over their northern European peasant counterparts.

However, these women's vulnerability can rise when they are widowed, especially if they do not have the support of grown sons. Data from Matlab, Bangladesh, indicate that widowhood had the effect of raising mortality levels above those of married women of the same age-groups (Rahman et al. 1992). Another study in Bangladesh showed how widows can be rendered highly vulnerable to destitution (Cain 1981). This vulnerability is substantially reduced where there is less gender inequality, as in rural Maharashtra (Cain 1981; Vlassoff 1990).

The specter of widowhood without the support of sons is a powerful force making for discrimination in favor of boys, as well as promoting a strong mother-son bond and marginalizing the son's bride. In short, the vulnerability of women in northern India is well designed for reinforcing and perpetuating itself with little need for direct reinforcement from the male world.

Conclusions

The potential ramifications of gender inequality are strongly influenced by patterns of household formation and inheritance. The northern European family form emphasized the conjugal bond, while intergenerational bonds were weak. Despite gender asymmetry, then, young wives had considerable autonomy and power in household matters and were well placed to maintain their own health and that of their children to the best of their ability.

By contrast, the northern Indian joint family system makes for strong intergenerational bonds and de-emphasizes the conjugal bond. Young wives are therefore subordinate both to men and to older women in the household. The double marginalization handicaps young women in caring for themselves and for their children, as layers of people can intervene between their perceptions of need

and their actual decisions. This has adverse effects on child survival and women's own reproductive health.

At later stages of the life cycle, northern Indian women gain autonomy and power in the household and the female biological advantage in survival is able to manifest itself. With sons to support them, these women receive more physical and emotional support than older women in preindustrial northern Europe.

While gender inequality exists in both northern Europe and northern India, its implications are magnified in the latter by the fact that status rises with age. This greatly increases the potential for marginalizing women as well as for worsening the health and demographic consequences of their marginalization.

Notes

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1. Bart 1969; Foner 1984; and Vatuk 1987. See also Yanagisako and Collier 1987 for an important discussion of gender dynamics and kinship.

2. This consisted of a restudy of the village Rampur, which was originally studied by Oscar Lewis in the early 1950s, and of a restudy of 11 villages in Ludhiana District, Punjab, also studied in the 1950s (Wyon and Gordon 1971).

3. Lamphere 1974; Mason 1984; and Vatuk 1987.

4. Gaunt 1987; Plakans 1989; Sorensen 1989; and Sieder and Mitterauer 1983.

5. This did not extend to having patrilineages, in the sense of corporate groups.

6. Goody (1976) has argued persuasively that kinship is not an autonomous system, but that productive processes and the transmission of property shape domestic groups.

7. These contrasts are essentially those between what Linton (1936) called the "conjugal" versus the "consanguinal" family.

8. See Dyson and Moore 1983 on the relationship between exogamy and women's status.

9. Similar strategies are reported from China, where women are similarly deprived of other avenues of self-assertion (Hsiung 1993 and Wolf 1974).

10. Jeffery et al. 1989; Vatuk 1987; and Wadley 1994.

11. Interestingly, Greenhalgh and Liang (1988) attribute high child mortality in prerevolutionary China partly to the low status of young wives.

12. Chen et al. 1981; Das Gupta 1987; and Wyon and Gordon 1971.

13. Similar findings were reported in a study elsewhere in northern India (Jeffery et al. 1989).

14. See Jejeebhoy and Rama Rao in press for a review of reproductive health problems in India.

15. Sample Registration System 1984, quoted in Government of India 1987:104.

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